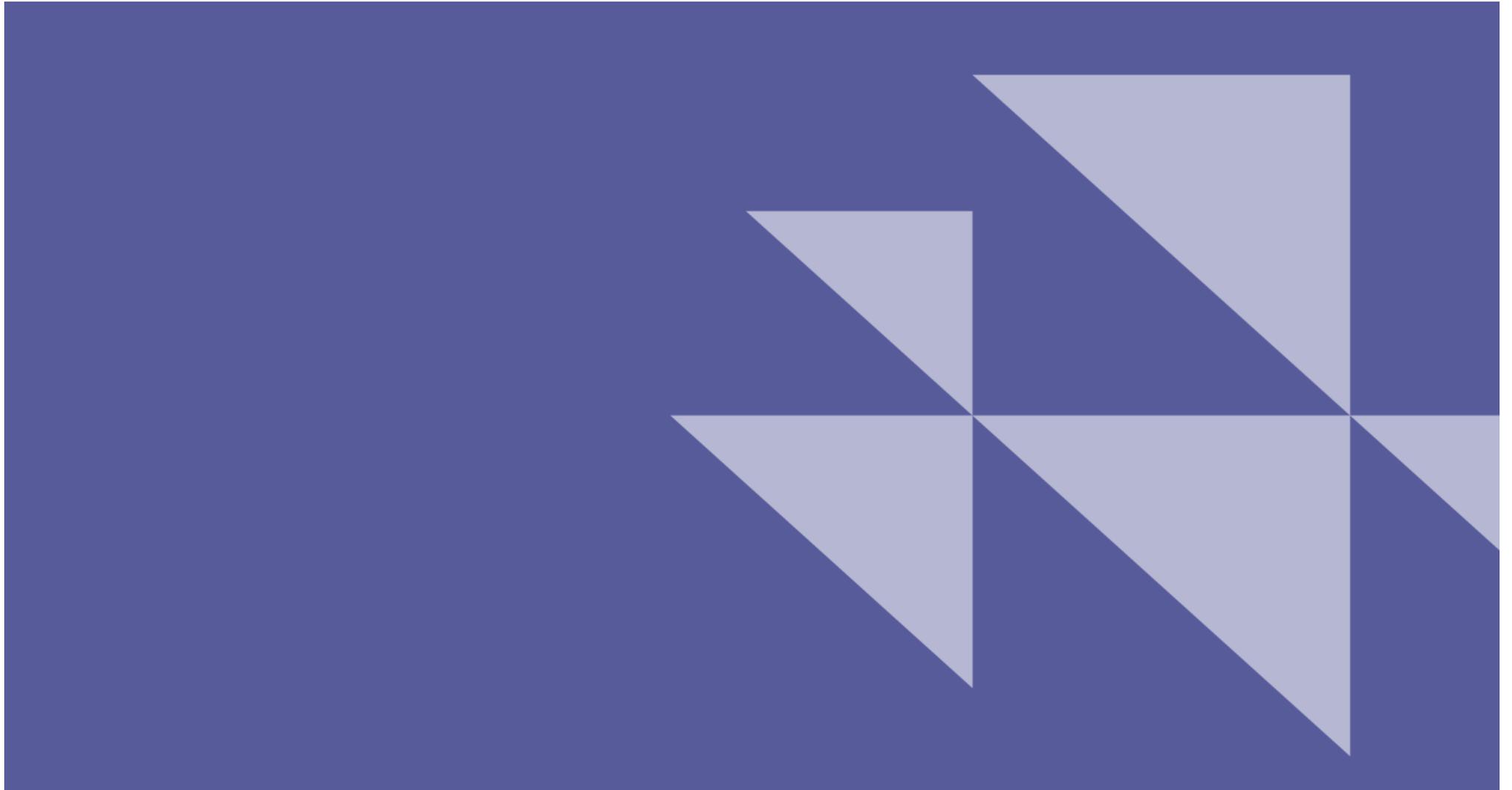


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## Cities 2019 Questionnaire

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# CDP Cities disclosure cycle 2019

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## Cities 2019 Questionnaire

We invite a reply to the following questions. In 2019, CDP has partnered with [ICLEI](#) Local Governments for Sustainability to present one unified platform for city climate reporting, streamlining the process of reporting and ensuing simplicity and standardisation for reporting cities. Cities will only have to report once, on one platform, to the following questions.

ICLEI will continue to support and provide technical assistance to local governments, while CDP and ICLEI will both use the self-reported city data to provide robust analysis of the action being taken by cities across the world.

## How to respond

Please respond to the information request using CDP's Online Response System (ORS), accessed via CDP's website or the activation link you will receive. This document shows all the possible questions that cities may encounter in the ORS. However, it should not be used instead of the ORS. If you are unable to respond online via the ORS please e-mail [cities@cdp.net](mailto:cities@cdp.net).

Please answer the questions comprehensively while also assessing the relevance of the information you provide. Where you do not have all of the information requested, please respond with what you have as this is more valuable than no response.

**The deadline for response is 10th July 2019**

## Help and resources

- **2019 Online Reporting Guidance:** This document provides a high-level overview of each questionnaire section as well as guidance on every question. It provides information on the intent of each question as well as examples of good responses for selected questions
- **In-ORS Guidance:** Within the ORS, there will be three levels of help and guidance
  - Brief help text is provided below every question. This text will give you guidance on the intent of the question.
  - Clicking on the help icon above each question will show a pop-up window with information on how to respond to the question.
  - More detailed guidance can be found by clicking the expandable link below the question. This link will display the full reporting guidance including detailed information on how to respond, examples, links to documentation and scoring associated with the question.
- **Contact us:** All cities can write to [cities@cdp.net](mailto:cities@cdp.net) for questions which are not answered in the guidance, for help accessing the ORS, or for general inquiries.
- **C40 cities** can contact their regional director or [reporting@c40.org](mailto:reporting@c40.org) for help in compiling their response.
- **ICLEI cities** can contact their regional director or [carbonn@iclei.org](mailto:carbonn@iclei.org) for help in compiling their response.

## GCoM Common Reporting Framework

The Global Covenant of Mayors (GCoM) has developed a new [Common Reporting Framework](#) in consultation with partners and cities and local governments around the world. This framework includes a set of global recommendations to ensure robust climate action planning, implementation and monitoring, and streamline measurement and reporting procedures. [Global Covenant of Mayors](#) (GCoM) questions used to report using the new framework are integrated in the Cities questionnaire.

The GCoM reporting framework uses precise language to indicate which provisions are requirements and which are optional. The term **shall** is used throughout the guidance to indicate what is **required**. The mandatory GCoM Common Reporting Framework requirements are detailed using this terminology throughout this guidance document, under the "GCoM Guidance" sections.

Recommendations that GCoM cities are strongly advised to follow are introduced by the term **should**, and optional provisions are introduced by the term **may**.

For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

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## 0. Introduction

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### Introduction

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**0.1 Please give a general description and introduction to your city including your city's reporting boundary in the table below.**

*Question 0.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

#### Response Options

Please complete the following table:

Administrative boundary	Description of city
<p>Select from:</p> <ul style="list-style-type: none"><li>● Local government area within a city / metropolitan area</li><li>● City / Municipality</li><li>● Independent city</li><li>● Special city</li><li>● Federal district</li><li>● Sovereign city-state</li><li>● Metropolitan area</li><li>● Province / County</li><li>● Independent province</li><li>● Intercommunality</li><li>● Sub-municipal district</li><li>● Other: please specify</li></ul>	Text field

**0.2 If you have not previously submitted your Letter of Commitment to the Global Covenant of Mayors, either through the relevant regional covenant or through the Global Covenant secretariat, please attach the letter signed by an appropriately mandated official (e.g. Mayor, City Council) to this question. Please click [here](#) to download the template of the Letter of Commitment.**

#### Response Options

Please attach the relevant document here.

*Question 0.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

### City Details

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**0.3 Please provide information about your city's Mayor or equivalent legal representative authority in the table below.**

*Question 0.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

### Response Options

Please complete the following table:

Leader title	Leader name	Current term end month	Current term end year
Text field	Text field	Select from: <ul style="list-style-type: none"> <li>● January</li> <li>● February</li> <li>● March</li> <li>● April</li> <li>● May</li> <li>● June</li> <li>● July</li> <li>● August</li> <li>● September</li> <li>● October</li> <li>● November</li> <li>● December</li> </ul>	Numerical field

**0.4 Please select the currency used for all financial information disclosed throughout your response.**

### Response Options

Select from Appendix A.

*Question 0.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

**0.5 Please provide details of your city's current population. Report the population in the year of your reported inventory, if possible.**

### Response Options

Please complete the following table:

Current population	Current population year	Projected population	Projected population year
Numerical field	Numerical field	Numerical field	Numerical field

*Question 0.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

**0.6 Please provide further details about the geography of your city.**

### Response Options

Please complete the following table:

Land area of the city boundary as defined in question 0.1 (in square km)
Numerical field

*Question 0.6 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

# 1. Governance & Data Management

## Governance

### 1.0 Does your city incorporate sustainability goals and targets (e.g. GHG reductions) into the master planning for the city?

#### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to incorporate in the next 2 years
- Not intending to incorporate
- Do not know

If Yes to 1.0:

### 1.0a Please detail which goals and targets are incorporated in your city's master plan and describe how these goals are addressed in the table below.

#### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Goal type	How are these goals/targets addressed in the city master plan?
Select from: <ul style="list-style-type: none"><li><input type="radio"/> Emissions reduction targets</li><li><input type="radio"/> Adaptation targets</li><li><input type="radio"/> Renewable energy targets</li><li><input type="radio"/> Energy efficiency targets</li><li><input type="radio"/> Water security targets</li><li><input type="radio"/> Waste management targets</li><li><input type="radio"/> Other: please specify</li></ul>	Text field

[Add Row]

### 1.1 Has the Mayor or city council committed to climate adaptation and/or mitigation across the geographical area of the city?

#### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in future
- Not intending to undertake

- Do not know

If Yes to 1.1:

**1.1a Please select any commitments to climate adaptation and/or mitigation your city has signed and attach evidence.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Name of commitment and attach document	Type of commitment	Comments
Select from: <ul style="list-style-type: none"> <li>● Global Covenant of Mayors for Climate &amp; Energy</li> <li>● Durban Adaptation Charter</li> <li>● Mexico City Pact</li> <li>● UNISDR, Making Cities Resilient Campaign</li> <li>● 100 Resilient Cities</li> <li>● Resilient Communities for America</li> <li>● STAR Communities</li> <li>● LEED for Cities</li> <li>● Mayors National Climate Action Agenda</li> <li>● Chicago Climate Charter</li> <li>● Klimakommune (Climate Municipality)</li> <li>● 100% Renewable Energy Cities &amp; Regions Network</li> <li>● Building Efficiency Accelerator</li> <li>● District Energy in Cities Initiative</li> <li>● One Planet City Challenge</li> <li>● EcoMobility Alliance</li> <li>● ICLEI's Green Climate Cities Program</li> <li>● Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way</li> <li>● Individual City Commitment</li> <li>● Other: please specify</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Adaptation</li> <li>● Mitigation</li> <li>● Both</li> <li>● Other</li> </ul>	Text field

[Add Row]

If Not intending to undertake to 1.1:

**1.1b Please explain why your Mayor or city council does not have any commitments to climate adaptation and/or mitigation.**

**Response Options**

Please complete the following table:

Reason	Explanation
<p>Select from:</p> <ul style="list-style-type: none"><li>● Lack of political will</li><li>● Commitments are under consideration</li><li>● Lack of funding / resources</li><li>● Lack of expertise / knowledge</li><li>● Actions prioritised over commitment</li><li>● Other: please specify</li></ul>	<p>Text field</p>

## 2. Climate Hazards and Vulnerability

### Risk and Vulnerability Assessment

#### 2.0 Has a climate change risk or vulnerability assessment been undertaken for the city area?

##### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

Question 2.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Yes or In progress to 2.0:

#### 2.0a Please select the primary process or methodology used to undertake the risk or vulnerability assessment of your city.

