



ONE PLANET  
CITY CHALLENGE

OPCC 2023-2024

# STRATEGIC FEEDBACK REPORT

Panda City



“We are in a time of  
global crisis, but  
these crises are a  
reason to increase our  
climate ambition, not  
reduce it.”

MANUEL PULGAR-VIDAL

WWF Global Lead for  
Climate and Energy Practice

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# YOUR STRATEGIC FEEDBACK REPORT

Each participant in the One Planet City Challenge (OPCC) receives a Strategic Feedback Report. This is yours.

Here you will find the results of our assessment, based on the [OPCC Assessment Framework 2023](#), of the climate information your city reported publicly through [CDP-ICLEI Track](#) in 2023. These results reflect the ability of your city's reported climate action plans to achieve results that are in line with the Paris Agreement and its goal of limiting global warming to a maximum of 1.5 °C while ensuring urban resilience.

In total, 36 indicators have been assessed to derive an integral, inclusive and science-based overview of the level of vision and impact of your city's climate efforts.

This report focuses on your city's:

- Assessed GHG emissions and risks from climate change.
- Mitigation targets and adaptation goals.
- Climate action plans.
- Implementation of climate strategies and/or actions.
- Results-based monitoring.

Finally, this report also provides you with strategic guidance on how your city's climate targets align with your fair share of emissions reduction to limit global warming to 1.5 °C and what big-win actions are needed to be a frontrunner in the global climate agenda.

*The data used by this report was collected in partnership by CDP and ICLEI - Local Governments for Sustainability. This information is powered by [CDP Data](#).*



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# MITIGATING CLIMATE CHANGE

In an integrated, inclusive and science-based manner.

Climate change affects cities globally, regardless of their size, development status, or location. With over 1°C of warming, it already harms economies, societies, and infrastructure through extreme events like heat waves, floods, and cyclones.

WWF Cities is committed to work towards the Paris Agreement goal of keeping our global temperatures below a 1.5 °C rise. We will get there if we make clear plans, learn from each other's successes, and adapt the most innovative solutions to individual city circumstances.

We have a 50% chance to limit global warming to 1.5°C by rapidly reducing and eventually eliminating emissions by 2050. Transformations in economies, food production, energy, transportation, and urban development are necessary to avert severe consequences. We urge you to rise to this challenge.

WWF Cities, based on the latest insights from the IPCC's [6th Assessment Report on Climate Change Mitigation](#) (IPCC AR6 WGIII), urges leaders to recognize:

## **1. The significance of cities' influence on the current state of the climate.**

Cities are climate change hotspots with intensified effects. Responses vary based on geography and city types, demanding tailored actions that address economic, political, social, and cultural factors.

## **2. The increasingly severe, interconnected and often irreversible risks of climate change on cities.**

City actions can intensify or mitigate climate change and its impacts. To accelerate sustainable and resilient development, integral actions are crucial for both adaptation and mitigation.

## **3. The urgency of a deep decarbonization and systemic transformation of the urban spaces as a pre-condition to limit global warming to 1.5 °C.**

Four key actions are crucial: reducing urban energy consumption through planning and infrastructure, electrifying transport and cooling/heating sustainably, sequestering carbon through green/blue infrastructure and Nature-Based Solutions and promoting sustainable lifestyles to reduce consumption-based emissions.

