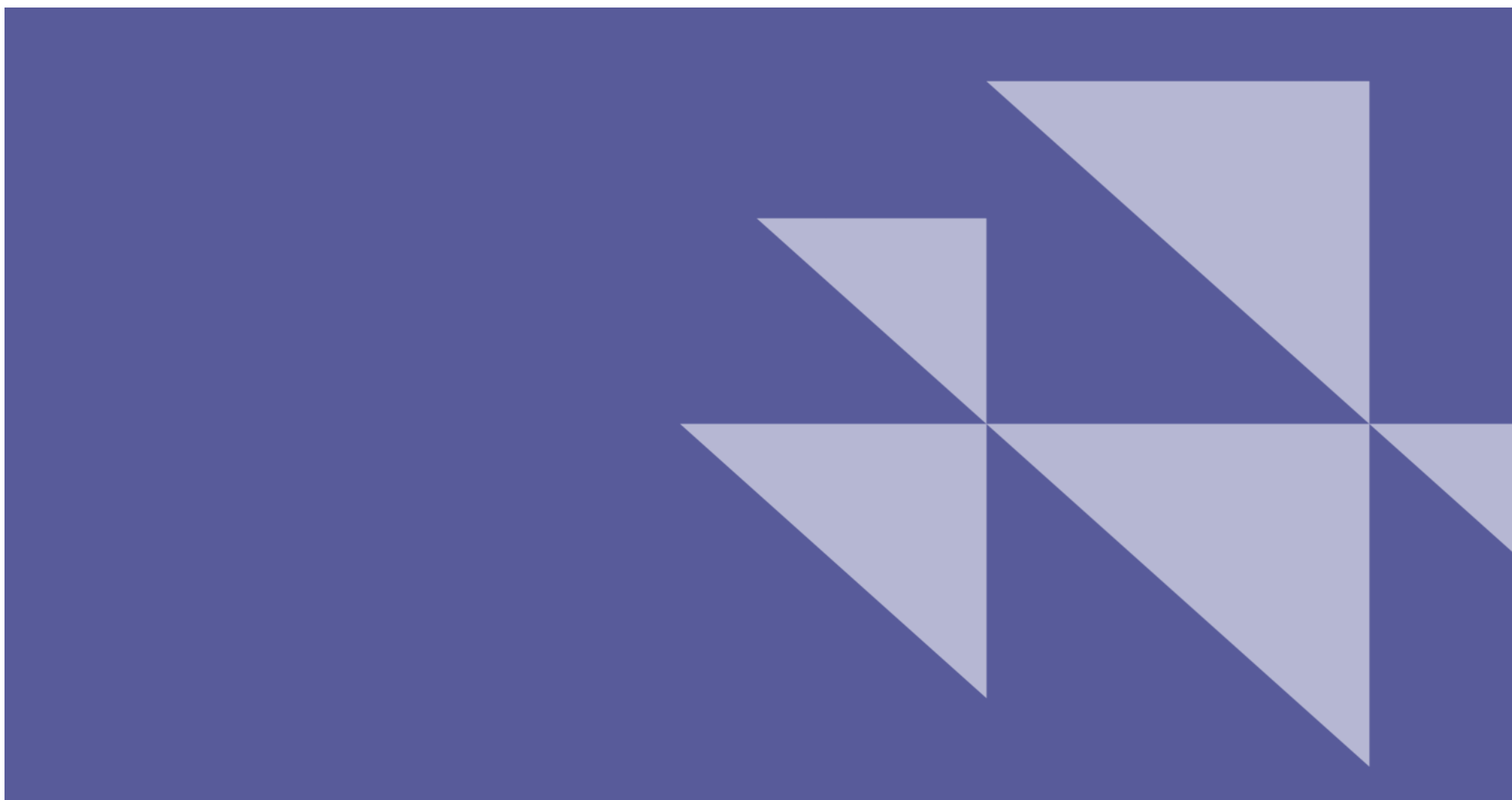


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## Cities 2020 Questionnaire

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# CDP Cities disclosure cycle 2020

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## Cities 2020 Questionnaire

We invite a reply to the following questions. CDP has partnered with [ICLEI](#) Local Governments for Sustainability to present one unified platform for city climate reporting, streamlining the process of reporting and ensuring 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 note, you must submit your response in the ORS, CDP cannot accept responses provided in other formats (i.e. PDF or Word documents).**

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.

Throughout the questionnaire you will be requested to report information relating to 'your city'. The term 'your city' is a broader term that refers equally to local government areas that may be referred to as cities, municipalities, metropolitan areas, counties etc. and in the context of your response is defined by your answer to the question 0.1 on your administrative boundary.

## Help and resources

- **2020 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) developed the [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](#).

# 0. Introduction

## Introduction

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 0.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.2 *Defining the inventory boundary* of the [GCoM Guidance note](#).

Response Options

Please complete the following table:

Administrative boundary	Description of city
<div>Select from:<ul style="list-style-type: none"><li>Local government area within a greater 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></div>	<div>Text field and attachment function</div>

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.

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 0.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 8.3 *Minimum requirements and GCoM badges* of the [GCoM Guidance note](#).

Response Options

Please attach the relevant document here.

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.

Change from 2019

Minor change

Connection to other frameworks

Global Covenant of Mayors

Question 0.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 8.1 *Reporting platform and overall reporting timelines* of the [GCoM Guidance note](#).

Response Options

Please complete the following table:

Leader title	Leader name	Current term end year
Text field	Text field	Numeric field

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

Change from 2019

Minor change

Connection to other frameworks

Global Covenant of Mayors

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](#).

Response Options

Select from [Appendix A](#).

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 0.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 8.1 *Reporting platform and overall reporting timelines* of the [GCoM Guidance note](#).

Response Options

Please complete the following table:

Current population	Current population year	Projected population	Projected population year
Numeric field	Numeric field	Numeric field	Numeric field

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 0.6 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 2 *Definitions and General Principles* of the [GCoM Guidance note](#)

Response Options

Please complete the following table:

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

# 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?

Change from 2019

No change

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

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.

Question dependencies

This question only appears if you select “Yes” in response to 1.0

Change from 2019

No change

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>• Emissions reduction targets</li><li>• Adaptation targets</li><li>• Renewable energy targets</li><li>• Energy efficiency targets</li><li>• Water security targets</li><li>• Waste management targets</li><li>• Other, please specify</li></ul>	<div>Text field</div>

[Add Row]



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## 2. Climate Hazards and Vulnerability

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### Climate Risk and Vulnerability Assessment

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

##### Change from 2019

No change

##### Connection to other frameworks

*Global Covenant of Mayors*

Question 2.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 4 *Climate Risk and Vulnerability Assessment* of the [GCoM Guidance note](#).

##### 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

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

##### Question dependencies

This question only appears if you select "Yes" or "In progress" in response to 2.0

##### Change from 2019

Minor change

##### Response Options

Please complete the following table:

Primary methodology	Description
<p>Select from:</p> <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>● ICLEI's Green Climate Cities (GCC) integrated climate change process methodology</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

**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 dependencies

This question only appears if you select "Yes" in response to 2.0.