##### Response Options

Please complete the following table:

Primary methodology	Description
Select from: <ul style="list-style-type: none"><li>● IPCC climate change impact assessment guidance</li><li>● OECD Strategic Environmental Assessment and Adaptation to Climate Change</li><li>● UNDP climate risk management methodologies</li><li>● UK Climate Impacts Partnership Framework (UKCIP)</li><li>● World Bank Urban Risk Assessment (URA)</li><li>● Shaping climate resilient development: A framework for decision making (ECA)</li><li>● Sendai Framework for Disaster Risk Reduction</li><li>● US Federal Emergency Management Agency (FEMA) Hazard Identification and Risk Assessment</li><li>● Australian/New Zealand Standard for Risk Management</li><li>● State or region vulnerability and risk assessment methodology</li><li>● Agency specific vulnerability and risk assessment methodology</li><li>● Proprietary methodology</li><li>● CRAFT Tool - City Climate Hazard Taxonomy</li><li>● Building Adaptive and Resilient Cities (BARC) toolkit (regional - Canada)</li><li>● ICLEI ACCCRN Process Toolkit (regional - Southeast Asia)</li><li>● Local Government Climate Change Adaptation Toolkit (regional - Oceania)</li><li>● Unknown</li><li>● Other: please specify</li></ul>	Text field

If Yes to 2.0:

**2.0b Please attach and provide details on your climate change risk and vulnerability assessment. Please provide details on the boundary of your assessment, and where this differs from your city’s boundary, please provide an explanation.**

Question 2.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Publication title	Year of adoption from local government	Web link	Boundary of assessment relative to city boundary (reported in 0.1)	Explanation of boundary choice where the assessment boundary differs from the the city boundary	Areas/Sectors covered by the risk and vulnerability assessment	Primary author of assessment	Does the assessment identify vulnerable populations?
Text field	Numerical field	Text field	Select from: <ul style="list-style-type: none"> <li>● Same – covers entire city and nothing else</li> <li>● Smaller – covers only part of the city</li> <li>● Larger – covers the whole city and adjoining areas</li> <li>● Partial – Covers part of the city and adjoining areas</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Energy</li> <li>● Water Supply and Sanitation</li> <li>● Transport</li> <li>● Food and agriculture</li> <li>● Waste Management</li> <li>● Information &amp; Communications Technology</li> <li>● Environment, Biodiversity and Forestry</li> <li>● Industrial</li> <li>● Commercial</li> <li>● Residential</li> <li>● Education</li> <li>● Public Health</li> <li>● Community and Culture</li> <li>● Law &amp; Order</li> <li>● Emergency Management</li> <li>● Land use planning</li> <li>● Tourism</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Dedicated city team</li> <li>● Relevant city department</li> <li>● Consultant</li> <li>● International organization</li> <li>● Community group</li> <li>● Regional / state / provincial government</li> <li>● National / central government</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● No</li> </ul>

[Add Row]

If Not intending to undertake is selected in 2.0:

**2.0c Please explain why your city does not have a climate risk and vulnerability assessment.**

**Response Options**

Please complete the following table:

Reason	Comment
Select one of the following options: <ul style="list-style-type: none"> <li>● Lack of resources/funding</li> <li>● Lack of expertise</li> <li>● Lack of political will</li> <li>● Climate hazards not experienced in the city</li> <li>● Other</li> </ul>	Text field

## Climate Hazards

**2.1 Please list the most significant climate hazards faced by your city and indicate the probability and consequence of these hazards, as well as the expected future change in frequency and intensity. Please also select the most relevant assets or services that are affected by the climate hazard and provide a description of the impact.**

*Question 2.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

### Response Options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Climate Hazards	Did this hazard significantly impact your city before 2019?	Current probability of hazard	Current consequence of hazard	Social impact of hazard overall	Future change in frequency
Select from Appendix G	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● No</li> <li>● Do not know</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● High</li> <li>● Medium High</li> <li>● Medium</li> <li>● Medium Low</li> <li>● Low</li> <li>● Do not know</li> <li>● Does not currently impact the city</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● High</li> <li>● Medium High</li> <li>● Medium</li> <li>● Medium Low</li> <li>● Low</li> <li>● Do not know</li> <li>● Does not currently impact the city</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Fluctuating socio-economic conditions</li> <li>● Increased incidence and prevalence of disease and illness</li> <li>● Increased demand for public services</li> <li>● Increased demand for healthcare services</li> <li>● Increased risk to already vulnerable populations</li> <li>● Increased conflict and/or crime</li> <li>● Increased resource demand</li> <li>● Loss of traditional jobs</li> <li>● Migration from rural areas to cities</li> <li>● Population displacement</li> <li>● Loss of tax base to support public services</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Increasing</li> <li>● Decreasing</li> <li>● None</li> <li>● Do not know</li> <li>● Not expected to happen in the future</li> </ul>

Future change in intensity	When do you first expect to experience those changes?	Most relevant assets/ services affected overall	Please identify which vulnerable populations are affected	Magnitude of expected future impact	Please describe the impacts experienced so far, and how you expect the hazard to impact in the future
Select from: <input type="radio"/> Increasing <input type="radio"/> Decreasing <input type="radio"/> None <input type="radio"/> Do not know <input type="radio"/> Not expected to happen in the future	Select from: <input type="radio"/> Immediately <input type="radio"/> Short-term (by 2025) <input type="radio"/> Medium-term (2026-2050) <input type="radio"/> Long-term (after 2050)	Select from: <input type="radio"/> Energy <input type="radio"/> Water supply & sanitation <input type="radio"/> Transport <input type="radio"/> Food & agriculture <input type="radio"/> Waste management <input type="radio"/> Information & communications technology <input type="radio"/> Environment, biodiversity, forestry <input type="radio"/> Industrial <input type="radio"/> Commercial <input type="radio"/> Residential <input type="radio"/> Education <input type="radio"/> Tourism <input type="radio"/> Public health <input type="radio"/> Society / community & culture <input type="radio"/> Law & order <input type="radio"/> Emergency services <input type="radio"/> Land use planning <input type="radio"/> Other	Select from: <input type="radio"/> Women & girls <input type="radio"/> Children & youth <input type="radio"/> Elderly <input type="radio"/> Indigenous population <input type="radio"/> Marginalized groups <input type="radio"/> Persons with disabilities <input type="radio"/> Persons with chronic diseases <input type="radio"/> Low-income households <input type="radio"/> Unemployed persons <input type="radio"/> Persons living in sub-standard housing <input type="radio"/> Other	Select from: <input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low <input type="radio"/> Do no know	Text field

[Add Row]

**2.2 Please identify the factors that most greatly affect your city’s ability to adapt to climate change and indicate how those factors either support or challenge this ability.**

*Question 2.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Factors that affect ability to adapt	Support / Challenge	Please describe the factor and the degree to which it supports or challenges the adaptive capacity of your city
<p>Select from:</p> <ul style="list-style-type: none"> <li>● Access to basic services</li> <li>● Access to healthcare</li> <li>● Access to education</li> <li>● Cost of living</li> <li>● Housing</li> <li>● Poverty</li> <li>● Inequality</li> <li>● Unemployment</li> <li>● Underemployment</li> <li>● Public health</li> <li>● Political stability</li> <li>● Political engagement / transparency</li> <li>● Government capacity</li> <li>● Budgetary capacity</li> <li>● Migration</li> <li>● Safety and security</li> <li>● Economic health</li> <li>● Economic diversity</li> <li>● Rapid urbanization</li> <li>● Resource availability</li> <li>● Environmental conditions</li> <li>● Infrastructure conditions / maintenance</li> <li>● Infrastructure capacity</li> <li>● Land use planning</li> <li>● Community engagement</li> <li>● Access to quality / relevant data</li> <li>● Other</li> </ul>	<p>Select from:</p> <ul style="list-style-type: none"> <li>● Challenge</li> <li>● Support</li> <li>● Do not know</li> </ul>	<p>Text field</p>

[Add Row]

### 3. Adaptation

#### Adaptation Actions

**3.0 Please describe the main actions you are taking to reduce the risk to, or vulnerability of, your city's infrastructure, services, citizens, and businesses from climate change as identified in the Climate Hazards section.**

*Question 3.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

#### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Climate hazards	Action	Action title	Status of action	Co-benefit area	Action description and implementation progress
Drop-down populated with selections from 2.1 column 1	Select from Appendix B	Text field	Select from: <ul style="list-style-type: none"> <li>● Scoping</li> <li>● Pre-feasibility study</li> <li>● Pre-implementation</li> <li>● Implementation</li> <li>● Implementation complete but not in operation</li> <li>● Operation</li> <li>● Monitoring and reporting</li> </ul>	Select from Appendix H	Text field

Finance status	Total cost of the project	Total cost provided by the local government	Primary source fund	Web link
Select from: <ul style="list-style-type: none"> <li>● Pre-feasibility study status</li> <li>● Feasibility undertaken</li> <li>● Feasibility finalised, and finance partially secured</li> <li>● Finance secured</li> </ul>	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Local</li> <li>● (Sub)national</li> <li>● International (ODA)</li> <li>● Climate finance (carbon credits)</li> <li>● Public-private partnership</li> <li>● Other</li> </ul>	Text field

[Add Row]

#### Adaptation Planning

### 3.1 Does your city council have a published plan that addresses climate change adaptation?

#### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

Question 3.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Yes or In progress to 3.1:

**3.1a Please provide more information on your plan that addresses climate change adaptation and attach the document. Please provide details on the boundary of your plan, and where this differs from your city’s boundary, please provide an explanation.**

Question 3.1a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

#### Response Options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Publication title	Areas covered by adaptation plan	Year of adoption from local government	Boundary of plan relative to city boundary (reported in 0.1)	If the city boundary is different from the plan boundary, please explain why and any areas / other cities excluded or included?	Stage of implementation
Text field and attachment function	Select from Appendix E	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Same – covers entire city and nothing else</li> <li>● Smaller – covers only part of the city</li> <li>● Larger – covers the whole city and adjoining areas</li> <li>● Partial – Covers part of the city and adjoining areas</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Plan in development</li> <li>● Plan developed but not implemented</li> <li>● Plan in implementation</li> <li>● Implementation complete</li> <li>● Measurement in progress</li> <li>● Plan update in progress</li> <li>● Other</li> </ul>

Type of plan	Has your local government addressed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?	Comment or describe the synergies, trade-offs, and co-benefits of this interaction	Primary author of plan	Description of the stakeholder engagement process	Web link
Select from: <ul style="list-style-type: none"> <li>● Standalone</li> <li>● Integrated mitigation / adaptation</li> <li>● Addressed in general city plan</li> <li>● Addressed in city sector plan</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● In Progress</li> <li>● Intending to undertake in the next 2 years</li> <li>● Not intending to undertake</li> <li>● Don't know</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Dedicated city team</li> <li>● Relevant city department;</li> <li>● Consultant</li> <li>● International organization</li> <li>● Community group</li> <li>● Regional / state / provincial government</li> <li>● National / central government</li> <li>● Other</li> </ul>	Text field	Text field

[Add Row]

*If Not intending to 3.1:*

**3.1b Please explain why not and any future arrangements you have to create a plan.**

**Response Options**

Please complete the following table:

Reason	Comment
Select from: <ul style="list-style-type: none"> <li>● Adaptation is not within city control</li> <li>● Adaptation is covered under main city strategy</li> <li>● Lack of resources/funding</li> <li>● Lack of expertise</li> <li>● Lack of political will</li> <li>● Adaptation is covered in the city plans</li> <li>● Adaptation is not currently a priority for my city</li> <li>● Other</li> </ul>	Text field

**Adaptation Goals**

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**3.2 Please describe the main goals of your city's adaptation efforts and the metrics/KPIs for each goal.**

*Question 3.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Adaptation goal	Target year	Metrics / Indicators	Percentage of target achieved so far	Does this target align with a requirement from a higher level of government?
Text field	Numerical field	Text field	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> Yes, but it exceeds its scale or requirements</li> <li><input type="radio"/> No</li> <li><input type="radio"/> Do not know</li> </ul>

[Add Row]

---

## 4. City-wide Emissions

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The questions in this section refer to your city's city-wide (sometimes referred to as "geographic" or "community") emissions inventory. This inventory encompasses emissions which are within a particular city boundary, over which local governments can exercise a degree of influence through the policies and regulations they implement.