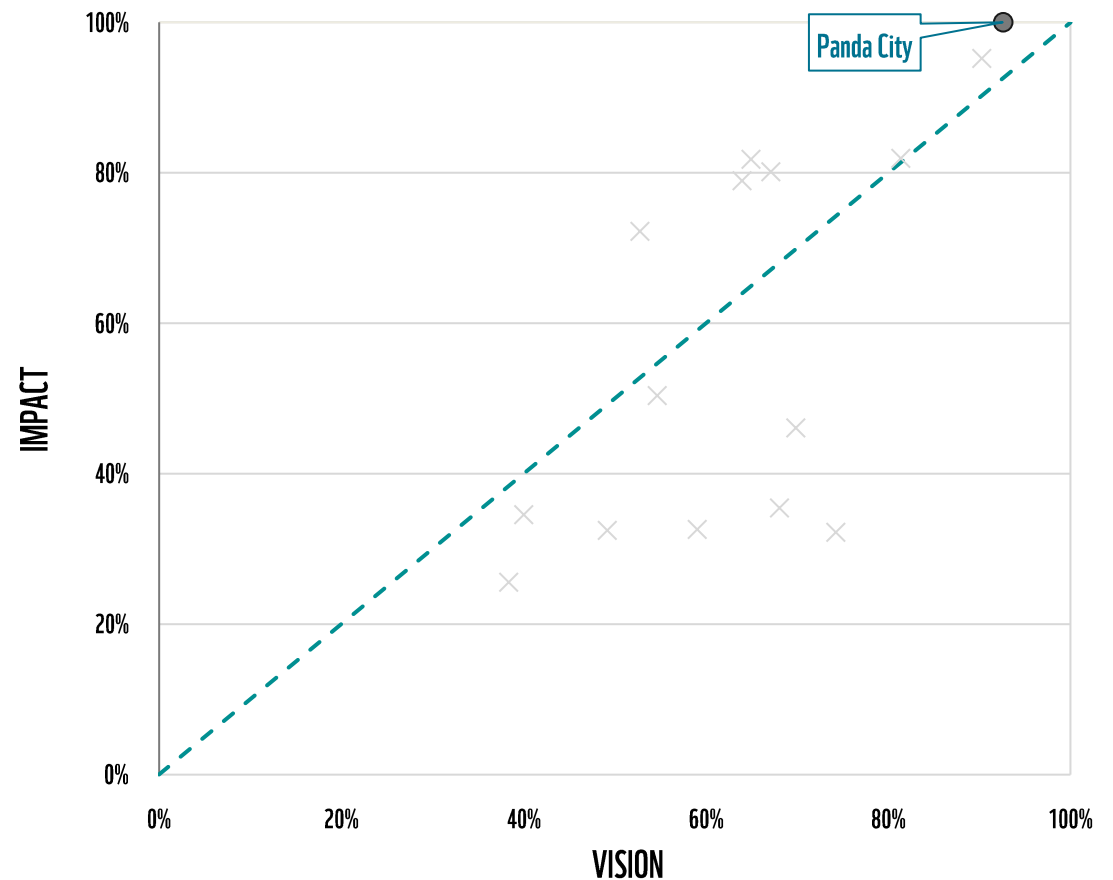
# YOUR CITY'S VISION & IMPACT

The OPCC assesses city data across 'Vision' and 'Impact' dimensions. The graph compares your city to others in your country based on these dimensions, indicating progress.

Use the graph to understand how strong and well balanced your goals and actions are.

- If you score high on 'Vision', but low on 'Impact' you may have strong targets, but you have yet to back them up with strong climate action.
- If you score high on 'Impact', but low on 'Vision', you may lack an ambitious goal to guide your climate actions.

To learn more about these dimensions, refer to the [OPCC Assessment Framework's Technical Document](#) for 2023.



# YOUR CITY'S CLIMATE JOURNEY

Cities are making real progress in their paths to zero emissions by 2050. WWF's OPCC showcases this progress to inspire other cities. We achieve this by promoting good planning practices at different stages of the climate journey to governments.

The following pages summarize key findings from assessing your city's climate data submitted to OPCC. Our assessment uses 36 indicators, grouped into five themes representing different stages of the climate journey.

For more details, refer to the [OPCC Assessment Framework's Technical Document](#) 2023.