#### Change from 2019

No change

#### Connection to other frameworks

##### *Global Covenant of Mayors*

Question 2.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.1 *Climate Risk and Vulnerability Assessment – Initial steps* of 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	Web link	Year of publication or approval from local government	Boundary of assessment relative to city boundary (reported in 0.1)	Explanation of boundary choice where the assessment boundary differs from the city boundary	Primary author of assessment	Does the assessment identify vulnerable populations?	Areas/Sectors covered by the risk and vulnerability assessment
Text field	Text field	Numeric 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>• 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, please specify</li> </ul>	Select from: <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Select all that apply: <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, please specify</li> </ul>

[Add Row]

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

### Question dependencies

This question only appears if you select "Not intending to undertake" in response to 2.0.

### Change from 2019

No change

### 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, please specify</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.**

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 2.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.2.2 *Identifying current and future climate hazards and their impacts* of 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 2020?	Current probability of hazard	Current magnitude of hazard	Social impact of hazard overall	Most relevant assets/services affected overall
Select from <a href="#">Appendix E</a>	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 all that apply: <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, please specify</li> </ul>	Select all that apply: <ul style="list-style-type: none"> <li>• Energy</li> <li>• Water supply &amp; sanitation</li> <li>• Transport</li> <li>• Food &amp; agriculture</li> <li>• Waste management</li> <li>• Information &amp; communications technology</li> <li>• Environment, biodiversity, forestry</li> <li>• Industrial</li> <li>• Commercial</li> <li>• Residential</li> <li>• Education</li> <li>• Tourism</li> <li>• Public health</li> <li>• Society / community &amp; culture</li> <li>• Law &amp; order</li> <li>• Emergency services</li> <li>• Land use planning</li> <li>• Other, please specify</li> </ul>

Please identify which vulnerable populations are affected	Future change in frequency	Future change in intensity	Future expected magnitude of hazard	When do you first expect to experience those future changes in frequency and intensity?	Please describe the impacts experienced so far, and how you expect the hazard to impact in the future
Select all that apply: <ul style="list-style-type: none"> <li>• Women &amp; girls</li> <li>• Children &amp; youth</li> <li>• Elderly</li> <li>• Indigenous population</li> <li>• Marginalized groups</li> <li>• Persons with disabilities</li> <li>• Persons with chronic diseases</li> <li>• Low-income households</li> <li>• Unemployed persons</li> <li>• Persons living in sub-standard housing</li> <li>• Other, please specify</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>	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>	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> </ul>	Select from: <ul style="list-style-type: none"> <li>• Immediately</li> <li>• Short-term (by 2025)</li> <li>• Medium-term (2026-2050)</li> <li>• Long-term (after 2050)</li> </ul>	Text field

[Add Row]

**2.2 Please identify and describe 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.**

### Change from 2019

Modified question

### Connection to other frameworks

*Global Covenant of Mayors*

Question 2.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.3.2 *Assessing adaptive capacity* of 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	Indicate if this factor either supports or challenges the ability to adapt	Level of degree to which factor challenges/supports the adaptive capacity of your city	Please describe how the factor supports or challenges the adaptive capacity of your city
Select from: <ul style="list-style-type: none"> <li>● Access to basic services</li> <li>● Access to healthcare</li> <li>● Access to education</li> <li>● Public health</li> <li>● Cost of living</li> <li>● Housing</li> <li>● Poverty</li> <li>● Inequality</li> <li>● Unemployment</li> <li>● Underemployment</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>● Political stability</li> <li>● Political engagement / transparency</li> <li>● Government capacity</li> <li>● Budgetary capacity</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, please specify</li> </ul>	Select from: <ul style="list-style-type: none"> <li>● Challenges</li> <li>● Supports</li> </ul>	Select from: If Challenges: <ul style="list-style-type: none"> <li>● Significantly challenges</li> <li>● Moderately challenges</li> <li>● Somewhat challenges</li> </ul> If Supports: <ul style="list-style-type: none"> <li>● Significantly supports</li> <li>● Moderately supports</li> <li>● Somewhat supports</li> </ul>	Text field

[Add Row]

## 2.3 Is your city facing risks to public health or health systems associated with climate change?

### Change from 2019

New question

### Response Option

Select form:

- Yes
- No
- Do not know

## 2.3a Please report on how climate change impacts health outcomes and health services in your city.

### Question Dependencies

This question only appears if you select "Yes" in response to 2.3.

## Change from 2019

New question

### Response Option

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

Area affected by climate change	Health-related risk and vulnerability assessment undertaken	Identify the climate hazards most significantly impacting the selected area	Identify the climate-related health issues faced by your city	Timescale of climate-related issues for the selected health area	Please identify which vulnerable populations are affected by these climate related impacts	Please explain
Select all that apply: <ul style="list-style-type: none"> <li>Health outcomes</li> <li>Health systems (service provision, infrastructure and technologies)</li> <li>Areas outside the health sector (e.g. agriculture, water and sanitation, transport, power generation, built environment)</li> </ul>	Select from: <ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>	Select all that apply: <a href="#">Appendix E</a>	Select all that apply: <ul style="list-style-type: none"> <li>Heat-related illnesses</li> <li>Vector-borne infectious diseases (e.g. malaria, dengue, Lyme disease, tick-borne encephalitis)</li> <li>Water-borne and food-borne infectious diseases (e.g. diarrheal diseases and wound infections)</li> <li>Air-pollution related illnesses</li> <li>Exacerbation of Non-Communicable Disease Symptoms (e.g. respiratory disease, cardiovascular disease, renal disease)</li> <li>Mental health impacts</li> <li>Direct physical injuries and deaths due to extreme weather events</li> <li>Food &amp; Nutrition Security</li> <li>Disruption to water, sanitation and wastewater services</li> <li>Disruption to health service provision</li> <li>Overwhelming of health service provision due to increased demand</li> <li>Lack of climate-informed surveillance, preparedness, early warning and response</li> <li>Damage/destruction to health infrastructure and technology</li> <li>Disruption of health-related services (e.g. roads, electricity, communications, emergency/ambulatory response, laboratories, pharmacies)</li> <li>Other, please specify</li> </ul>	Select from: <ul style="list-style-type: none"> <li>Current</li> <li>Short-term (by 2025)</li> <li>Medium-term (2026-2050)</li> <li>Long-term (after 2050)</li> </ul>	Select all that apply: <ul style="list-style-type: none"> <li>Women</li> <li>Children and youth</li> <li>Elderly</li> <li>Indigenous populations</li> <li>Marginalized groups</li> <li>Outdoor workers</li> <li>Factory workers</li> <li>Persons with disabilities</li> <li>Persons with pre-existing medical conditions</li> <li>Low-income households</li> <li>Unemployed persons</li> <li>Persons living in sub-standard housing</li> <li>Other, please specify</li> </ul>	Text field

[Add Row]