### City-wide GHG Emissions Data

---

#### 4.0 Does your city have a city-wide emissions inventory to report?

By selecting Yes below, you are indicating that you have fuel and/or greenhouse gas (GHG) emissions data from the entire city area over which the city government can exercise a degree of influence through the policies and regulations they implement (sometimes referred to as 'geographic' or 'community' emissions) to report at this time.

##### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake

*Question 4.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

*If Yes or In Progress to 4.0:*

#### 4.1 Please state the dates of the accounting year or 12-month period for which you are reporting your latest city-wide GHG emissions inventory.

##### Response Options

Please complete the following table:

From	To
Drop-down calendar	Drop-down calendar

*Question 4.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

*If Yes or In Progress to 4.0:*

#### 4.2 Please indicate the category that best describes the boundary of your city-wide GHG emissions inventory.

*Question 4.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

##### Response Options

Please complete the following table:

Boundary of inventory relative to city boundary (reported in 0.1)	Excluded sources/areas	Explanation of boundary choice where the inventory boundary differs from the city boundary (include inventory boundary, GDP and population)
Select from: <ul style="list-style-type: none"> <li>● Same - covers entire city and nothing else</li> <li>● Smaller - covers only part of the city</li> <li>● Larger - covers the whole city and adjoining areas</li> <li>● Partial - Covers part of the city and adjoining areas</li> </ul>	Text field	Text field

If Yes or In progress to 4.0:

**4.3 Please give the name of the primary protocol, standard, or methodology you have used to calculate your city’s city-wide GHG emissions.**

Question 4.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

**Response Options**

Please complete the following table:

Primary protocol	Comment
Select from: <ul style="list-style-type: none"> <li>● Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)</li> <li>● International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank)</li> <li>● 2006 IPCC Guidelines for National Greenhouse Gas Inventories</li> <li>● U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)</li> <li>● Regional or country specific methodology</li> <li>● City specific methodology</li> <li>● Other</li> </ul>	Text field

If Yes to 4.0 and GPC selected in 4.3:

**4.3a The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new [Common Reporting Framework \(CRF\)](#), to encourage standard reporting of emissions data. If your city is reporting an updated inventory, we encourage reporting this in the CRF format, for which guidance can be found in the link below. Would you like to report your inventory in the CRF format or continue to report in the GPC format? Please ensure you respond to this question in order for the correct emissions breakdown questions to be displayed.**

**Response Options**

Select one of the following options:

- Yes - use the CRF format
- No - continue to use the GPC format

Question 4.3a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Yes or In progress to 4.0:

**4.4 Which gases are included in your city-wide emissions inventory?**

### Response Options

Select all that apply:

- CO2
- CH4
- N2O
- HFCs
- PFCs
- SF6
- NF3

Question 4.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Yes to 4.0:

### 4.5 Please attach your city-wide inventory in Excel or other spreadsheet format and provide additional details on the inventory calculation methods in the table below.

If you have an inventory in the format of the GPC, please attach it below. If you are using the ClearPath tool, please attach both extracts in the table below. If your inventory is not in the format of the GPC, you can also attach it below.

Question 4.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Emissions inventory format	Document title and attachment	Emissions factors used	Global Warming Potential (select relevant IPCC Assessment Report)	Please select if these additional sectors are included in the inventory	Population in inventory year	Overall Level of confidence	Comment on level of confidence
Select from: <input type="checkbox"/> GPC format: City Inventory Reporting and Information System (CIRIS) <input type="checkbox"/> GPC Reporting tool <input type="checkbox"/> GPC format: ClearPath (ICLEI) <input type="checkbox"/> Custom or older GPC format <input type="checkbox"/> SCATTER <input type="checkbox"/> This inventory is in a format other than the GPC	Text Field and attachment function	Select from: <input type="checkbox"/> IPCC <input type="checkbox"/> LCA <input type="checkbox"/> Other	Select from: <input type="checkbox"/> IPCC 2nd AR (1995) <input type="checkbox"/> IPCC 3rd AR (2001) <input type="checkbox"/> IPCC 4th AR (2007) <input type="checkbox"/> IPCC 5th AR (2013)	<input type="checkbox"/> Industrial process and/or product use <input type="checkbox"/> Agriculture, forestry or other land use sectors	Numerical field	Select from: <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Text field

[Add Row]

If Yes – use the CRF format is selected in 4.3a OR any selection other than Global Protocol for Community Scale Greenhouse Gas Emissions Inventories is selected in 4.3:

### 4.6a The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new Common Reporting Framework, to encourage standard reporting of

emissions data. Please provide a breakdown of your city-wide emissions by sector and sub-sector in the table below. Where emissions data is not available, please use the relevant notation keys to explain the reason why.

### Response Options

Please complete the following table:

Sectors and sub-sectors	Direct emissions / Scope 1 (metric tonnes CO2e)	If you have no direct emissions to report, please select a notation key to explain why	Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling / Scope 2 (metric tonnes CO2e)	If you have no indirect emissions to report, please select a notation key to explain why	Emissions occurring outside the city boundary as a result of in-city activities / Scope 3 (metric tonnes CO2e)	If you have no emissions occurring outside the city boundary to report as a result of in-city activities, please select a notation key to explain why	Please explain any excluded sources, identify any emissions covered under a ETS and provide any other comments
Stationary energy > Residential buildings	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Not Occurring</li> <li>● Integrated Elsewhere</li> <li>● Not Estimated</li> <li>● Confidential</li> <li>● Combination of notation keys</li> <li>● N/A</li> </ul>	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Not Occurring</li> <li>● Integrated Elsewhere</li> <li>● Not Estimated</li> <li>● Confidential</li> <li>● Combination of notation keys</li> <li>● N/A</li> </ul>	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Not Occurring</li> <li>● Integrated Elsewhere</li> <li>● Not Estimated</li> <li>● Confidential</li> <li>● Combination of notation keys</li> <li>● N/A</li> </ul>	Text field
Stationary energy > Commercial buildings & facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Institutional buildings and facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Industrial buildings & facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Agriculture	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Fugitive emissions	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Total Stationary Energy	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > On-road	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Rail	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Waterborne navigation	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Aviation	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Off-road	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Total Transport	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above

Waste > Solid waste disposal	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Waste > Biological treatment	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Waste > Incineration and open burning	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Waste > Wastewater	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Total Waste	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
IPPU > Industrial process	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
IPPU > Product use	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Total IPPU	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
AFOLU > Livestock	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
AFOLU > Land use	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Total AFOLU	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Electricity-only generation	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Generation of grid-supplied energy > CHP generation	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Heat/cold generation	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Local renewable generation	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	<i>Not applicable for this sub-sector</i>	Same as above	Same as above	Same as above
Total Generation of grid-supplied energy	Same as above	Same as above	<i>Not applicable for this sub-sector</i>	Same as above			

Total Emissions (excluding generation of grid-supplied energy)	Same as above	Same as above	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Not Occuring</li> <li>● Integrated Elsewhere</li> <li>● Not Estimated</li> <li>● Confidential</li> <li>● Combination of notation keys</li> <li>● N/A</li> </ul>	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Not Occuring</li> <li>● Integrated Elsewhere</li> <li>● Not Estimated</li> <li>● Confidential</li> <li>● Combination of notation keys</li> <li>● N/A</li> </ul>	Same as above
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Question 4.6a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Global Protocol for Community Scale Greenhouse Gas Emissions Inventories is selected in 4.3 and No – continue reporting using the GPC format to 4.3a:

**4.6b Please provide a summary of emissions by sector and scope as defined in the Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC) in the table below.**

Question 4.6b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

**Response Options**

Please complete the following table:

Sector and scope (GPC reference number)	Emissions (metric tonnes CO2e)	Where data is not available, please explain why
Stationary Energy: energy use – Scope 1 (I.X.1)	Numerical field	Text field
Stationary Energy: energy use – Scope 2 (I.X.2)	Numerical field	Text field
Stationary Energy: energy use – Scope 3 (I.X.3)	Numerical field	Text field
Stationary Energy: energy generation supplied to the grid – Scope 1 (I.4.4)	Numerical field	Text field
Transportation – Scope 1 (II.X.1)	Numerical field	Text field
Transportation – Scope 2 (II.X.2)	Numerical field	Text field

Transportation – Scope 3 (II.X.3)	Numerical field	Text field
Waste: waste generated within the city boundary – Scope 1 (III.X.1)	Numerical field	Text field
Waste: waste generated within the city boundary – Scope 3 (III.X.2)	Numerical field	Text field
Waste: waste generated outside the city boundary – Scope 1 (III.X.3)	Numerical field	Text field
Industrial Processes and Product Use – Scope 1 (IV)	Numerical field	Text field
Agriculture, Forestry and Land Use – Scope 1 (V)	Numerical field	Text field
TOTAL Scope 1 (Territorial) emissions	Numerical field	Text field
TOTAL Scope 2 emissions	Numerical field	Text field
TOTAL Scope 3 emissions	Numerical field	Text field
TOTAL BASIC emissions	Numerical field	Text field

TOTAL BASIC+ emissions	Numerical field	Text field
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If any methodology other than GPC is selected in 4.3 and if Yes selected in response to 4.0:

**4.6c Please provide a breakdown of your GHG emissions by scope. Where values are not available, please use the comment field to indicate the reason why.**

**Response Options**

Please complete the following table:

Scope	Metric tonnes CO2e	Level of confidence
Scope 1 emissions excluding emissions from grid-supplied energy generation	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>
Scope 1 emissions from grid-supplied energy generation within the city boundary	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>
Total Scope 1 emissions (Row 1 + Row 2)	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>
Total Scope 2 emissions	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>
Total (Scope 1 + Scope 2) emissions	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>
Total Scope 3 emissions	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> High</li> <li><input type="radio"/> Medium</li> <li><input type="radio"/> Low</li> </ul>

If 2006 IPCC Guidelines for National Greenhouse Gas Inventories or International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank) is selected in 4.3 and if Yes selected in response to 4.0:

**4.6d Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by IPCC sector in the table below.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