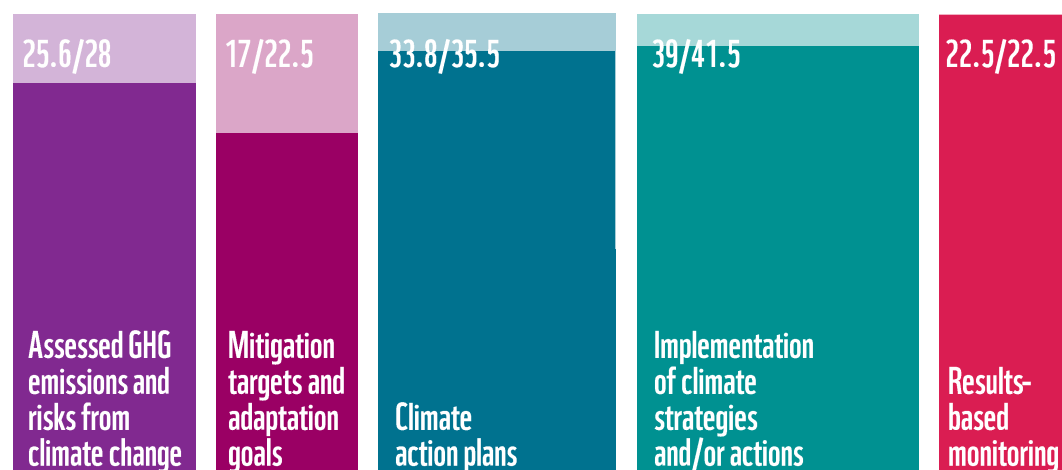
# YOUR CITY'S CLIMATE JOURNEY

Successful climate action requires you to both mitigate your climate emissions and adapt to the effects of climate change so urban resilience increases.

The treemap on the right provides an overview of your city's reporting and scores in key areas of the climate journey. Lighter colours represent the full available score, while filled areas indicate your city's scores. The score for each step, along with the maximum available score in brackets, is indicated.

Use the graph to understand your city's climate journey strengths and weaknesses.

For detailed scoring information, kindly request it by contacting your national WWF office or WWF's international OPCC Technical Helpdesk ([opcc-helpdesk@wwf.se](mailto:opcc-helpdesk@wwf.se)).



**Footnote:** Values in the graph are rounded to the nearest whole number and therefore the sum of points available may not be exactly 150.

# YOUR CITY'S ASSESSMENT OF CLIMATE RISK

Climate change risk and vulnerability assessments assist in identifying how your city is likely to be affected by a given climate hazard.

The icons show different factors covered by your city's climate change risk/vulnerability assessment(s). Coloured icons represent factors that were included in your city's assessment. Non-coloured icons represent factors that we advise to be included in the assessment.



Vulnerable populations



Water security



Nature



Transition risks



High emissions scenario



Hazards in  
jurisdiction's overall  
risk management  
framework



Hazards prioritization



Process for 5-year  
updates

**Footnote:** This figure uses data from questions 1.1, 1.1a and 1.2 of the 2023 Cities Questionnaire.

# YOUR CITY'S ASSESSMENT OF GHG EMISSIONS

Understanding and quantifying the sources of emissions is essential to identifying and informing strategies to reduce emissions.

The Sankey diagram on the right illustrates the distribution of your reported GHG emissions across various sectors. Analyse the graph to identify areas where stronger climate targets are necessary.

In cities, scope 1 emissions come from sources within the city boundary. Scope 2 emissions arise from grid-supplied electricity, heat, steam, and cooling used within the city. Scope 3 emissions include all other GHG emissions linked to city activities outside the boundary, such as production and transportation of goods.



Note: This analysis is based on reported inventory data. Insufficient data in your reporting may result in the absence of the graph or elements of the graph.

**Footnote:** This graph uses data from questions 2.1 and 2.1a/b/c/d of the 2023 Cities Questionnaire

# YOUR CITY'S MITIGATION TARGETS AND ADAPTATION GOALS

Climate frontrunners set adaptation goals and mitigation targets in line with what is needed. Setting such goals and targets gives your city long-term vision and short-term motivation to act on the climate crisis.

The icons represent your city's reported adaptation goals and mitigation targets. Coloured icons indicate reported targets, while blank icons represent non-reported targets. Each icon is accompanied by characteristics your goals and targets comply with.