### 3. Adaptation

#### Adaptation Actions

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

#### Change from 2019

Modified question

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 3.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 7 *Developing a Climate Action Plan(s)* of 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	Means of implementation	Co-benefit area	Sectors/areas adaptation action applies to	Action description and implementation progress
Drop-down populated with selections from 2.1 column 1	Select from <a href="#">Appendix B</a>	Text field	Select from: <ul style="list-style-type: none"><li>● Scoping</li><li>● Pre-feasibility/impact assessment 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><li>● Other, please specify</li></ul>	Select all that apply: <ul style="list-style-type: none"><li>● Education</li><li>● Capacity building and training activities</li><li>● Awareness raising program or campaign</li><li>● Stakeholder engagement</li><li>● Infrastructure development</li><li>● Assessment and evaluation activities</li><li>● Monitor activities</li><li>● Verification activities</li><li>● Development and implementation of action plan</li><li>● Policy and regulation</li><li>● Financial mechanism</li><li>● Sustainable public procurement</li><li>● Other, please specify</li></ul>	Select from <a href="#">Appendix F</a>	Select all that apply: <ul style="list-style-type: none"><li>● Energy</li><li>● Transport (Mobility)</li><li>● Building and Infrastructure</li><li>● Industry</li><li>● ICT (Information and Communication Technology)</li><li>● Spatial Planning</li><li>● Agriculture and Forestry</li><li>● Fishery</li><li>● Water</li><li>● Waste</li><li>● Public Health and Safety</li><li>● Business and Financial Service</li><li>● Social Services</li><li>● Other, please specify</li></ul>	Text field



Finance status	Majority funding source	Total cost of the project (currency)	Total cost provided by the local government (currency)	Total cost provided by the majority funding source (currency)	Web link
Select from: <ul style="list-style-type: none"> <li>● Pre-feasibility/impact assessment study status</li> <li>● Feasibility undertaken</li> <li>● Feasibility finalized, and finance partially secured</li> <li>● Finance secured</li> <li>● Seeking funding</li> </ul>	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, please specify</li> </ul>	Numeric field	Numeric field	Numeric field	Text field

[Add Row]

## Adaptation Planning

### 3.2 Does your city council, or similar authority, have a published plan that addresses climate change adaptation?

#### Change from 2019

No change (2019 3.1)

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 3.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 7 *Developing a Climate Action Plan(s)* of the [GCoM Guidance note](#).

#### 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

**3.2a 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 dependencies

This question only appears if you select "Yes" or "In progress" in response to 3.2

#### Change from 2019

Modified question (2019 3.1a)

#### Connection to other frameworks

Question 3.2a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 7.2 *Key considerations on developing and implementing climate action plan(s) at the municipal level* of 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	Weblink	Sectors/areas covered by plan that addresses climate change adaptation	Climate hazards factored into plan that addresses climate change adaptation	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	Stage of implementation
Text field and attachment function	Text field	Select all that apply: <ul style="list-style-type: none"> <li>● Energy</li> <li>● Transport (mobility)</li> <li>● Building and Infrastructure</li> <li>● Industry</li> <li>● ICT (Information and Communication Technology)</li> <li>● Spatial Planning</li> <li>● Agriculture and Forestry</li> <li>● Fishery</li> <li>● Water</li> <li>● Waste</li> <li>● Public Health and Safety</li> <li>● Business and Financial Service</li> <li>● Social Services</li> </ul>	Select all that apply from: <a href="#">Appendix E</a>	Numeric 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>● Monitoring and evaluation in progress</li> <li>● Plan update in progress</li> <li>● Other, please specify</li> </ul>

Type of plan	Has your local government assessed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?	Describe the synergies, trade-offs, and co-benefits of this interaction	Primary author of plan	Description of the stakeholder engagement process	Update/revision process in place for the Adaptation Plan <i>For GCC cities only</i>
Select from: <ul style="list-style-type: none"> <li>● Standalone</li> <li>● Integrated mitigation / adaptation</li> <li>● Addressed in general city master plan</li> <li>● Addressed in city sector plan</li> <li>● Other, please specify</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, please specify</li> </ul>	Text field	Select from: <ul style="list-style-type: none"> <li>● Formal schedule for update</li> <li>● No formal schedule for update</li> <li>● Not known</li> </ul>

[Add Row]

**3.2b Please explain why there is no published plan that addresses climate change adaptation and outline any future arrangements you have to create a plan.**

### Question dependencies

This question only appears if you select "Not intending to undertake" in response to 3.2

### Change from 2019

No change (2019 3.1b)

### Response Options

Please complete the following table:

Reason	Comment
Select from: <ul style="list-style-type: none"><li>● Adaptation is not within city jurisdiction</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, please specify</li></ul>	Text field

## Adaptation Goals

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

### Change from 2019

Modified question

### Connection to other frameworks

*Global Covenant of Mayors*

Question 3.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.7 *Setting adaptation goals* of 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	Climate hazards that adaptation goal addresses	Target year of goal	Description of metric / indicator used to track goal	Does this goal align with a requirement from a higher level of government?	Select the initiatives related to this adaptation goal that your city has committed to	Comment
Text field	Select all that apply from <a href="#">Appendix E</a>	Numeric field	Text field	Select from: <ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes, and it exceeds its scale or requirements</li> <li>• No</li> <li>• Do not know</li> </ul>	Select all that apply: <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 Cities Catalyst</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>• Urban-LEDS</li> <li>• Declaring Climate Emergency</li> <li>• Individual City Commitment</li> <li>• Other, please specify</li> <li>• This target does not contribute towards an initiative commitment</li> </ul>	Text field

[Add Row]

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## 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

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#### 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.

##### Change from 2019

No change

##### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 3 *Greenhouse Gas Emissions Inventories* of the [GCoM Guidance note](#).

##### Response Options

Select one of the following options:

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

#### 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.

##### Question dependencies

This question only appears if you select "Yes" or "In Progress" in response to 4.0.

##### Change from 2019

No change

##### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.2 *Defining the inventory boundary* of the [GCoM Guidance note](#).

## Response Options

Please complete the following table:

From	To
Drop-down calendar	Drop-down calendar

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

#### Question dependencies

This question only appears if you select "Yes" or "In Progress" in response to 4.0.

#### Change from 2019

No change

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.2 *Defining the inventory boundary* of 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

### 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 dependencies

This question only appears if you select "Yes" or "In Progress" in response to 4.0.

#### Change from 2019

No change

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.5.2 *Reporting data sources and methodologies* of 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, please specify</li></ul>	Text field

**4.3a The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new [Common Reporting Framework \(CRF\)](#). Would you like to report your inventory in the CRF format or continue to report in the GPC format? This question triggers the display of the corresponding emissions table.**

### Question dependencies

This question only appears if you select "Yes" in response to 4.0 and "GPC" is selected in 4.3

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.3a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 1.1 *GCoM and the Common Reporting Framework* of the [GCoM Guidance note](#).

### Response Options

Select one of the following options:

- Yes - I will use the CRF format
- No - I am unable to reporting the CRF format, use the GPC format

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

### Question dependencies

This question only appears if you select "Yes" or "In Progress" in response to 4.0.