IPCC sector	Sector	Scope	Emissions (metric tonnes CO2e)
Select from: <ul style="list-style-type: none"> <li>● Energy</li> <li>● Industrial processes and product use (IPPU)</li> <li>● Agriculture, Forestry and other land use (AFOLU)</li> <li>● Waste</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Stationary energy (buildings)</li> <li>● Residential buildings</li> <li>● Public buildings</li> <li>● Commercial buildings</li> <li>● Industrial buildings</li> <li>● Transportation</li> <li>● Road</li> <li>● Rail</li> <li>● Waste</li> <li>● Wastewater</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Scope 1</li> <li>● Scope 2</li> <li>● Total figure</li> </ul>	Numerical field

[Add Row]

If [U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions \(ICLEI\)](#) is selected in 4.3 and if Yes selected in response to 4.0:

**4.6e Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by the US Community Protocol sources.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

US Community Protocol Sources	Sector	Scope	Emissions (metric tonnes CO2e)
Select from: <ul style="list-style-type: none"> <li>● Built environment</li> <li>● Transportation and other mobile sources</li> <li>● Solid waste</li> <li>● Wastewater and water</li> <li>● Agricultural livestock</li> <li>● Upstream impacts of community-wide activities</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Stationary energy (buildings)</li> <li>● Residential buildings</li> <li>● Public buildings</li> <li>● Commercial buildings</li> <li>● Industrial buildings</li> <li>● Transportation</li> <li>● Road</li> <li>● Rail</li> <li>● Waste</li> <li>● Wastewater</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Scope 1</li> <li>● Scope 2</li> <li>● Total figure</li> </ul>	Numerical field

[Add Row]

If *Regional or country specific methodology, City specific methodology or Other* is selected in 4.3 and if Yes selected in response to 4.0:

**4.6f Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by end user (buildings, water, waste, transport), economic sector (residential, commercial, industrial, institutional), or any other classification system used in your city.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Source	Sector	Scope	Emissions (metric tonnes CO2e)
Text field	Select from: <ul style="list-style-type: none"> <li>● Stationary energy (buildings)</li> <li>● Residential buildings</li> <li>● Public buildings</li> <li>● Commercial buildings</li> <li>● Industrial buildings</li> <li>● Transportation</li> <li>● Road</li> <li>● Rail</li> <li>● Waste</li> <li>● Wastewater</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Scope 1</li> <li>● Scope 2</li> <li>● Total figure</li> </ul>	Numerical field

[Add Row]

*If Yes to 4.0*

**4.8 Please indicate if your city-wide emissions have increased, decreased, or stayed the same since your last emissions inventory, and describe why.**

**Response Options**

Please complete the following table:

Change in emissions	Reason for change	Please explain and quantify changes in emissions
Select from: <ul style="list-style-type: none"> <li>● Increased</li> <li>● Decreased</li> <li>● Stayed the same</li> <li>● This is our first year of calculation</li> <li>● Do not know</li> </ul>	If "Increased" or "Decreased" is selected: <ul style="list-style-type: none"> <li>● Increased energy/electricity consumption</li> <li>● Population increase</li> <li>● Improved data accuracy</li> <li>● Emissions reduction actions not implemented</li> <li>● Change in weather conditions</li> <li>● Change in accounting methodology</li> <li>● Change in calculation following verification</li> <li>● Behavioural change</li> <li>● Technological change</li> <li>● Legislative change</li> <li>● Change in available data</li> <li>● Change in data collection methods</li> <li>● Policy change</li> <li>● Financial conditions</li> <li>● Other</li> </ul> If "This is our first year of calculation" is selected: <ul style="list-style-type: none"> <li>● Lack of resource / funding overcome</li> <li>● Lack of knowledge overcome</li> <li>● Other</li> </ul> If "Stayed the same" is selected: <ul style="list-style-type: none"> <li>● No new inventory to report</li> <li>● Emissions have not changed</li> <li>● Other</li> </ul> If "Do not know" is selected: <ul style="list-style-type: none"> <li>● Change in staff</li> <li>● Lack of documentation</li> <li>● Change in methodology</li> <li>● Other</li> </ul>	Text field

If Yes to 4.0:

**4.9 Does your city have a consumption-based inventory to measure emissions from consumption of goods and services by your residents?**

**Response Options**

Please complete the following table:

Response	Provide an overview and attach your consumption-based inventory if relevant
Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Yes</li> <li><input type="radio"/> In progress</li> <li><input type="radio"/> Intending to undertake in the next 2 years</li> <li><input type="radio"/> Not intending to undertake</li> <li><input type="radio"/> Do not know</li> </ul>	Text field and attachment function

## City-wide External Verification

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*If Yes to 4.0:*

### 4.11 Has the city-wide GHG emissions data you are currently reporting been externally verified or audited in part or in whole?

#### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

*If Yes to 4.11:*

### 4.11a Please provide the following information about the city-wide emissions verification.

#### Response Options

Please complete the following table:

Name of verifier and attach verification certificate	Year of verification	Please explain which parts of your inventory are verified
Text field and attachment function	Numerical field	Text field

*If Not intending to undertake or Intending to undertake in the next 2 years to 4.11:*

### 4.11b Please explain why your city-wide emissions inventory is not verified and describe any plans to verify your city-wide emissions in the future.

#### Response Options

Please complete the following table:

Reason	Comments
Select from: <ul style="list-style-type: none"> <li>• Verification under consideration</li> <li>• Lack of funding / resources</li> <li>• Lack of expertise / knowledge</li> <li>• Verification is not prioritised</li> <li>• Data is internally verified</li> <li>• Other</li> </ul>	Text field

## Historical emissions inventories

**4.12 Please provide details on any historical and base year city-wide emissions inventories your city has, in order to allow assessment of targets in the table below.**

### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Inventory date from	Inventory date to	Scopes/boundary covered	Previous emissions (metric tonnes CO2e)	Is this inventory used as the base year inventory?	Methodology	File name and attach your inventory	Comments
Date field	Date field	Select from: <ul style="list-style-type: none"> <li>• Total emissions</li> <li>• Scope 1 (direct)</li> <li>• Scope 2 (indirect)</li> <li>• Scope 3 (other indirect)</li> <li>• Other</li> </ul>	Numerical field	Select from: <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Select from: <ul style="list-style-type: none"> <li>• Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)</li> <li>• International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank)</li> <li>• 2006 IPCC Guidelines for National Greenhouse Gas Inventories</li> <li>• U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)</li> <li>• Regional or country specific methodology</li> <li>• City specific methodology</li> <li>• Other</li> </ul>	Text field and attachment function	Text field

## Re-stating previous emissions inventories

If Yes to 4.0:

### 4.13 Since your last submission, have you needed to recalculate any past city-wide GHG emission inventories previously reported to CDP?

#### Response Options

Select one of the following options:

- Yes
- No
- Do not know

If Yes to 4.13:

### 4.13a Please provide your city's recalculated total city-wide emissions figures for any previous inventories along with Scope 1, 2 and 3 breakdowns where applicable.

#### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Inventory date from	Inventory date to	Scope	Previous emissions (metric tonnes CO2e)	Updated emissions (metric tonnes CO2e)	Updated methodology	File name and attach your new inventory	Reasoning for recalculation
Date field	Date field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Total emissions</li> <li><input type="radio"/> Scope 1</li> <li><input type="radio"/> Scope 2</li> <li><input type="radio"/> Scope 3</li> <li><input type="radio"/> Other</li> </ul>	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)</li> <li><input type="radio"/> International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank)</li> <li><input type="radio"/> 2006 IPCC Guidelines for National Greenhouse Gas Inventories</li> <li><input type="radio"/> U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)</li> <li><input type="radio"/> Regional or country specific methodology</li> <li><input type="radio"/> City specific methodology</li> <li><input type="radio"/> Other</li> </ul>	Text field and attachment function	Text field

[Add Row]

## 5. Emissions Reduction

### Mitigation Target setting

#### 5.0 Do you have a GHG emissions reduction target in place at the city-wide level?

Question 5.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

#### Response Options

Select all that apply:

- Base year emissions (absolute) target
- Fixed level target
- Base year intensity target
- Baseline scenario (business as usual) target
- No target

If "Base year emissions (absolute) target" is selected in 5.0:

#### 5.0a Please provide details of your total city-wide base year emissions reduction (absolute) target. In addition, you may add rows to provide details of your sector-specific targets, by providing the base year emissions specific to that target.

Question 5.0a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

#### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target implementation	Base year emissions (metric tonnes CO2e)	Percentage reduction target
Select from: <ul style="list-style-type: none"> <li>● All emissions sources included in city inventory</li> <li>● Energy</li> <li>● Transport</li> <li>● Waste</li> <li>● Other</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Same - covers entire city and nothing else</li> <li>● Smaller - covers only part of the city</li> <li>● Larger - covers the whole city and adjoining areas</li> <li>● Partial - Covers part of the city and adjoining areas</li> </ul>	Numerical field	Numerical field	Numerical field	Numerical field

Target year	Target year absolute emissions (metric tonnes CO2e)	Percentage of target achieved so far	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Please indicate to which sector(s) the target applies	Does this target align to a requirement from a higher level of sub-national government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numerical field	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>• Yes - 1.5 c</li> <li>• Yes - 2°C</li> <li>• No</li> <li>• Do not know</li> </ul>	Select from: <ul style="list-style-type: none"> <li>• Energy industry</li> <li>• Heating and cooling supply</li> <li>• Commercial buildings</li> <li>• Residential buildings</li> <li>• Public facility</li> <li>• Industrial facilities</li> <li>• Transport</li> <li>• Water</li> <li>• Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes, but it exceeds its scale or requirement</li> <li>• No</li> <li>• Do not know</li> </ul>	Text field

[Add Row]

If "Fixed level target" selected in 5.0:

**5.0b Please provide details of your total fixed level target.**

Question 5.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Year of target implementation	Target year	Projected population in target year
Select from: <ul style="list-style-type: none"> <li>• All emissions sources included in city inventory</li> <li>• Energy</li> <li>• Transport</li> <li>• Waste</li> <li>• Other</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>• Same - covers entire city and nothing else</li> <li>• Smaller - covers only part of the city</li> <li>• Larger - covers the whole city and adjoining areas</li> <li>• Partial - Covers part of the city and adjoining areas</li> </ul>	Numerical field	Numerical field	Numerical field

Target year absolute emissions goal (metric tonnes CO2e)	Percentage of target achieved	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Please indicate to which sector(s) the target applies	Does this target align to a requirement from a higher level of government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Yes - 1.5°C</li> <li>● Yes - 2°C</li> <li>● No</li> <li>● Do not know</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Energy industry</li> <li>● Heating and cooling supply</li> <li>● Commercial buildings</li> <li>● Residential buildings</li> <li>● Public facility</li> <li>● Industrial facilities</li> <li>● Transport</li> <li>● Water</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● Yes, but it exceeds its scale or requirement</li> <li>● No</li> <li>● Do not know</li> </ul>	Text field

[Add Row]

If "Base year intensity target" selected in 5.0:

**5.0c Please provide details of your total city-wide base year intensity target. An intensity target is usually measured per capita or per unit GDP. If you have an absolute emissions reduction target, please select "Base year emissions (absolute) target" in question 5.0.**

Question 5.0c is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

### Response Options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target implementation	Intensity unit (Emissions per)	Base year emissions per intensity unit (metric tonnes CO2e per denominator)	Base year emissions (metric tonnes CO2e)
Select from: <ul style="list-style-type: none"> <li>● All emissions sources included in city inventory</li> <li>● Energy</li> <li>● Transport</li> <li>● Waste</li> <li>● Other</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Same - covers entire city and nothing else</li> <li>● Smaller - covers only part of the city</li> <li>● Larger - covers the whole city and adjoining areas</li> <li>● Partial - Covers part of the city and adjoining areas</li> </ul>	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Metric tonnes of CO2e per capita</li> <li>● Metric tonnes of CO2e per unit GDP</li> <li>● Other</li> </ul>	Numerical field	Numerical field