## Adaptation goal<sup>1</sup>

- Your city reported at least one long-term goal



## Renewable Energy Target<sup>2</sup>

- No data provided



## Energy Access Target<sup>2</sup>

- No data provided



## GHG Emissions Target<sup>3</sup>

- Your city reported at least one interim target



## Energy Efficiency Target<sup>2</sup>

- Your city reported an energy efficiency target

**Footnote:** This figure uses data from the 2023 Cities Questionnaire.

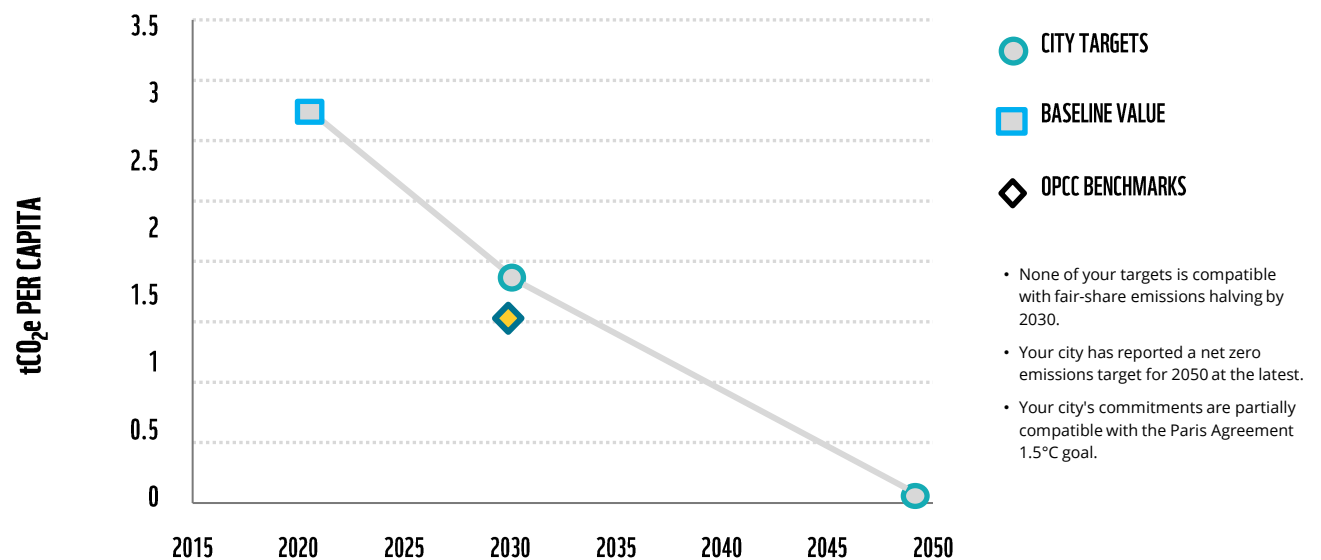
<sup>1</sup>Questions 4.1 and 4.1a. <sup>2</sup>Question 6.1. <sup>3</sup>Questions 5.1 and 5.1a.

# YOUR CITY'S FAIR SHARE OF THE PARIS AGREEMENT

The Paris Agreement's essential target: holding global warming to 1.5°C.

To limit global warming to 1.5°C, cities are targeting swift GHG cuts, halving emissions by 2030, and aiming for net zero by 2050. The graph, using the OPCC 1.5°C Alignment Method, evaluates these goals against the Paris Agreement. If your targets meet or are below the OPCC benchmarks, it signifies alignment with the 1.5°C goal—a commitment grounded in science!

To learn more about the OPCC 1.5 °C Alignment Method, refer to the [OPCC Assessment Framework - Technical Document 2023](#).



Note: This analysis relies on reported inventory data. Insufficient reporting may lead to missing elements in the graph. The 2030 OPCC benchmark is derived from estimated 2018 emissions per capita, projected from the provided baseline emissions value.