### Change from 2019

No change

### Connection to other frameworks

## Global Covenant of Mayors

Question 4.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.2 *Defining the inventory boundary* of the [GCoM Guidance note](#).

### Response Options

Select all that apply:

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

## 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 dependencies

This question only appears if you select "Yes" in response to 4.0.

### Change from 2019

Minor change

### Connection to other frameworks

## Global Covenant of Mayors

Question 4.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.6 *calculating and reporting emissions by sources* of 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: ● GPC format: City Inventory Reporting and Information System (CIRIS) ● GPC Reporting tool ● GPC format: ClearPath (ICLEI) ● Custom or older GPC format ● SCATTER ● This inventory is in a format other than the GPC	Text Field and attachment function	Select from: ● IPCC ● LCA ● Other, please specify	Select from: ● IPCC 2nd AR (1995) ● IPCC 3rd AR (2001) ● IPCC 4th AR (2007) ● IPCC 5th AR (2013)	● Industrial process and/or product use ● Agriculture, forestry or other land use sectors ● No additional sectors included	Numeric field	Select from: ● High ● Medium ● Low	Text field

[Add Row]

**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.**

#### Question dependencies

This question only appears if you select “Yes – use the CRF format” in response to 4.3a OR any selection other than “Global Protocol for Community Scale Greenhouse Gas Emissions Inventories” is selected in 4.3.

#### Change from 2019

No change

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.6a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.6 *calculating and reporting emissions by sources* of the [GCoM Guidance note](#).

#### Response Options

Please complete the following table:

Sectors and sub-sectors	Direct emissions (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 (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 (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
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Stationary energy > Residential buildings	Numeric 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>	Numeric 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>	Numeric 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	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
IPPU > Industrial process	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
IPPU > Product use	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total IPPU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Livestock	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Land use	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Other AFOLU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total AFOLU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Electricity-only generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > CHP generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Heat/cold generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Local renewable generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total Generation of grid-supplied energy	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above
Total Emissions (excluding generation of grid-supplied energy)	Same as above	Same as above	Numeric 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>	Numeric 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>	Same as above

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 dependencies

This question only appears if you select "Global Protocol for Community Scale Greenhouse Gas Emissions Inventories" in response to 4.3 and "No – continue reporting using the GPC format" in response to 4.3a.

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.6b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.6 *calculating and reporting emissions by sources* of 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)	Numeric field	Text field
Stationary Energy: energy use – Scope 2 (I.X.2)	Numeric field	Text field
Stationary Energy: energy use – Scope 3 (I.X.3)	Numeric field	Text field
Stationary Energy: energy generation supplied to the grid – Scope 1 (I.4.4)	Numeric field	Text field
Transportation – Scope 1 (II.X.1)	Numeric field	Text field
Transportation – Scope 2 (II.X.2)	Numeric field	Text field
Transportation – Scope 3 (II.X.3)	Numeric field	Text field

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

**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.**

### Question dependencies

This question only appears if you select any methodology other than "GPC" in response to 4.3 and "Yes" in response to 4.0.

### Change from 2019

No change

### Response Options

Please complete the following table:

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

**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.**

### Question dependencies

This question only appears if you select ["2006 IPCC Guidelines for National Greenhouse Gas Inventories"](#), or ["International Standard for Determining Greenhouse Gas Emissions for Cities \(UNEP and World Bank\)"](#) in response to 4.3.

### Change from 2019

No change

## 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, please specify</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, please specify</li></ul>	Select from: <ul style="list-style-type: none"><li>● Scope 1</li><li>● Scope 2</li><li>● Total figure</li></ul>	Numeric field

[Add Row]

**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.**

## Question dependencies

This question only appears if you select [U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions \(ICLEI\)](#) in response to 4.3 and “Yes” in response to 4.0.

## Change from 2019

No change

## 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, please specify</li></ul>	Select from: <ul style="list-style-type: none"><li>● Scope 1</li><li>● Scope 2</li><li>● Total figure</li></ul>	Numeric field

[Add Row]

**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.

Question dependencies

This question only appears if you select "Regional or country specific methodology", "City specific methodology" or "Other, please specify" in response to 4.3.

Change from 2019

No change

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, please specify</li></ul>	Select from: <ul style="list-style-type: none"><li>● Scope 1</li><li>● Scope 2</li><li>● Total figure</li></ul>	Numeric field

[Add Row]

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

Question dependencies

This question only appears if you select "Yes" in response to 4.0.

Change from 2019

No change

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, please specify</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, please specify</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, please specify</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, please specify</li> </ul>	Text field

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

##### Question dependencies

This question only appears if you select "Yes" in response to 4.0.

##### Change from 2019

No change

##### 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>• Yes</li> <li>• In progress</li> <li>• Intending to undertake in the next 2 years</li> <li>• Not intending to undertake</li> <li>• Do not know</li> </ul>	Text field and attachment function

## City-wide External Verification

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

#### Question dependencies

This question only appears if you select "Yes" in response to 4.0.

#### Change from 2019

No change (2019 4.11)

#### 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

### 4.12a Please provide the following information about the city-wide emissions verification.

#### Question dependencies

This question only appears if you select "Yes" in response to 4.12.

#### Change from 2019

No change (2019 4.11a)

#### Response Options

Please complete the following table:

Name of verifier and attach verification certificate	Year of verification	Please explain
Text field and attachment function	Numeric field	Text field

### 4.12b Please explain why your city-wide emissions inventory is not verified and describe any plans to verify your city-wide emissions in the future.

#### Question dependencies

This question only appears if you select "Not intending to undertake" or "Intending to undertake in the next 2 years" in response to 4.12.

**Change from 2019**

No change (2019 4.11b)

**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, please specify</li></ul>	<div>Text field</div>

Historical emissions inventories

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**4.13 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.**

**Change from 2019**

No change (2019 4.12)

**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 all that apply: <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, please specify</li> </ul>	Numeric 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, please specify</li> </ul>	Text field and attachment function	Text field

[Add Row]

## Re-stating previous emissions inventories

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

#### Question dependencies

This question only appears if you select "Yes" in response to 4.0.

#### Change from 2019

No change (2019 4.13)

#### Response Options

Select one of the following options:

- Yes
- No
- Do not know

### 4.14a Please provide your city's recalculated total city-wide emissions figures for any previous inventories.

#### Question dependencies

This question only appears if you select "Yes" in response to 4.14.

### Change from 2019

No change (2019 4.13a)

### 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/boundary covered	Previous emissions (metric tonnes CO2e)	Updated emissions (metric tonnes CO2e)	Updated methodology	File name and attach your new inventory	Reason for recalculation
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, please specify</li></ul>	Numeric field	Numeric field	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, please specify</li></ul>	Text field and attachment function	Text field

[Add Row]

## Emissions Factors

### 4.15 Please provide a summary of emissions factors and activity data used in your inventory

#### Change from 2019

New question

#### Connection to other frameworks

*Global Covenant of Mayors*

Question 4.15 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.5 [calculating and reporting emissions - overview of the GCoM Guidance Note](#).

#### Response Option

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.