Percentage reduction target in emissions intensity	Target year	Target year absolute emissions (metric tonnes CO2e)	Percentage of target achieved	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Please indicate to which sector(s) the target applies	Does this target align to a requirement from a higher level of government?	Please describe your target If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numerical field	Numerical field	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Yes - 1.5°C</li> <li>● Yes - 2°C</li> <li>● No</li> <li>● Do not know</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Energy industry</li> <li>● Heating and cooling supply</li> <li>● Commercial buildings</li> <li>● Residential buildings</li> <li>● Public facility</li> <li>● Industrial facilities</li> <li>● Transport</li> <li>● Water</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● Yes, but it exceeds its scale or requirement</li> <li>● No</li> <li>● Do not know</li> </ul>	Text field

[Add Row]

If "Baseline scenario (business as usual) target" is selected in response to 5.0:

**5.0d Please provide details of your total city-wide baseline scenario target, including projected business as usual emissions.**

Question 5.0d is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

**Response Options**

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target implementation	Base year emissions (metric tonnes CO2e)	Target year	Estimated business as usual absolute emissions in target year (metric tonnes CO2e)
Select from: <ul style="list-style-type: none"> <li>● All emissions sources included in city inventory</li> <li>● Energy</li> <li>● Transport</li> <li>● Waste</li> <li>● Other</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Same - covers entire city and nothing else</li> <li>● Smaller - covers only part of the city</li> <li>● Larger - covers the whole city and adjoining areas</li> <li>● Partial - Covers part of the city and adjoining areas</li> </ul>	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field

Percentage reduction target from business as usual	Percentage of target achieved	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Please describe the target and the modelling methodology(ies) and parameters used to define it	Please indicate to which sector(s) the target applies	Does this target align to a requirement from a higher level of government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Yes - 1.5°C</li> <li>● Yes - 2°C</li> <li>● No</li> <li>● Do not know</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Energy industry</li> <li>● Heating and cooling supply</li> <li>● Commercial buildings</li> <li>● Residential buildings</li> <li>● Public facility</li> <li>● Industrial facilities</li> <li>● Transport</li> <li>● Water</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● Yes, but it exceeds its scale or requirement</li> <li>● No</li> <li>● Do not know</li> </ul>	Text field

[Add Row]

If "No target" is selected in 5.0:

**5.0e Please explain why you do not have a city-wide emissions reduction target and any plans to set one in the future.**

**Response Options**

Please complete the following table:

Reason	Comment
Select from: <ul style="list-style-type: none"> <li>● Emissions not calculated</li> <li>● Not intending to set a target</li> <li>● Lack of resources</li> <li>● Lack of available data</li> <li>● Policies/projects prioritized over target setting</li> <li>● Target is set at regional level</li> <li>● Target is set at national level</li> <li>● Target is in development</li> <li>● Target already achieved</li> <li>● Other</li> </ul>	Text field

If Yes – 1.5 or Yes – 2°C is selected in "Does this target align..." in 5.0a, 5.0b, 5.0c or 5.0d:

**5.1 Please describe how the target(s) reported above align with the global 1.5-2°C pathway set out in the Paris agreement.**

**Response Options**

This is an open text question.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

If any selection except No target in 5.0:

**5.2 Is your city-wide emissions reduction target(s) conditional on the success of an externality or component of policy outside of your control?**

**Response Options**

Select one of the following options:

- Yes
- No
- Do not know

*Question 5.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

If Yes to 5.2:

**5.2a Please identify and describe the conditional components of your city-wide emissions reduction target(s).**

**Response Options**

This is an open text question.

Please note that when copying from another document into the disclosure platform, formatting is not retained.

*Question 5.2a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

If any selection except No target in 5.0:

**5.3 Does your city-wide emissions reduction target(s) account for the use of transferable emissions units?**

**Response Options**

Select one of the following options:

- Yes
- No
- Do not know

*Question 5.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).*

If Yes to 5.3:

**5.3a Please provide details on the use of transferable emissions.**

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Type of transferable emissions	Emissions saved (metric tonnes CO2e)	What percentage of the target does this unit represent?	Please identify which target this refers to and describe the transferable emissions unit in particular the source of the transferable units
Select from: <ul style="list-style-type: none"> <li>● Offset credit transactions generated within the boundary and sold</li> <li>● Offset credit transactions purchased from outside of the boundary</li> <li>● Renewable energy generation produced within the geographic boundary, or reflecting an investment by the city</li> <li>● Renewable energy credits</li> <li>● Other</li> </ul>	Numerical field	Numerical field	Text field

Question 5.3a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

## Mitigation Actions

**5.4 Describe the anticipated outcomes of the most impactful mitigation actions your city is currently undertaking; the total cost of the action and how much is being funded by the local government.**

### Response Options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Mitigation action	Action title	Means of implementation	Implementation status	Estimated emissions reduction (metric tonnes CO2e)	Energy savings (MWh)	Renewable energy production (MWh)	Timescale of reduction / savings / energy production
Select from Appendix D	Text field	Select all the apply from Appendix F	Select from: <ul style="list-style-type: none"> <li>● Scoping</li> <li>● Pre-feasibility study</li> <li>● Pre-implementation</li> <li>● Implementation</li> <li>● Implementation complete</li> <li>● Operation</li> <li>● Monitoring and reporting</li> </ul>	Numerical field	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Per year</li> <li>● Projected lifetime</li> <li>● Other</li> </ul>

Co-benefit area	Action description	Finance status	Total cost of the project	Total cost provided by the local government	Primary fund source	Web link to action website
Select all that apply from Appendix H	Text field	Select from: <ul style="list-style-type: none"> <li>● Pre-feasibility study status</li> <li>● Feasibility undertaken</li> <li>● Feasibility finalized, and finance partially secured</li> <li>● Finance secured</li> </ul>	Numerical field	Numerical field	Select from: <ul style="list-style-type: none"> <li>● Local</li> <li>● (Sub) national</li> <li>● International (ODA)</li> <li>● Climate finance (carbon credits)</li> <li>● Public-private partnership</li> <li>● Other</li> </ul>	Text field

[Add Row]

Question 5.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

## Mitigation Planning

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### 5.5 Does your city have a climate change mitigation or energy access plan for reducing city-wide GHG emissions?

#### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

Question 5.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

If Yes to 5.5:

**5.5a Please attach your city’s climate change mitigation plan below. If your city has both action and energy access plans, please make sure to attach all relevant documents below.**

Question 5.5a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the [GCoM Guidance note](#).

#### Response Options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Publication title and attach document	Year of adoption from local government	Web link	Areas covered by action plan	Boundary of plan relative to city boundary (reported in 0.1)	If the city boundary is different from the plan boundary, please explain why and any areas/other cities excluded or included
Text field and attachment function	Numerical field	Text field	Select all that apply from Appendix E	Select from: <ul style="list-style-type: none"> <li>• Same – covers entire city and nothing else</li> <li>• Smaller – covers only part of the city</li> <li>• Larger – covers the whole city and adjoining areas</li> <li>• Partial – Covers part of the city and adjoining areas</li> </ul>	Text field

Stage of implementation	Has your local government assessed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?	Comment or describe the synergies, trade-offs, and co-benefits of this interaction	Has there been a stakeholder engagement plan to develop the plan?	Primary author of plan
Select from: <ul style="list-style-type: none"> <li>• Plan in development</li> <li>• Plan developed but not implemented</li> <li>• Plan in implementation</li> <li>• Implementation complete</li> <li>• Measurement in progress</li> <li>• Plan update in progress</li> <li>• Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>• Yes</li> <li>• In progress</li> <li>• Intending to undertake in the next 2 years</li> <li>• Not intending to undertake</li> <li>• Don't know</li> </ul>	Text field	Text field	Select from: <ul style="list-style-type: none"> <li>• Dedicated city team</li> <li>• Relevant city department</li> <li>• Consultant</li> <li>• International organization</li> <li>• Community group</li> <li>• Regional / state / provincial government</li> <li>• National / central government</li> <li>• Other</li> </ul>

[Add Row]

*If Not intending to undertake, or Intending to undertake in the next 2 years to 55:*

**5.5b Please explain why you do not have a city climate change mitigation plan and any future plans to create one.**

**Response Options**

Please complete the following table:

Reason	Comment
<p>Select from:</p> <ul style="list-style-type: none"><li>● No plans yet to create an action plan</li><li>● Resources lacking to create an action plan</li><li>● Action plan in early stages of project planning</li><li>● Action planning in progress</li><li>● Lack of budget/resources</li><li>● Other</li></ul>	Text field

## 6. Opportunities

### Opportunities

**6.0 Please indicate the opportunities your city has identified as a result of addressing climate change and describe how the city is positioning itself to take advantage of these opportunities.**

#### Response Options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Opportunity	Describe how the city is maximizing this opportunity
<p>Select from:</p> <ul style="list-style-type: none"><li>● Development of local/sustainable food businesses</li><li>● Development of energy efficiency measures and technologies</li><li>● Increase in clean technology businesses</li><li>● Development of waste management / recycling businesses</li><li>● Development of tourism industry</li><li>● Development of sustainable transport sector</li><li>● Development of sustainable construction sector</li><li>● Increase opportunities for trading and investment</li><li>● Increase opportunities for partnerships</li><li>● Development of climate change resiliency projects</li><li>● Development of carbon markets</li><li>● Development of resource conservation and management</li><li>● Increased water security</li><li>● Extended agricultural seasons</li><li>● Additional funding opportunities</li><li>● Improved efficiency of operations</li><li>● Increased energy security</li><li>● Increased attention to other environmental concerns</li><li>● Increased infrastructure investment</li><li>● Other</li><li>● No opportunities identified</li></ul>	<p>Text field</p>

[Add Row]

**6.1 Does your city collaborate in voluntary partnership with businesses in your city on sustainability projects?**

#### Response Options

Select one of the following options:

- Yes
- In progress

- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

If Yes to 6.1:

**6.1a Please provide some key examples of how your city collaborates with business in the table below.**

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Collaboration area	Description of collaboration
Select from Appendix E	Text field

[Add Row]

**6.2 List any emission reduction, adaptation, water related or resilience projects you have planned within your city for which you hope to attract financing, and provide details on the estimated costs and status of the project. If your city does not have any relevant projects, please select No relevant projects under Project Area.**

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Project area	Project Title	Stage of project development
Select from: <ul style="list-style-type: none"> <li>● Buildings</li> <li>● Energy efficiency / retrofit</li> <li>● Outdoor lighting</li> <li>● Renewable energy</li> <li>● Transport</li> <li>● Waste management</li> <li>● Waste recycling</li> <li>● Water management</li> <li>● Other</li> <li>● No relevant projects</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Scoping</li> <li>● Pre-feasibility study</li> <li>● Project feasibility</li> <li>● Project structuring</li> <li>● Transaction preparation</li> <li>● Post implementation</li> </ul>

Status of financing	Project description	Total cost of project	Total investment cost needed (if relevant)
Select from: <ul style="list-style-type: none"> <li>● Project not funded and seeking partial funding</li> <li>● Project not funded and seeking full funding</li> <li>● Project partially funded and seeking additional funding</li> <li>● Other</li> </ul>	Text field	Numerical field	Numerical field

[Add Row]

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## 7. Local Government Emissions

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The questions in this section refer to emissions associated with your local government operations (sometimes referred to as "corporate" or "municipal") emissions.

### Local Government Operations GHG Emissions Data

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The questions in this section refer to emissions reduction targets and actions associated with your local government operations (sometimes referred to as "corporate" or "municipal") emissions.