**Footnote:** This graph uses data from questions 0.1, 2.1, 2.1a/b/c/d, 5.1 and 5.1a of the 2023 Cities Questionnaire.

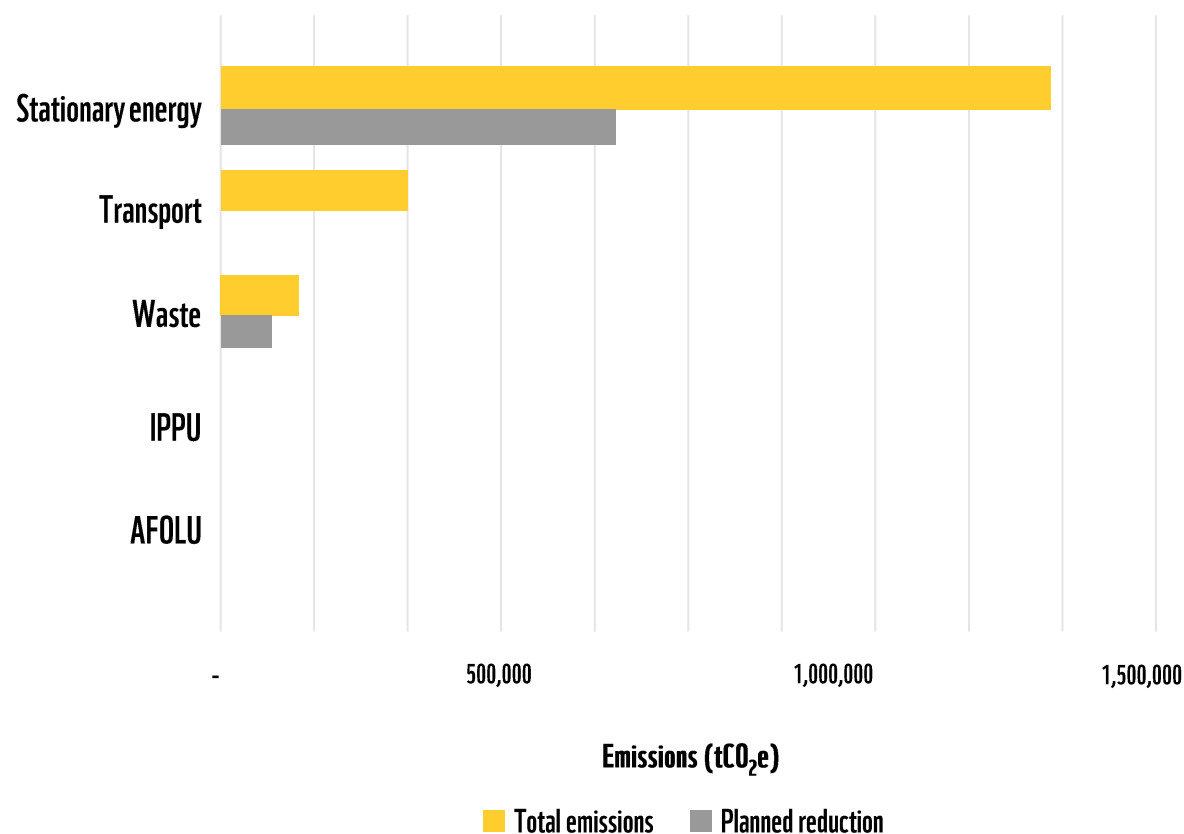
# YOUR CITY'S MITIGATION ACTION PLAN

Developing your mitigation actions plan will take you a step closer to achieving your GHG emissions reduction targets.

The bar chart displays your city's reported inventory emissions across different sector categories (dark colour) and the reported annual emissions reductions achieved through actions (clear colour).

Use the graph to identify areas where stronger climate actions are required.

Note: Insufficient data in your reporting, including your emissions reductions estimates from planned actions, may derive in the absence of the graph or elements of the graph.



**Footnote:** This graph uses data from questions 2.1, 2.1a/b/c/d and 9.1 of the 2023 Cities Questionnaire.

# RECOMMENDED MITIGATION STRATEGIES

High-impact mitigation strategies can differ across cities, but there are shared opportunities for achieving significant results through urban spatial planning and transformations in urban form.

The table outlines urban mitigation strategies that positively impact emissions reductions and sustainable development. Coloured segments highlight recommended strategies for impactful climate action based on your city's typology.

Check the actions list for high-impact examples related to each strategy.

For more information on the methodology, refer to the [OPCC Assessment Framework - Technical Document](#) 2023.