Applicable sub-sector	Category	Fuel type or activity	Emission factor source	Gas
Select from: <a href="#">Appendix G</a>	Select all that apply: <ul style="list-style-type: none"><li>• Direct emissions</li><li>• Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling</li><li>• Emissions occurring outside the city boundary as a result of in-city activities</li></ul>	Select from: <a href="#">Appendix H</a>	Text field	Select from: <ul style="list-style-type: none"><li>• CO2e</li><li>• CO2</li><li>• CH4</li><li>• N2O</li><li>• HFCs</li><li>• PFCs</li><li>• SF6</li><li>• NF3</li></ul>

Emission factor value	Emission factor unit (numerator)	Emission factor unit (denominator)	Activity level (per emission factor unit denominator)	Comment
Numeric field	Select from: <ul style="list-style-type: none"><li>• Gram (g)</li><li>• Kilogram (kg)</li><li>• Kiloton (kt)</li><li>• Tonne (t)</li><li>• Long ton (lt)</li><li>• Stone (st)</li><li>• Pound (lb)</li><li>• Other, please specify</li></ul>	Text field	Numeric field	Text field

[Add Row]

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## 5. Emissions Reduction

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### Mitigation Target setting

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

**Change from 2019**

No change

**Connection to other frameworks**

*Global Covenant of Mayors*

Question 5.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 6 *Target and Goal Setting* of 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

**5.0a Please provide details of your total city-wide base year emissions reduction (absolute) target(s). 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 dependencies**

This question only appears if you select "Base year emissions (absolute) target" in response to 5.0

**Change from 2019**

Modified question

**Connection to other frameworks**

*Global Covenant of Mayors*

Question 5.0a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 *Choose the target type* of 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 introduction	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, please specify</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> <li>• Administrative – covers only emission sources owned and operated by city administration</li> </ul>	Numeric field	Numeric field	Numeric field	Numeric field

Target year	Target year absolute emissions (metric tonnes CO2e) (Auto-calculated)	Percentage of target achieved so far	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Select the initiatives that this target contributes towards	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.
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Numeric field	Auto-calculated numeric field	Numeric 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 all that apply: <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 Cities Catalyst</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>• UN-Habitat Guiding Principles for City Climate Action Planning</li> <li>• Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way</li> <li>• Cities Power Partnership</li> <li>• Malaysia Low Carbon Cities 2030 Challenge</li> <li>• Urban-LEDS</li> <li>• Declaring Climate Emergency</li> <li>• Individual City Commitment</li> <li>• Other, please specify</li> <li>• This target does not contribute towards an initiative commitment</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
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[Add Row]

## 5.0b Please provide details of your total fixed level target(s).

### Question dependencies

This question only appears if you select "Fixed level target" in response to 5.0.

### Change from 2019

Modified question

## Connection to other frameworks

### Global Covenant of Mayors

Question 5.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 *Choose the target type* of 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 introduction	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, please specify</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><li>• Administrative –covers only emission sources owned and operated by city administration</li></ul>	Numeric field	Numeric field	Numeric field
Target year absolute emissions goal (metric tonnes CO <sub>2</sub> e)	Percentage of target achieved	Does this target align with the global 1.5 - 2°C pathway set out in the Paris Agreement?	Select the initiatives that this target contributes towards	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.

Numeric field	Numeric 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 all that apply: <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 Cities Catalyst</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>• UN-Habitat Guiding Principles for City Climate Action Planning</li> <li>• Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way</li> <li>• Cities Power Partnership</li> <li>• Malaysia Low Carbon Cities 2030 Challenge</li> <li>• Urban-LEDS</li> <li>• Declaring Climate Emergency</li> <li>• Individual City Commitment</li> <li>• Other, please specify</li> <li>• This target does not contribute towards an initiative commitment</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
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[Add Row]

**5.0c Please provide details of your total city-wide base year intensity target(s). 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 dependencies

This question only appears if you select “Base year intensity target” in response to 5.0.

#### Change from 2019

Modified question

#### Connection to other frameworks

Question 5.0c is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 *Choose the target type* of 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 introduction	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, please specify</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> <li>• Administrative – covers only emission sources owned and operated by city administration</li> </ul>	Numeric field	Numeric 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, please specify</li> </ul>	Numeric field	Numeric 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?	Select the initiatives that this target contributes towards	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.
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Numeric field	Numeric field	Numeric field	Numeric 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 all that apply: <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 Cities Catalyst</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>● UN-Habitat Guiding Principles for City Climate Action Planning</li> <li>● Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way</li> <li>● Cities Power Partnership</li> <li>● Malaysia Low Carbon Cities 2030 Challenge</li> <li>● Urban-LEDS</li> <li>● Declaring Climate Emergency</li> <li>● Individual City Commitment</li> <li>● Other, please specify</li> <li>● This target does not contribute towards an initiative commitment</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]

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

#### Question dependencies

This question only appears if you select "Baseline scenario (business as usual) target" in response to 5.0.

#### Change from 2019

Modified question

#### Connection to other frameworks

#### Global Covenant of Mayors

Question 5.0d is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 *Choose the target type* of 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 introduction	Base year emissions (metric tonnes CO <sub>2</sub> e)	Target year	Estimated business as usual absolute emissions in target year (metric tonnes CO <sub>2</sub> e)
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, please specify</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><li>• Administrative – covers only emission sources owned and operated by city administration</li></ul>	Numeric field	Numeric field	Numeric field	Numeric field	Numeric 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	Select the initiatives that this target contributes towards	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.
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Numeric field	Numeric 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 all that apply: <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 Cities Catalyst</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>• UN-Habitat Guiding Principles for City Climate Action Planning</li> <li>• Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way</li> <li>• Cities Power Partnership</li> <li>• Malaysia Low Carbon Cities 2030 Challenge</li> <li>• Urban-LEDS</li> <li>• Declaring Climate Emergency</li> <li>• Individual City Commitment</li> <li>• Other, please specify</li> <li>• This target does not contribute towards an initiative commitment</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
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[Add Row]

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

#### Question dependencies

This question only appears if you select "No target" in response to 5.0.

### Change from 2019

No change

### Response Options

Please complete the following table:

Reason	Comment
Select from: <ul style="list-style-type: none"><li>• Emissions not fully 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, please specify</li></ul>	Text field

### 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.

#### Question dependencies

This question only appears if you select "Yes – 1.5°C" or "Yes – 2°C" in response to "Does this target align..." in 5.0a, 5.0b, 5.0c or 5.0d.

### Change from 2019

No change

### Response Options

This is an open text question.

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

### 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?

#### Question dependencies

This question appears if you select any option except "No target" in response to 5.0.

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 5.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.5 *Set the level of ambition* of the [GCoM Guidance note](#).

### Response Options

Select one of the following options:



- Yes
- No
- Do not know

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

### Question dependencies

This question only appears if you select "Yes" in response to 5.2

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 5.2a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.5 *Set the level of ambition* of the [GCoM Guidance note](#).

### Response Options

This is an open text question.

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

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

### Question dependencies

This question appears if you select any option except "No target" in 5.0.