#### 7.0 Do you have an emissions inventory for your local government operations to report? Reporting a Local Government Operations emissions inventory is optional.

By selecting Yes below, you are indicating that you have fuel and/or greenhouse gas (GHG) emissions data from your local government operations (sometimes referred to as 'corporate' or 'municipal' emissions) to report at this time.

##### Response Options

Select one of the following options:

- Yes
- In progress
- Not intending to undertake in the next 2 years
- Not intending to undertake

*If Yes or In progress to 7.0:*

#### 7.1 Please state the dates of the accounting year or 12-month period for which you are reporting an emissions inventory for your local government operations.

##### Response Options

Please complete the following table:

From	To
Drop-down calendar	Drop-down calendar

*If Yes or In progress to 7.0:*

#### 7.2 Please indicate the category that best describes the boundary of your local government operations emissions inventory.

##### Response Options

Select one of the following options:

- Departments, entities or companies over which operational control is exercised
- Departments, entities or companies over which financial control is exercised
- Other

*If Yes or In progress to 7.0:*

**7.3 Please give the name of the primary protocol, standard, or methodology used to calculate your local government operations emissions inventory and attach your inventory using the attachment function.**

**Response Options**

Please complete the following table:

Primary protocol	Comment
Select from: <ul style="list-style-type: none"> <li>● Greenhouse Gas Protocol: Public Sector Standard</li> <li>● International Emissions Analysis Protocol (ICLEI)</li> <li>● ISO 14064</li> <li>● Local Government Operations Protocol (ICLEI/The Climate Registry/California Climate Action Registry/ California Air Resources Board)</li> <li>● Australian National Greenhouse and Energy Reporting (Measurement) Determination</li> <li>● Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI)</li> <li>● 2006 IPCC Guidelines for National Greenhouse Gas Inventories</li> <li>● Other</li> </ul>	Text field

*If Yes or In progress to 7.0:*

**7.4 Which gases are included in your emissions inventory?**

**Response Options**

Select all that apply:

- CO2
- CH4
- N2O
- HFCs
- PFCs
- SF6
- NF3

**Energy Data**

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*If Yes to 7.0:*

**7.5 Please give the total amount of fuel (refers to Scope 1 emissions) that your local government has consumed this year.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Source	Fuel	Amount	Units	Emissions (tonnes CO2e)
Select from: <ul style="list-style-type: none"> <li>● Airport (s)</li> <li>● Buildings</li> <li>● Buses</li> <li>● Electricity generation</li> <li>● Electricity transmission and distribution</li> <li>● Employee commuting</li> <li>● Incineration of waste</li> <li>● Landfills</li> <li>● Local trains</li> <li>● Maritime port</li> <li>● Municipal vehicle fleet</li> <li>● Regional trains</li> <li>● Roads / highways</li> <li>● Street lighting and traffic signals</li> <li>● Subway / underground</li> <li>● Thermal energy</li> <li>● Waste collection</li> <li>● Wastewater treatment</li> <li>● Water supply</li> <li>● Unknown source</li> <li>● Total</li> <li>● Other</li> </ul>	Select from Appendix C	Numerical field	Select from: <ul style="list-style-type: none"> <li>● GWh</li> <li>● MWh</li> <li>● kWh</li> <li>● TJ</li> <li>● GJ</li> <li>● MJ</li> <li>● Therms</li> <li>● Btu m3</li> <li>● L</li> <li>● Metric tonnes</li> <li>● Short tons</li> </ul>	Numerical field

[Add row]

If Yes to 7.0:

**7.6 Please provide total (Scope 1 + Scope 2) GHG emissions for your local government operations, in metric tonnes CO2e. Scopes are a common categorization method.**

Scope 1: All direct GHG emissions

Scope 2: Indirect GHG emissions associated with the consumption of purchased or acquired electricity, steam, heating, or cooling.

**Response Options**

Please complete the following table:

Total Scope 1 + Scope 2 emissions (metric tonnes CO2e)	Total Scope 1 emissions (metric tonnes CO2e)	Total Scope 2 emissions (metric tonnes CO2e)	Comment
Numerical field	Numerical field	Numerical field	Text field

If Yes to 7.0:

**7.7 Do you measure local government Scope 3 emissions?**

**Response Options**

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake

If Yes to 7.7:

**7.7a Please complete the table.**

**Response Options**

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table.

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
Select from: <ul style="list-style-type: none"> <li>● Employee commuting</li> <li>● Employee business travel</li> <li>● Emissions from contracted services</li> <li>● Upstream production of materials and fuels</li> <li>● Upstream and downstream transportation of materials and fuels</li> <li>● Waste related Scope 3 emission sources</li> <li>● Other</li> </ul>	Numerical field	Text field

[Add Row]

If Not intending to undertake or Intending to undertake in the next 2 years to 7.7:

**7.7b Please explain why not and detail your plans to do so in the future, if any.**

**Response Options**

Please complete the following table:

Reasoning	Explanation
Select from: <ul style="list-style-type: none"> <li>● Lack of data</li> <li>● Low data quality</li> <li>● Lack of knowledge/capacity</li> <li>● Lack of funding/resources</li> <li>● Scope categorization not used</li> <li>● Not required by national authorities</li> <li>● Not required by international agreements</li> <li>● Local government Scope 3 emissions have been assessed as insignificant</li> <li>● Other</li> </ul>	Text field

If Yes to 7.0:

**7.8 Please indicate if your local government operations emissions have increased, decreased, or stayed the same since your last emissions inventory, and please describe why.**

**Response Options**

Please complete the following table:

Change in emissions	Reason for change	Please explain
<p>Select from:</p> <ul style="list-style-type: none"> <li><input type="radio"/> Increased</li> <li><input type="radio"/> Decreased</li> <li><input type="radio"/> Stayed the same</li> <li><input type="radio"/> This is our first year of calculation</li> <li><input type="radio"/> Do not know</li> </ul>	<p>If "Increased" or "Decreased" selected:</p> <ul style="list-style-type: none"> <li><input type="radio"/> Increased energy/electricity consumption</li> <li><input type="radio"/> Population increase</li> <li><input type="radio"/> Improved data accuracy</li> <li><input type="radio"/> Emissions reduction actions not implemented</li> <li><input type="radio"/> Change in weather conditions</li> <li><input type="radio"/> Change in accounting methodology</li> <li><input type="radio"/> Change in calculation following verification</li> <li><input type="radio"/> Behavioural change</li> <li><input type="radio"/> Technological change</li> <li><input type="radio"/> Legislative change</li> <li><input type="radio"/> Change in available data</li> <li><input type="radio"/> Change in data collection methods</li> <li><input type="radio"/> Policy change</li> <li><input type="radio"/> Financial conditions</li> <li><input type="radio"/> Other</li> </ul> <p>If "This is our first year of calculation" is selected:</p> <ul style="list-style-type: none"> <li><input type="radio"/> Lack of resource / funding overcome</li> <li><input type="radio"/> Lack of knowledge overcome</li> <li><input type="radio"/> Other:</li> </ul> <p>If "Stayed the same" is selected:</p> <ul style="list-style-type: none"> <li><input type="radio"/> No new inventory to report</li> <li><input type="radio"/> Emissions have not changed</li> <li><input type="radio"/> Other</li> </ul> <p>If "Do not know" is selected:</p> <ul style="list-style-type: none"> <li><input type="radio"/> Change in staff</li> <li><input type="radio"/> Lack of documentation</li> <li><input type="radio"/> Change in methodology</li> <li><input type="radio"/> Other</li> </ul>	<p>Text field</p>

**Local Government Emissions Verification**

*If Yes to 7.0*

**7.9 Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole?**

### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

*If Yes to 7.9:*

### 7.9a Please provide the following information about the emissions verification process.

#### Response Options

Please complete the following table:

Name of verifier and attach verification certificate	Year of verification	Please explain which parts of your inventory are verified
Text field and attachment function	Numerical field	Text field

*If Not intending to undertake, or Intending to undertake in the next 2 years to 7.9:*

### 7.9b Please explain why your local government operations inventory is not verified and describe any future plans for verification.

#### Response Options

Please complete the following table:

Reason	Comments
Select from: <ul style="list-style-type: none"><li>● Verification under consideration</li><li>● Lack of funding / resources</li><li>● Lack of expertise / knowledge</li><li>● Verification is not prioritised</li><li>● Data is internally verified</li><li>● Other</li></ul>	Text field

## 8. Energy

### Energy

#### 8.0 Does your city have a renewable energy or electricity target?

##### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

If Yes to 8.0:

#### 8.0a Please provide details of your renewable energy or electricity target and how the city plans to meet those targets.

##### Response Options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scale	Energy / electricity types covered by target	Base year	Total renewable energy / electricity covered by target in base year (in unit specified in column 2)	Percentage renewable energy / electricity of total energy or electricity in base year
Select from: <ul style="list-style-type: none"> <li><input type="radio"/> City-wide</li> <li><input type="radio"/> Local government operations</li> </ul>	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Total installed capacity of renewable energy (in MW)</li> <li><input type="radio"/> Total installed capacity of renewable electricity (in MW)</li> <li><input type="radio"/> All energy produced (in MWh)</li> <li><input type="radio"/> All electricity produced (in MWh)</li> <li><input type="radio"/> All energy consumed (in MWh)</li> <li><input type="radio"/> All electricity consumed (in MWh)</li> <li><input type="radio"/> Other</li> </ul>	Numerical field	Numerical field	Percentage field
Target year	Total renewable energy / electricity covered by target in target year (in unit specified in column 2)	Percentage renewable energy / electricity of total energy or electricity in target year	Percentage of target achieved	Plans to meet target (include details on types of energy/electricity)
Numerical field	Numerical field	Percentage field	Percentage field	Text field

[Add Row]

If Not intending to undertake, or Intending to undertake to 8.0:

**8.0b Please explain why you do not have a renewable energy or electricity target and any plans to introduce one in the future.**

**Response Options**

Please complete the following table:

Reasoning	Comment
<p>Select from:</p> <ul style="list-style-type: none"><li>● Target already achieved</li><li>● Energy / electricity is not within the city jurisdiction</li><li>● Lack of renewable energy potential within the city</li><li>● Lack of funding</li><li>● The grid is not controlled by the city</li><li>● Renewable energy not prioritized</li><li>● Target is under development / consideration</li><li>● Other</li></ul>	<p>Text field</p>

**8.1 Does your city have energy consumption data to report?**

**Response Options**

Select one of the following options:

- Yes
- No

If Yes to 8.1:

**8.2 Please indicate the energy mix of electricity consumed in your city.**

**Response Options**

Please complete the following table:

Energy source	Percent
Coal	Percentage field
Gas	Percentage field
Oil	Percentage field
Nuclear	Percentage field
Hydro	Percentage field
Biomass	Percentage field
Wind	Percentage field
Geothermal	Percentage field
Solar	Percentage field
Other sources	Percentage field

If Yes to 8.1:

### 8.3 What scale is the energy mix data reported above?

#### Response Options

Select from:

- Local government operations energy mix reported
- City-wide energy mix reported
- National energy mix reported
- We do not have access to energy data (please specify)
- Other

If Yes to 8.1:

### 8.5 How much (in MW capacity) renewable energy is installed within the city boundary in the following categories?

#### Response Options

Please complete the following table:

Type	MW capacity	Please describe the scale of the energy source
Renewable district heat/cooling	Numerical field	Text field
Solar PV	Numerical field	Text field
Solar thermal	Numerical field	Text field
Ground or water source	Numerical field	Text field
Wind	Numerical field	Text field
Other: please specify	Numerical field	Text field

### 8.6 Does your city have a target to increase energy efficiency?

#### Response Options

Select from:

- Yes
- In progress
- Intending to undertake in the next 2 years
- Not intending to undertake
- Do not know

If Yes to 8.6:

### 8.6a Please provide details on your city's energy efficiency targets.

#### Response Options

Please complete the following table. The table is displayed over several rows for readability. You are able to add rows by using the "Add Row" button at the bottom of the table.