|                                                                                     | STRATEGY                                                        | POTENTIAL ACTIONS                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>SPATIAL PLANNING,<br/>URBAN FORM, AND<br/>INFRASTRUCTURE</b> | <ul style="list-style-type: none"> <li>• <a href="#">Low-carbon industrial zones</a></li> <li>• <a href="#">Policy, zoning, or financial support for local food production (such as farmers markets, community gardens, regional agriculture, etc.)</a></li> <li>• Development of 15/30-minute neighborhoods (complete neighborhoods)</li> </ul> |
|    | <b>ELECTRIFICATION AND<br/>NET-ZERO EMISSIONS<br/>RESOURCES</b> | <ul style="list-style-type: none"> <li>• <a href="#">Install advanced thermal treatment/waste to energy</a></li> <li>• <a href="#">Switching to consumption of low-carbon fuels</a></li> <li>• <a href="#">Procurement of zero emissions buses</a></li> <li>• <a href="#">Action to advance net zero carbon municipal buildings</a></li> </ul>   |
|  | <b>URBAN GREEN AND<br/>BLUE<br/>INFRASTRUCTURE</b>              | <ul style="list-style-type: none"> <li>• <a href="#">Promote conservation efforts for natural areas</a></li> <li>• <a href="#">Water recycling and reclamation</a></li> <li>• Forest restoration</li> </ul>                                                                                                                                      |
|  | <b>SOCIO-BEHAVIOURAL<br/>ASPECTS</b>                            | <ul style="list-style-type: none"> <li>• <a href="#">Improve rail, metro, and tram infrastructure, services and operations*</a></li> <li>• <a href="#">Improve bus infrastructure, services, and operations*</a></li> <li>• <a href="#">Improve walking, cycling and integrated transit access*</a></li> </ul>                                   |

**Footnote:** This graph uses data from question 9.1 of the 2023 Cities Questionnaire

Actions marked with an asterisk (\*) contribute to scaling solutions that halve global emissions by 2030 as prioritized by Exponential Roadmap.

# RECOMMENDED ADAPTATION PRIORITIES

Adaptation strategies should address both slow- and rapid-onset hazards to effectively respond to the uneven nature of climate change.

The table shows city's top climate hazards (dark colour) with current and future risk levels: low (**teal**), medium-low (**cyan**), medium (**amber**), medium-high (**magenta**), high (**purple**). Clear entries (**light grey**) represent additional hazards faced by similar cities with no risk estimates.

The table helps prioritize climate hazards and plan adaptation strategies by showcasing current actions and recommending measures based on similar hazard experiences in other cities.

More information on the method can be consulted in the [OPCC Assessment Framework - Technical Document](#) 2023.

**Footnote:** This table uses data from questions 1.2 and 8.1 of the 2023 Cities Questionnaire

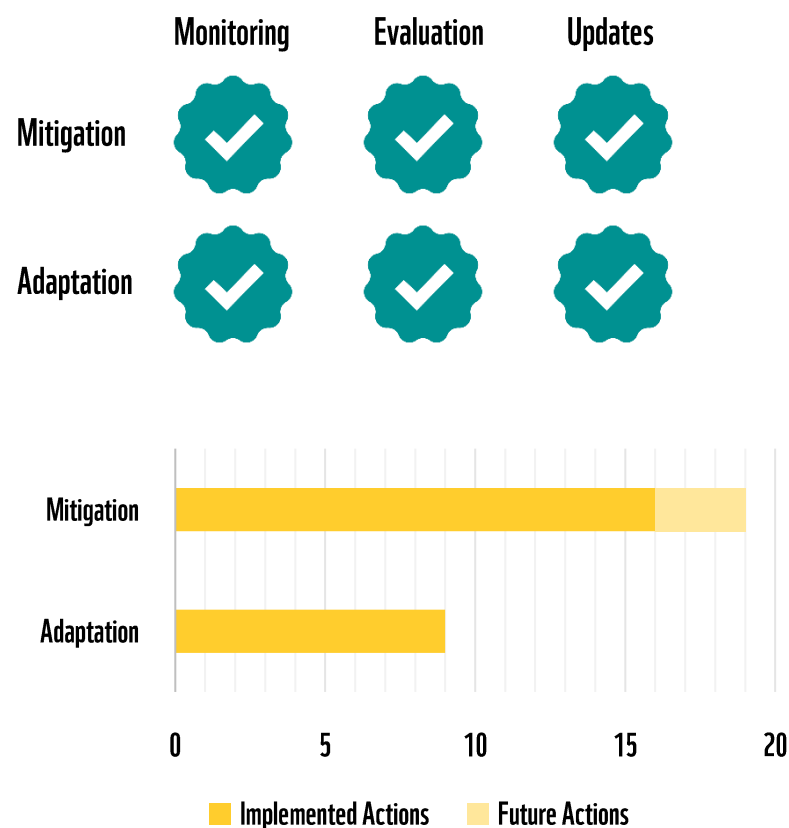
| HAZARD                                                                              |                                                                                      | CURRENT ACTIONS         | POTENTIAL ACTIONS                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current Risk                                                                        | Future Risk                                                                          |                         |                                                                                                                                                                                                                                            |
|    |    | 14 city action(s) align | Public preparedness (including exercises/drills)<br>Disaster planning and preparedness<br>Improved drainage<br>Community engagement/education<br>Fisheries management                                                                      |
| Storm                                                                               |                                                                                      |                         |                                                                                                                                                                                                                                            |
|    |    | 17 city action(s) align | Improved drainage<br>Public preparedness (including exercises/drills)<br>Disaster planning and preparedness<br>Water saving technologies (including rainwater harvesting)<br>Flood mapping                                                 |
| Urban flooding                                                                      |                                                                                      |                         |                                                                                                                                                                                                                                            |
|   |   | 15 city action(s) align | Water saving technologies (including rainwater harvesting)<br>Community engagement/education<br>Afforestation and reforestation<br>Fisheries management<br>Real time risk monitoring                                                       |
| Extreme heat                                                                        |                                                                                      |                         |                                                                                                                                                                                                                                            |
|  |  | 14 city action(s) align | Community engagement/education<br>Disaster planning and preparedness<br>Development of targeted plan/program to address hazard(s) selected<br>Water storage and pump storage<br>Water saving technologies (including rainwater harvesting) |
| Drought                                                                             |                                                                                      |                         |                                                                                                                                                                                                                                            |
|  |  | 6 city action(s) align  | Disaster planning and preparedness<br>Real time risk monitoring<br>Increasing biological diversity<br>Resilience and resistance measures for buildings<br>Community engagement/education                                                   |
| Extreme wind                                                                        |                                                                                      |                         |                                                                                                                                                                                                                                            |