### Change from 2019

No change

### Connection to other frameworks

*Global Covenant of Mayors*

Question 5.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.5 *Set the level of ambition* of the [GCoM Guidance note](#).

### Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

### Question dependencies

This question only appears if you select "Yes" in response to 5.3.

### Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 5.3a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.5 *Set the level of ambition* of 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.

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, please specify</li></ul>	Numeric field	Numeric field	Text field

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.

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.6 *Summary of reporting output* of 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.

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 <a href="#">Appendix D</a>	Text field	Select all the apply from: <ul style="list-style-type: none"> <li>● Education</li> <li>● Capacity building and training activities</li> <li>● Awareness raising program or campaign</li> <li>● Stakeholder engagement</li> <li>● Infrastructure development</li> <li>● Assessment and evaluation activities</li> <li>● Monitor activities</li> <li>● Verification activities</li> <li>● Development and implementation of action plan</li> <li>● Policy and regulation</li> <li>● Financial mechanism</li> <li>● Sustainable public procurement</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</li> <li>● Operation</li> <li>● Monitoring and reporting</li> </ul>	Numeric field	Numeric field	Numeric field	Select from: <ul style="list-style-type: none"> <li>● Per year</li> <li>● Projected lifetime</li> <li>● Other, please specify</li> </ul>

Co-benefit area	Scope and impact of action	Finance status	Total cost of the project	Total cost provided by the local government	Majority funding source	Total cost provided by the majority funding source (currency)	Web link to action website
Select all that apply from <a href="#">Appendix E</a>	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>	Numeric field	Numeric 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, please specify</li> </ul>	Numeric field	Text field

[Add Row]

## Mitigation Planning

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

Change from 2019

No change

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

Connection to other frameworks

Global Covenant of Mayors

Question 5.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 7 *Developing a Climate Action Plan(s)* of the [GCoM Guidance note](#).

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

Question dependencies

This question only appears if you select “Yes” in response to 5.5.

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.5a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 8 *GCoM monitoring and reporting* of 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	Web link	Focus area of plan	Year of adoption from local government	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
Text field and attachment function	Text field	Select from: <ul style="list-style-type: none"> <li>● Climate change mitigation plan</li> <li>● Energy access plan</li> <li>● Climate change mitigation and energy access plan</li> </ul>	Numeric field	Select all that apply from: <ul style="list-style-type: none"> <li>● Energy</li> <li>● Transport (Mobility)</li> <li>● Building and Infrastructure</li> <li>● Industry</li> <li>● ICT (Information and Communication Technology)</li> <li>● Spatial Planning</li> <li>● Agriculture and Forestry</li> <li>● Fishery</li> <li>● Water</li> <li>● Waste</li> <li>● Public Health and Safety</li> <li>● Business and Financial Service</li> <li>● Social Services</li> </ul>	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?	Describe the synergies, trade-offs, and co-benefits of this interaction	Description of the stakeholder engagement process	Does your plan include policy goals that explicitly reflect one of the following principles? <i>For GCC cities only</i>	Primary author of plan	Comment
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, please specify</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 one from: <ul style="list-style-type: none"> <li>● An aim not to unfairly or excessively burden the poor with the costs and any negative impacts associated with climate action</li> <li>● The principle of 'common but differentiated responsibility' and/or 'the emitter (or polluter) pays' principle.</li> <li>● Plan includes policy goals that explicitly reflect both principles above</li> <li>● Other, please specify</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, please specify</li> </ul>	Text field

[Add Row]

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

Question dependencies

This question only appears if you select "Not intending to undertake" or "Intending to undertake in the next 2 years" in response to 5.5.

Change from 2019

No change

Response Options

Please complete the following table:

Reason	Comment
<div>Select from:</div> <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, please specify</li></ul>	<div>Text field</div>

## 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.**

**Change from 2019**

Minor change

**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
<div>Select from:<ul style="list-style-type: none"><li>● Development of clean energy technologies/businesses</li><li>● Development of energy efficiency measures and technologies</li><li>● Development of waste management sector</li><li>● Development of water management sector</li><li>● Development of circular economy models and businesses</li><li>● Development of tourism industry and eco-tourism sector</li><li>● Development of sustainable transport sector</li><li>● Development of sustainable construction/real estate sector</li><li>● Development of local sustainable food businesses</li><li>● Increased opportunities for investment in infrastructure projects</li><li>● Increased opportunities for trade (nationally or internationally)</li><li>● Additional funding opportunities</li><li>● Increase opportunities for partnerships</li><li>● Improved flood risk mitigation</li><li>● Increased water security</li><li>● Increased energy security</li><li>● Development of climate change resiliency projects</li><li>● Increased food security</li><li>● Extended agricultural seasons</li><li>● Reduced risk to natural capital</li><li>● Reduced risk to human health</li><li>● Creation/development of carbon markets</li><li>● Carbon tax revenue</li><li>● Development of resource conservation and management</li><li>● Improved efficiency of municipal operations</li><li>● Other, please specify</li><li>● No opportunities identified</li></ul></div>	<div>Text field</div>

[Add Row]

## Collaboration

### 6.2 Does your city collaborate in partnership with businesses in your city on sustainability projects?

#### Change from 2019

Minor change (2019 6.1)

#### 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

### 6.2a Please provide some key examples of how your city collaborates with business in the table below.

#### Question dependencies

This question only appears if you select “Yes” in response to 6.2.

#### Change from 2019

Modified question (2019 6.1a)

#### 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	Type of collaboration	Description of collaboration
Select from: <ul style="list-style-type: none"><li>• Energy</li><li>• Transport (Mobility)</li><li>• Building and Infrastructure</li><li>• Industry</li><li>• ICT (Information and Communication Technology)</li><li>• Spatial Planning</li><li>• Agriculture and Forestry</li><li>• Fishery</li><li>• Water</li><li>• Waste</li><li>• Public Health and Safety</li><li>• Business and Financial Services</li><li>• Social Services</li></ul>	Select from: <ul style="list-style-type: none"><li>• Financial mechanism (grants etc.)</li><li>• Policy and regulation consultation</li><li>• Climate Action Plan consultation</li><li>• Climate action target setting consultation</li><li>• Collaborative initiative</li><li>• Knowledge or data sharing</li><li>• Capacity development</li><li>• Labour market training initiatives</li><li>• Economic development</li><li>• Project implementation</li><li>• Convening industry groups</li><li>• Trade union engagement</li><li>• Other, please specify</li></ul>	Text field

[Add Row]



## Finance & Economic Opportunities

6.5 List any mitigation, 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'.

### Change from 2019

Modified question (2019 6.2)

### 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, please specify</li><li>● No relevant projects</li></ul>	Text field	Select from: <ul style="list-style-type: none"><li>● Scoping</li><li>● Pre-feasibility/impact assessment</li><li>● Project feasibility</li><li>● Project structuring</li><li>● Transaction preparation</li><li>● Implementation</li><li>● Post implementation</li></ul>

Status of financing	Financing model identified	Identified financing model description	Project description and attach project proposal	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, please specify</li></ul>	Select from: <ul style="list-style-type: none"><li>● Yes</li><li>● No</li><li>● Do not know</li></ul>	Text field	Text field Attachment function	Numeric field	Numeric field

[Add Row]

## Climate Action Planning

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## 8. Energy

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### Energy

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

**Change from 2019**

No change

**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

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

**Question dependencies**

This question only appears if you select "Yes" in response 8.0.