Scale	Energy efficiency type covered by target	Base year	Total energy consumed/produced covered by target in base year (in unit specified in column 2)	Target year
Select from: <ul style="list-style-type: none"> <li><input type="radio"/> City-wide</li> <li><input type="radio"/> Local government operations</li> </ul>	Select from: <ul style="list-style-type: none"> <li><input type="radio"/> Reduce total energy produced (in MWh)</li> <li><input type="radio"/> Reduce total energy consumed (in MWh)</li> <li><input type="radio"/> Other</li> </ul>	Numerical field	Numerical field	Numerical field

Total energy consumed/produced covered by target in target year (in unit specified in column 2)	Percentage of energy efficiency improvement in target year compared to base year levels	Percentage of target achieved	Plans to meet target (include details on types of energy in thermal /electricity)	Please indicate to which energy sector(s) the target applies (Multiple choice)
Numerical field	Numerical field	Numerical field	Text field	Select from: <ul style="list-style-type: none"> <li>● Energy industry</li> <li>● Heating and cooling supply</li> <li>● Commercial buildings</li> <li>● Residential buildings</li> <li>● Public facility</li> <li>● Industrial facilities</li> <li>● Transport</li> <li>● Other</li> </ul>

[Add Row]

*If Not intending to undertake, or Intending to undertake to 8.6:*

**8.6b Please explain why you do not have an energy efficiency target and any plans to introduce one in the future.**

**Response Options**

Please complete the following table:

Reasoning	Comment
Select from: <ul style="list-style-type: none"> <li>● Target already achieved</li> <li>● Energy / electricity is not within the city jurisdiction</li> <li>● Lack of renewable energy potential within the city</li> <li>● Lack of funding</li> <li>● The grid is not controlled by the city</li> <li>● Renewable energy not prioritized</li> <li>● Target is under development / consideration</li> <li>● Other</li> </ul>	Text field

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## 10. Transport

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### Transport

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#### 10.0 Do you have mode share information available to report for the following transport types?

##### Response Options

Select all that apply:

- Freight transport
- Passenger transport

*If 'Passenger transport' is selected in 10.0:*

#### 10.1 What is the mode share of each transport mode in your city for passenger transport?

##### Response Options

Please complete the following table:

	Mode share
Private motorized transport	Percentage field
Rail/Metro/Tram	Percentage field
Buses (including BRT)	Percentage field
Ferries/ River boats	Percentage field
Walking	Percentage field
Cycling	Percentage field
Taxis or For Hire Vehicles	Percentage field
Other	Percentage field

*If 'Freight transport' is selected in 10.0:*

#### 10.2 What is the mode share of each transport mode in your city for freight transport?

##### Response Options

Please complete the following table:

	Mode share
Private motorized transport	Percentage
Rail/Metro/Tram	Percentage
Ferries/River boats	Percentage
Other	Percentage

**10.5 Please provide the total fleet size and number of vehicle types for the following modes of transport.**

**Response Options**

Please complete the following table:

	Number of private cars	Number of buses	Number of municipal fleet (excluding buses)	Number of freight vehicles	Number of taxis	Transport Network Companies (e.g. Uber, Lyft) fleet size	Customer-drive carshares (e.g. Car2Go, Drivenow) fleet size
Total fleet size	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field
Electric	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field
Hybrid	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field
Plug in hybrid	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field
Hydrogen	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field

**10.7 Do you have a low or zero-emission zone in your city? (i.e. an area that disincentivises fossil fuel vehicles)**

**Response Options**

Select one of the following options:

- Yes
- No
- Do not know

*If Yes is to 10.7:*

**10.7a Please provide more details about the zero emissions zone.**

**Response Options**

Please complete the following table:

Size (sq. km)	Stipulations and any plans to expand
Numerical field	Text field

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## 12. Food

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### Food

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**12.0 How many meals per year are served through programs managed by your city? (this includes schools, canteens, hospitals etc.)**

**Response Options**

Numerical field.

**12.4 Does your city have any policies relating to food consumption within your city? If so, please describe the expected outcome of the policy.**

**Response Options**

Please complete the following table:

Response	Please describe the expected outcome of the policy
Select from: <ul style="list-style-type: none"><li>● Yes</li><li>● No</li><li>● Do not know</li></ul>	Text field

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## 14. Water Security

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### Water Supply

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#### 14.0 What are the sources of your city's water supply?

##### Response options

Select all that apply:

- Surface water
- Ground water
- Desalinated seawater
- Recycled / reclaimed water
- Rainwater
- Other source

#### 14.1 Where does the water used to supply your city come from?

##### Response Options

Select one of the following options:

- From a river basin within the city boundary
- From adjacent river basins (by water transfer schemes) outside the city boundary
- Other
- Do not know

#### 14.2 What percentage of your city's population has potable water supply service?

##### Response options

Percentage field.

#### 14.3 Are you aware of any substantive current or future risks to your city's water supply?

##### Response options

Select one of the following options:

- Yes
- No
- Do not know

*If Yes to 14.3:*

#### 14.3a Please identify the risks to your city's water supply as well as the timescale and level of risk.

##### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Risks	Timescale	Magnitude	Risk description
Select from: <ul style="list-style-type: none"> <li>● Increased water stress</li> <li>● Increased water scarcity</li> <li>● Declining water quality</li> <li>● Inadequate or ageing infrastructure</li> <li>● Higher water prices</li> <li>● Regulatory</li> <li>● Increased water demand</li> <li>● Drought</li> <li>● Energy supply issues</li> <li>● Rationing of municipal water supply</li> <li>● Severe weather events</li> <li>● Change in land-use</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Current</li> <li>● Short-term</li> <li>● Medium-term</li> <li>● Long-term</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Extremely serious</li> <li>● Serious</li> <li>● Less Serious</li> </ul>	Text field

[Add Row]

If No to 14.3:

**14.3b Please explain why you do not consider your city to be exposed to any substantive water-related risk.**

**Response Options**

Please complete the following table:

Reason	Explanation
Select from: <ul style="list-style-type: none"> <li>● City water supply is secure</li> <li>● Risks are not substantive</li> <li>● No assessment of water risks undertaken</li> <li>● Other</li> </ul>	Text field

## Water Supply Management

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If Yes to 14.3:

**14.4 Please select the actions you are taking to reduce the risks to your city's water supply.**

**Response Options**

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Risks	Adaptation action	Status of action	Action description and implementation progress
Populated from 14.3a	Select from: <ul style="list-style-type: none"> <li>● Conservation awareness and education</li> <li>● Conservation incentives</li> <li>● Water use restrictions</li> <li>● Efficiency regulations or standards</li> <li>● Water metering</li> <li>● Municipal water efficiency retrofits</li> <li>● Diversifying water supply (including new sources)</li> <li>● Investment in existing water supply infrastructure</li> <li>● Use of non-potable water outside</li> <li>● Use of non-potable water indoors (within building)</li> <li>● Watershed preservation</li> <li>● Stormwater management (natural or man-made infrastructure)</li> <li>● Nature-based solution</li> <li>● Water recycling/reclamation</li> <li>● Other</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Scoping</li> <li>● Pre-feasibility study</li> <li>● Pre-implementation</li> <li>● Implementation</li> <li>● Implementation complete but not in operation</li> <li>● Operation</li> <li>● Monitoring and reporting</li> </ul>	Text field

[Add Row]

#### 14.5 Does your city have a publicly available Water Resource Management strategy?

##### Response Options

Select one of the following options:

- Yes
- In progress
- Intending to undertake in the the next 2 years
- Not intending to undertake

If Yes to 14.5:

#### 14.5a Please provide more information on your city's public Water Resource Management strategy.

##### Response Options

Please complete the following table. You are able to add rows by using the "Add Row" button at the bottom of the table.

Publication title and attach document	Year of adoption from local government	Web link	Does this strategy include Sanitation services?	Stage of implementation
Text field and attachment function	Numerical field	Text field	Select from: <ul style="list-style-type: none"> <li>● Yes</li> <li>● No</li> <li>● Do not know</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Plan in development</li> <li>● Plan developed but not implemented</li> <li>● Plan in implementation</li> <li>● Implementation complete</li> <li>● Measurement in progress</li> <li>● Plan update in progress</li> <li>● Other</li> </ul>

[Add Row]

If No to 14.5:

**14.5b Please explain why your city does not have a public Water Resource Management strategy.**

**Response Options**

Please complete the following table:

Reason	Explanation
<p>Select from:</p> <ul style="list-style-type: none"><li>● Water Resource Management is not a priority for the city</li><li>● Lack of funding/resources</li><li>● Lack of knowledge</li><li>● Water Resource Management is covered in other plans</li><li>● Other</li></ul>	<p>Text field</p>

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## Important Information

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CDP has been making information requests relating to carbon and climate change on behalf of investors since 2003. To find out more about CDP and the previous responses from other organizations, please refer to our website at [www.cdp.net](http://www.cdp.net).

### What are the financial implications of responding?

CDP has charitable status and seeks to use its limited funds effectively. Consequently, responses must be prepared and submitted at the expense of responding cities. CDP also reserves the right, where it deems it appropriate in view of its charitable aims and objectives, to charge for access to or use of data and/or reports it publishes or commissions.

### What is the basis of participation and what will happen to the data received?

When responding to CDP you will be given a choice as to whether your response is made public or non-public. We strongly encourage cities to make their responses public which means that the response will be made publicly available from the CDP website. Non-public responses will not be made publicly available and will only be used in aggregate and/or anonymously. Any responses submitted to the Global Covenant of Mayors (GCoM) will be considered public.

### Scoring of responses

CDP provides private scores to cities who respond to the CDP Cities 2019 information request, the scoring methodology can be found [here](#). Responses to CDP Cities 2019 will not be scored publicly by CDP or its partners. CDP is considering publicly scoring responses in the future.

### What if a city wishes to change or update a response?

After you submit your response via the Online Response System, it will become 'read-only' and any amendments can be made through the dashboard. Please submit and make all necessary amendments by the submission deadline.

### How can a city confirm its participation?

If you received this document in hard copy, please email [Cities@cdp.net](mailto:Cities@cdp.net) to confirm your participation.

### What is the legal status of CDP?

CDP Worldwide (CDP) is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. It is a UK registered charity (no. 1122330) and a company limited by guarantee registered in England and Wales (no. 05013650) with its registered office at 4th Floor Plantation Place South, 60 Great Tower Street, London EC3R 5AD. The charity has a wholly owned UK operating subsidiary and wholly owned subsidiaries in Germany, China and Hong Kong. It also exercises control over companies in Brazil, India and Japan through majority Board representation. In the US, CDP North America, Inc. is an independently incorporated entity which has US 501(c)(3) tax exempt status.

CDP is an independent not-for-profit organization holding the largest database of primary corporate climate change information in the world.

Thousands of organizations from across the world's major economies measure and disclose their greenhouse gas emissions and climate change strategies through CDP. CDP puts this information at the heart of financial and policy decision-making and its goal is to collect and distribute high quality information that motivates investors, corporations and governments to take action to prevent dangerous climate change.