# CLIMATE IMPLEMENTATION AND RESULTS-BASED MONITORING

Cities should rapidly and ambitiously implement their climate action plans, so specific targets and goals are achieved in line with the climate crisis.

Mechanisms for monitoring, evaluating, and updating climate action plans enhance cities' capacities for adapting to hazards and reducing emissions. The icons on the right show reported mechanisms (**dark colour**) and areas that may require development (**clear colour**).

The chart on the right shows the number of actions reported by your city, indicating those already implemented (**dark orange**) and those pending implementation (**light orange**). Monitor the progress of your city's action implementation using this graph.



**Footnote:** This graph uses data from questions 2.1, 2.1a/b/c/d and 9.1 of the 2023 Cities Questionnaire.

# OTHER CLIMATE-RELATED TARGETS, PLANS, STRATEGIES AND/OR ACTIONS

Increasing access to clean and affordable water and energy services, reducing air pollution, including emissions from agriculture, forestry and other Land uses, and developing sustainable food systems are key to tackle climate change.

The icons represent climate-related areas where your city is taking action. Coloured icons indicate fields included in your city's submission, while non-coloured icons suggest additional areas to consider for your climate efforts.

|                                       | Targets and goals                                                                     | Action plans                                                                          | Implementation of strategies and/or actions                                           |
|---------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| AFOLU                                 |    |    |    |
| Water                                 |    |    |    |
| Food                                  |   |   |   |
| Air quality                           |  |  |  |
| Energy access and poverty alleviation |  |  |  |

**Footnote:** This figure uses data from questions 6.1 and 7.2 of the 2023 Cities Questionnaire.

# ABOUT THE ONE PLANET CITY CHALLENGE

The One Planet City Challenge (OPCC) celebrates national and global frontrunners in climate action.

We raise the global profile of participating cities, and build awareness and support for success at international climate events such as the COPs.

The OPCC process creates transformational leadership by helping cities acquire needed skills and strategies to achieve their ambitious goals.

As of 2022, over 700 cities from 69 countries on 6 continents have taken part at least once in the OPCC.

Read more [here](#).



# OUR MISSION IS TO CONSERVE NATURE AND REDUCE THE MOST PRESSING THREATS TO THE DIVERSITY OF LIFE ON EARTH.



Working to sustain the natural  
world for the benefit of people  
and wildlife.

together possible. panda.org

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