**Change from 2019**

Modified question

**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	Type	Energy/electricity types covered by target	Base year	Total renewable energy / electricity covered by target in base year (in unit specified in column 3: <i>Energy/electricity types covered by target</i> )	Percentage renewable energy / electricity of total energy or electricity in base year
Select from: <ul style="list-style-type: none"> <li>City-wide</li> <li>Local government operations</li> </ul>	Select from: <ul style="list-style-type: none"> <li>Energy</li> <li>Electricity</li> </ul>	Select from: <b>Energy:</b> <ul style="list-style-type: none"> <li>Total installed capacity of renewable energy (in MW)</li> <li>All energy produced (in MWh)</li> <li>Energy produced (percentage)</li> <li>All energy consumed (in MWh)</li> <li>All energy consumed (percentage)</li> <li>Other, please specify</li> </ul> <b>Electricity:</b> <ul style="list-style-type: none"> <li>Total installed capacity of renewable electricity (in MW)</li> <li>All electricity produced (in MWh)</li> <li>All electricity produced (percentage)</li> <li>All electricity consumed (in MWh)</li> <li>All electricity consumed (percentage)</li> <li>Other, please specify</li> </ul>	Numeric field	Numeric field	Percentage field

Target year	Total renewable energy / electricity covered by target in target year (in unit specified in column 3: <i>Energy/electricity types covered by target</i> )	Percentage renewable energy / electricity of total energy or electricity in target year	Percentage of target achieved	Please specify plans to meet the target(s) and in which sector this target will be implemented (i.e. All energy sectors, electricity, heating & cooling and/or transport)
Numeric field	Numeric field	Percentage field	Percentage field	Text field

[Add Row]

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

### Question dependencies

This question only appears if you select "Not intending to undertake" or "Intending to undertake" in response to 8.0.

### Change from 2019

No change

### Response Options

Please complete the following table:

Reason	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, please specify</li> </ul>	Text field

## 8.1 Please indicate the source mix of electricity consumed in your city.

### Change from 2019

Minor change (2019 8.2)

### Response Options

Please complete the following table:

Electricity 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
Total	Auto-calculated field
Year data applies to	Select from: Drop-down list: 2000-2020

## 8.2 What scale is the electricity mix data reported above?

### Change from 2019

No change (2019 8.3)

## Response Options

Select from:

- Local government operations electricity mix reported
- City-wide electricity mix reported
- Regional/State electricity mix reported
- National electricity mix reported
- Utility electricity mix reported
- We do not have access to electricity data
- Other, please specify

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

#### Change from 2019

Minor change (2019 8.5)

## Response Options

Please complete the following table:

Type	MW capacity	Comment
Renewable district heat/cooling	Numeric field	Text field
Solar PV	Numeric field	Text field
Solar thermal	Numeric field	Text field
Hydro power	Numeric field	Text field
Wind	Numeric field	Text field
Other, please specify	Numeric field	Text field

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

#### Change from 2019

No change (2019 8.6)

## Response Options

Select from:

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

### 8.5a Please provide details on your city's energy efficiency targets.

#### Question dependencies

This question only appears if you select "Yes" in response 8.5.

### Change from 2019

No change (2019 8.6a)

### 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>• City-wide</li><li>• Local government operations</li></ul>	Select from: <ul style="list-style-type: none"><li>• Reduce total energy produced (in MWh)</li><li>• Reduce total energy consumed (in MWh)</li><li>• Other, please specify</li></ul>	Numeric field	Numeric field	Numeric 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)
Numeric field	Numeric field	Numeric field	Text field	Select all that apply: <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, please specify</li></ul>

[Add Row]

### 8.5b Please explain why you do not have an energy efficiency target and any plans to introduce one in the future.

### Question dependencies

This question only appears if you select "Not intending to undertake" or "Intending to undertake" in response 8.5.

### Change from 2019

No change (2019 8.6b)

### Response Options

Please complete the following table:

Reason	Comment
<p>Select from:</p> <ul style="list-style-type: none"> <li>● Target already achieved</li> <li>● Lack of funding</li> <li>● The grid is not controlled by the city</li> <li>● Target is under development / consideration</li> <li>● Energy generation transmission and distribution infrastructure requires upgrade to achieve energy efficiency</li> <li>● The implementation of decentralized smart grids and smart meters are not under the city's control</li> <li>● Retrofit policy for energy efficiency is not aware by the city government</li> <li>● Other, please specify</li> </ul>	<p>Text field</p>

# 10. Transport

## Transport

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

Change from 2019

No change

Response Options

Select all that apply:

- Freight transport
- Passenger transport

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

Question dependencies

This question only appears if you select "Passenger transport" in response to 10.0.

Change from 2019

Minor change

Response Options

Please complete the following table:

Mode	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
Micro-Mobility	Percentage field
Other	Percentage field



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

### Question dependencies

This question only appears if you select "Freight transport" in response to 10.0.

### Change from 2019

Modified question

### Response Options

Please complete the following table:

Mode	Mode share
Motorcycle	Percentage
Light Goods vehicles (LGV)	Percentage
Medium Goods vehicles (MGV)	Percentage
Heavy Goods vehicles (HGV)	Percentage
Rail	Percentage
In-land waterways	Percentage

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

### Change from 2019

Minor change (2019 10.5)

### Response Options

Please complete the following table:

Mode of transport	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	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field
Electric	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field
Hybrid	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field
Plug in hybrid	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field
Hydrogen	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field

## 10.7 Do you have a low or zero-emission zone in your city? (i.e. an area that disincentivises fossil fuel vehicles through a charge, a ban or access restriction)

### Change from 2019

No change

### Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

This question only appears if you select “Yes” in response to 10.7.