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# Appendices

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## Appendix A: Currency

AED United Arab Emirates dirham

AFN Afghani

ALL Lek

AMD Armenian Dram

ANG Netherlands Antillian Guilder

AOA Kwanza

ARS Argentine Peso

AUD Australian Dollar

AWG Aruban Guilder

AZN Azerbaijanian Manat

BAM Convertible Marks

BBD Barbados Dollar

BDT Bangladeshi Taka

BGN Bulgarian Lev

BHD Bahraini Dinar

BIF Burundian Franc

BMD Bermudian Dollar (customarily known as Bermuda Dollar)

BND Brunei Dollar

BOB Boliviano

BOV Bolivian Mvdol (Funds code)

BRL Brazilian Real

BSD Bahamian Dollar

BTN Ngultrum

BWP Pula

BYR Belarussian Ruble

BZD Belize Dollar

CAD Canadian Dollar

CDF Franc Congolais

CHE WIR Euro (complementary currency)

CHF Swiss Franc

CHW WIR Franc (complementary currency)

CLF Unidades de formento (Funds code)

CLP Chilean Peso

CNY Yuan Renminbi

COP Colombian Peso

COU Unidad de Valor Real

CRC Costa Rican Colon

CUP Cuban Peso

CVE Cape Verde Escudo

CYP Cyprus Pound

CZK Czech Koruna

DJF Djibouti Franc  
DKK Danish Krone  
DOP Dominican Peso  
DZD Algerian Dinar  
EEK Kroon  
EGP Egyptian Pound  
ERN Nakfa  
ETB Ethiopian Birr  
EUR Euro  
FJD Fiji Dollar  
FKP Falkland Islands Pound  
GBP Pound Sterling  
GEL Lari  
GHS Cedi  
GIP Gibraltar pound  
GMD Dalasi  
GNF Guinea Franc  
GTQ Quetzal  
GYD Guyana Dollar  
HKD Hong Kong Dollar  
HNL Lempira  
HRK Croatian Kuna

HTG Haiti Gourde

HUF Forint

IDR Rupiah

ILS New Israeli Shekel

INR Indian Rupee

IQD Iraqi Dinar

IRR Iranian Rial

ISK Iceland Krona

JMD Jamaican Dollar

JOD Jordanian Dinar

JPY Japanese yen

KES Kenyan Shilling

KGS Som

KHR Riel

KMF Comoro Franc

KPW North Korean Won

KRW South Korean Won

KWD Kuwaiti Dinar

KYD Cayman Islands Dollar

KZT Tenge

LAK Kip

LBP Lebanese Pound

LKR Sri Lanka Rupee

LRD Liberian Dollar

LSL Loti

LTL Lithuanian Litas

LVL Latvian Lats

LYD Libyan Dinar

MAD Moroccan Dirham

MDL Moldovan Leu

MGA Malagasy Ariary

MKD Denar

MMK Kyat

MNT Tugrik

MOP Pataca

MRO Ouguiya

MTL Maltese Lira

MUR Mauritius Rupee

MVR Rufiyaa

MWK Kwacha

MXN Mexican Peso

MXV Mexican Unidad de Inversion (UDI) (Funds code)

MYR Malaysian Ringgit

MZN Metical

NAD Namibian Dollar

NGN Naira

NIO Cordoba Oro

NOK Norwegian Krone

NPR Nepalese Rupee

NZD New Zealand Dollar

OMR Rial Omani

PAB Balboa

PEN Nuevo Sol

PGK Kina

PHP Philippine Peso

PKR Pakistan Rupee

PLN Zloty

PYG Guarani

QAR Qatari Rial

RON Romanian New Leu

RSD Serbian Dinar

RUB Russian Ruble

RWF Rwanda Franc

SAR Saudi Riyal

SBD Solomon Islands Dollar

SCR Seychelles Rupee

SDG Sudanese Pound

SEK Swedish Krona

SGD Singapore Dollar

SHP Saint Helena Pound

SKK Slovak Koruna

SLL Leone

SOS Somali Shilling

SRD Surinam Dollar

STD Dobra

SYP Syrian Pound

SZL Lilangeni

THB Baht

TJS Somoni

TMM Manat

TND Tunisian Dinar

TOP Pa'anga

TRY New Turkish Lira

TTD Trinidad and Tobago Dollar

TWD New Taiwan Dollar

TZS Tanzanian Shilling

UAH Hryvnia

UGX Uganda Shilling

USD US Dollar

UYU Peso Uruguayo

UZS Uzbekistan Som

VEB Venezuelan bolívar

VND Vietnamese đồng

VUV Vatu

WST Samoan Tala

XAF CFA Franc BEAC

XAG Silver (one Troy ounce)

XAU Gold (one Troy ounce)

XBA European Composite Unit (EURCO) (Bonds market unit)

XBB European Monetary Unit (E.M.U.-6) (Bonds market unit)

## **Appendix B: Actions to reduce vulnerability**

No action currently taken

Flood mapping

Heat mapping and thermal imaging

Landslide risk mapping

Sea level rise modelling

Biodiversity monitoring

Real time risk monitoring

Crisis management including warning and evacuation systems

Public preparedness (including practice exercises/drills)

Community engagement/education

Projects and policies targeted at those most vulnerable

Testing/vaccination programmes for vector-borne disease

Disease prevention measures

Air quality initiatives

Incorporating climate change into long-term planning documents

Restrict development in at risk areas

Resilience and resistance measures for buildings

Hazard resistant infrastructure design and construction

Diversifying power/energy supply

Economic diversification measures

Flood defences – development and operation & storage

Storm water capture systems

Additional reservoirs and wells for water storage

Soil retention strategies

Tree planting and/or creation of green space

Green roofs/walls

White roofs

Shading in public spaces, markets

Cooling systems for critical infrastructure

Retrofit of existing buildings

Cooling centers, pools, water parks/plazas

Cool pavement

Water extraction protection

Promoting low flow technologies

Water butts/rainwater capture

Xeriscapes – low water landscaping design

Maintenance/repair – leaking infrastructure

Optimizing delivery fuel mix of water supply

Improve water supply distribution method

Promoting and incentivizing water efficiency

Water use restrictions and standards

Water efficient equipment and appliances

Water smart metering

Water use audits

Awareness campaign/education to reduce water use

Diversification of water supply

Increasing use of desalination

Nature based solutions for water

Other<

### **Appendix C: Fuel Type**

Natural gas

Compressed Natural Gas (CNG)

Liquefied Petroleum Gas (LPG)

Liquefied Natural Gas (LNG)

Methane

Butane

Propane

Town gas or city gas

Coal (Bituminous or Black coal)

Coking coal

Crude oil

Diesel/Gas oil

Motor gasoline (petrol)

Aviation gasoline

Jet gasoline

Jet kerosene

Kerosene

Residual fuel oil

Distillate fuel oil No 1

Distillate fuel oil No 2

Distillate fuel oil No 3

Distillate fuel oil No 4

Distillate fuel oil No 5

Distillate fuel oil No 6

Liquified petroleum gas (LPG)

Naptha

Bitumen

Petroleum coke

Wood or wood waste

Biodiesel

Biogasoline

Ethanol

E85

Other liquid biofuel

Landfill gas

Other biogas

Waste (municipal)

Other

#### **Appendix D: City-wide emissions reduction activities**

Buildings > Building codes and standards

Buildings > Building performance rating and reporting

Buildings > Carbon emissions reduction from industry

Buildings > Energy efficiency/ retrofit measures

Buildings > On-site renewable energy generation

Buildings > Switching to low-carbon fuels

Community-Scale Development > Brownfield redevelopment programs

Community-Scale Development > Building standards

Community-Scale Development > Compact cities

Community-Scale Development > Eco-district development strategy

Community-Scale Development > Green space and/ or biodiversity preservation and expansion

Community-Scale Development > Low carbon industrial zones

Community-Scale Development > Transit oriented development

Community-Scale Development > Urban agriculture

Energy Supply > Low or zero carbon energy supply generation

Energy Supply > Optimize traditional power/ energy production

Energy Supply > Smart grid

Energy Supply > Transmission and distribution loss reduction

Finance and Economic Development > Developing the green economy

Finance and Economic Development > Instruments to fund low carbon projects

Finance and Economic Development > Low-carbon industrial zones

Food and Agriculture > Encourage sustainable food production and consumption

Mass Transit > Improve bus infrastructure, services, and operations

Mass Transit > Improve fuel economy and reduce CO2 from bus and/or light rail

Mass Transit > Improve fuel economy and reduce CO2 from ferries

Mass Transit > Improve fuel economy and reduce CO2 from trucks

Mass Transit > Improve rail, metro, and tram infrastructure, services and operations

Mass Transit > Smart public transport

Outdoor Lighting > LED / CFL / other luminaire technologies

Outdoor Lighting > Smart lighting

Private Transport > Awareness and education for non-motorized transport

Private Transport > Improve fuel economy and reduce CO2 from aviation

Private Transport > Improve fuel economy and reduce CO2 from motorized vehicles

Private Transport > Improve fuel economy and reduce CO2 from trucks (private)

Private Transport > Improve the efficiency of freight systems

Private Transport > Improve the operations of shipping ports

Private Transport > Infrastructure for non-motorized transport

Private Transport > Transportation demand management

Waste > Improve the efficiency of long-haul transport

Waste > Improve the efficiency of waste collection

Waste > Landfill management

Waste > Recyclables and organics separation from other waste

Waste > Recycling or composting collections and/or facilities

Waste > Waste prevention policies and programs

Water > Wastewater to energy initiatives

Water > Water metering and billing

Water > Water recycling and reclamation

Water > Water use efficiency projects

## **Appendix E: Action area sectors**

Energy

Transport (Mobility)

Building and Infrastructure

Industry

ICT (Information and Communication Technology)

Spatial Planning

Agriculture and Forestry

Fishery

Water

Waste

Public Health and Safety

Business and Financial Service

Social Services

## **Appendix F: Means of implementation**

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Sustainable public procurement

## **Appendix G: Climate hazards**

Extreme Precipitation > Rain storm

Extreme Precipitation > Monsoon

Extreme Precipitation > Heavy snow

Extreme Precipitation > Fog

Extreme Precipitation > Hail

Storm and wind > Severe wind

Storm and wind > Tornado

Storm and wind > Cyclone (Hurricane / Typhoon)

Storm and wind > Extra tropical storm

Storm and wind > Tropical storm

Storm and wind > Storm surge

Storm and wind > Lightning / thunderstorm

Extreme cold temperature > Extreme winter conditions

Extreme cold temperature > Cold wave

Extreme cold temperature > Extreme cold days

Extreme hot temperature > Heat wave

Water Scarcity > Drought

Wild fire > Forest fire

Wild fire > Land fire

Flood and sea level rise > Flash / surface flood

Flood and sea level rise > River flood

Flood and sea level rise > Coastal flood

Flood and sea level rise > Groundwater flood

Flood and sea level rise > Permanent inundation

Chemical change > Salt water intrusion

Chemical change > Ocean acidification

Chemical change > Atmospheric CO2 concentrations

Mass movement > Landslide

Mass movement > Avalanche

Mass movement > Rock fall

Mass movement > Subsidence

Biological hazards > Water-borne disease

Biological hazards > Vector-borne disease

Biological hazards > Air-borne disease

Biological hazards > Insect infestation

## **Appendix H: Co-benefit area**

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Poverty reduction/eradication

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Job creation

Improved resource quality (e.g. air, water)

Improved public health

Improved resource security (e.g. food, water, energy)

Security of tenure

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Improved access to and quality of mobility services and infrastructure

Shift to more sustainable behaviours

Improved access to data for informed decision-making