Change from 2019

No change

Response Options

Please complete the following table:

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

## 12. Food

### Food Consumption

**12.0 Report the total number of meals and tonnes that are served and/or sold through programs managed by your city (this includes schools, canteens, hospitals etc.)**

#### Change from 2019

Modified question

#### Response Options

Please complete the following table:

	Number of meals	Tonnes served and/or sold	Comment
Total meals and tonnes that are served or sold through programs managed by your city	Numeric field	Numeric field	Text field

**12.1 What is the per capita meat and dairy consumption (kg) in your city?**

*Please note that only C40 Cities, Green Climate Cities and/or cities from China, USA, and Europe will be presented this question.*

#### Change from 2019

Modified question (2019 12.2)

#### Response Options

Please complete the following table:

Consumption type	Amount	Year data applies to	Comment
Meat consumption per capita (kg/year)	Numeric field	Select from Drop-down list: 2000-2020	Text field
Dairy consumption per capita (kg/year)	Numeric field	Select from Drop-down list: 2000-2020	Text field

### Sustainable Food Policies and Actions

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

#### Change from 2019

No change (2019 12.4)

## 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

## 12.4 How does your city increase access to sustainable foods?

*Please note that only C40 Cities, Green Climate Cities and/or cities from China, USA, and Europe will be presented this question.*

## Change from 2019

Modified question (2019 12.5)

## Response Options

Please complete the following table:

Response	Action implemented	Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods
Do you subsidize fresh fruits and vegetables?	Select from: <ul style="list-style-type: none"><li>• Yes</li><li>• No</li><li>• Do not know</li></ul>	Text field
Do you tax/ban higher carbon foods (meat, dairy, ultra-processed)?	Select from: <ul style="list-style-type: none"><li>• Yes</li><li>• No</li><li>• Do not know</li></ul>	Text field
Do you use regulatory mechanisms that limit advertising of higher carbon foods (meat, dairy, ultra-processed)?	Select from: <ul style="list-style-type: none"><li>• Yes</li><li>• No</li><li>• Do not know</li></ul>	Text field
Do you incentivize fresh fruit/vegetable vendor locations?	Select from: <ul style="list-style-type: none"><li>• Yes</li><li>• No</li><li>• Do not know</li></ul>	Text field

# 13. Waste

## Waste

### 13.0 What is the annual solid waste generation in your city?

#### Change from 2019

Modified question

#### Response Options

Please complete the following table:

Amount of solid waste generated (tonnes/year)	Year data applies to	Please describe the methodology used to calculate the annual solid waste generation in your city
Numeric field	Select from: Drop-down list: 2000-2020	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?

##### Change from 2019

Minor change

##### Response options

Select all that apply:

- Surface water, from sources located fully or partially within city boundary
- Surface water, from sources outside the city boundary (by water transfer schemes)
- Ground water
- Desalinated seawater/brackish water
- Other source

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

##### Change from 2019

No change (2019 14.2)

##### Response options

Percentage field.

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

##### Change from 2019

No change (2019 14.3)

##### Response options

Select one of the following options:

- Yes
- No
- Do not know

#### 14.2a Please identify the risks to your city's water security as well as the timescale and level of risk.

##### Question dependencies

This question only appears if you select "Yes" in response to 14.2.

##### Change from 2019

Modified question (2019 14.3a)

##### 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.

Water security risk drivers	Anticipated timescale	Estimated magnitude of potential impact	Estimated probability of impact	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 water supply infrastructure</li> <li>Higher water prices</li> <li>Environmental regulations</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>Ecosystem vulnerability</li> <li>Change in land-use</li> <li>Pollution incidents</li> <li>Increased levels of plastic in freshwater bodies</li> <li>Water infestation/disease</li> <li>Unauthorized/unregistered water connections</li> <li>Other, please specify</li> </ul>	Select from: <ul style="list-style-type: none"> <li>Current</li> <li>Short-term (by 2025)</li> <li>Medium-term (by 2050)</li> <li>Long-term (after 2050)</li> </ul>	Select from: <ul style="list-style-type: none"> <li>Extremely serious</li> <li>Serious</li> <li>Less Serious</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> </ul>	Text field

[Add Row]

## 14.2b Please explain why you do not consider your city to be exposed to any substantive water-related risk.

### Question dependencies

This question only appears if you select "No" in response to 14.2.

### Change from 2019

No change (2019 14.3b)

### Response Options

Please complete the following table:

Reason	Please explain
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, please explain</li> </ul>	Text field

## Water Management

### 14.3 Please select the actions you are taking to reduce the risks to your city's water security.

#### Question dependencies

This question only appears if you select "Yes" in response to 14.2.

#### Change from 2019

No change (2019 14.4)

#### 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 14.2a	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, please specify</li></ul>	Select from: <ul style="list-style-type: none"><li>● Scoping</li><li>● Pre-feasibility study/impact assessment</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]

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

#### Change from 2019

No change (2019 14.5)

#### Response Options

Select one of the following options:

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

### 14.4a Please provide more information on your city's public Water Resource Management strategy.

#### Question dependencies

This question only appears if you select "Yes" in response to 14.4.



### Change from 2019

No change (2019 14.5a)

### 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	Numeric 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, please specify</li></ul>

[Add Row]

### 14.4b Please explain why your city does not have a public Water Resource Management strategy.

#### Question dependencies

This question only appears if you select “No” in response to 14.4.

### Change from 2019

No change (2019 14.5b)

### Response Options

Please complete the following table:

Reason	Please explain
Select from: <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, please explain</li></ul>	Text field

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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

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)

XOF CFA West African Franc

ZAR South African Rand

## **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, please specify

### **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, please specify

#### **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: 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

Extreme hot temperature > Extreme hot days

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 F: 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

### **Appendix G: Common Reporting Framework sub-sector list**

CRF - Stationary energy > Residential buildings

CRF -Stationary energy > Commercial buildings & facilities

CFR - Stationary energy > Institutional buildings & facilities

CRF - Stationary energy > Industrial buildings & facilities

CRF - Stationary energy > Agriculture

CRF - Stationary energy > Fugitive emissions

CRF - Transportation > On-road

CRF - Transportation > Rail

CRF - Transportation > Waterborne navigation

CRF - Transportation > Aviation

CRF - Transportation > Off-road

CRF - Waste > Solid waste disposal

CRF - Waste > Biological treatment

CRF - Waste > Incineration and open burning

CRF - Waste > Wastewater

CRF - IPPU > Industrial process

CRF - IPPU > Product use

CRF - AFOLU > Livestock

CRF - AFOLU > Land use

CRF - AFOLU > Other AFOLU

CRF - Generation of grid-supplied energy > Electricity-only generation

CRF - Generation of grid-supplied energy > CHP generation

CRF - Generation of grid-supplied energy > Heat/cold generation

CRF - Generation of grid-supplied energy > Local renewable generation

## **Appendix H: Emission factors and activity**

Aviation gasoline

Biodiesels

Biogasoline

Bitumen

Butane

Charcoal

Coal (Bituminous or Black coal)

Coke

Coking coal

Coal (manufacture solid fuels)

Compressed Natural Gas (CNG)

Crude oil

Diesel oil

E85

Ethanol

Hydrogen

Gas oil

Jet gasoline

Jet kerosene

Kerosene (paraffin)

Landfill gas

Liquefied Natural Gas (LNG)

Liquefied Petroleum Gas

Lubricants

Methanol

Motor gasoline (petrol)

Municipal wastes (all)

Municipal wastes (non-biomass fraction)

Municipal wastes (biomass fraction)

Naphtha

Natural gas

Other biogas

Other Liquid BioFuels

Petroleum coke

Propane

Residual fuel oil

Sewage sludge

Sludge gas

Town gas or city gas

Wood or wood waste

Electricity

Electricity (CHP)

Heating

Heating (CHP)

Steam

Steam (CHP)

Cooling

Cooling (CHP)

T&D losses from grid-supplied

Hydrogen

Distance travelled (vehicle)

Distance travelled (passenger)

Distance travelled (freight)

Travel expenditure

Travel time

Other, please specify