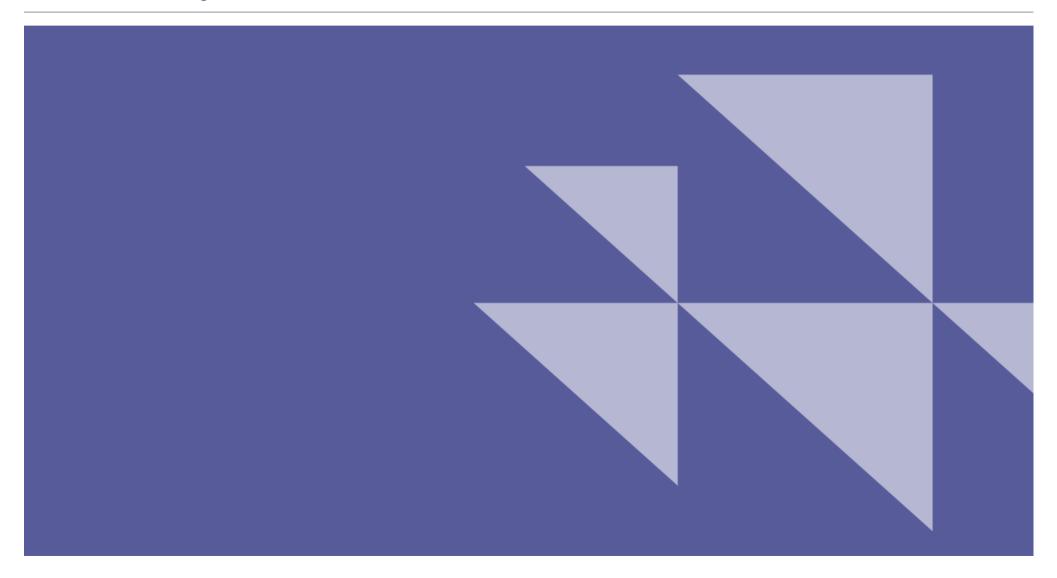


# **CDP Cities 2018 Questionnaire**



### **CDP Cities Guidance 2018**

#### **CDP Disclosure Cycle 2018**

We invite a reply to the following questions.

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

The following sources of support are also available to guide you in responding to the information request:

- 2018 Guidance Document: This document provides a high-level overview of each section and question-level guidance on every question. The guidance 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 in order to explain the purpose of each question:
- 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.
- More detailed guidance can be found by clicking the expandable link below the question. This link will display the full guidance and 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 for questions which are not answered in the guidance, for help accessing the ORS, or for general inquiries.

Please answer the questions comprehensively while also assessing the relevance of the information you provide. Further explanation will also be provided in the CDP Cities 2018 guidance document to be released in March. Where you do not have all of the information requested, please respond with what you have as this is more valuable than no response.

The deadline for response is 11th July 2018

# Introduction

### Introduction

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

### **Response Options**

Please complete the following table:

Administrative boundary	Description of city
Select from:	Text field
City / Municipality	
Local government area within a city / metropolitan area	
Independent city	
Special city	
Federal district	
Sovereign city-state	
Metropolitan area	
• County	
Other: please specify	

# City Details

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

### **Response Options**

Please complete the following table:

Leader title	Leader name	Current term start year	Current term end year	Total time in office (years)
Text field	Text field	Numerical field	Numerical field	Numerical field

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

### **Response Options**

Select from Appendix A.

0.5 Please provide details of your city's annual operating budget, in the currency reported in question 0.4.

#### **Response Options**

Annual operating budget	Budget year start	Budget year end
Numerical field	Drop-down calendar: From	Drop-down calendar: To

# 0.6 Please provide details of your city's current and projected population.

### **Response Options**

Please complete the following table:

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

### 0.7 Please provide details of your city's GDP in the currency reported in question 0.4.

### **Response Options**

Please complete the following table:

GDP	Year of GDP	Source
Numerical field	Numerical field	Text field

### 0.8 Please provide further details about the geography of your city.

### **Response Options**

Please complete the following table:

Average annual temperature (in Celsius)	Land area (in square km)	Average altitude (m)	Longitude (e.g120.9762)	Latitude (e.g. 41.25)
Numerical field	Numerical field	Numerical field	Numerical field	Numerical field

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# **Governance & Data Management**

#### Governance

1.0 Please describe the impact of national and/or regional climate change activities on your city's own climate change activities.

### **Response Options**

This is an open text question.

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

1.1 Please describe how your city manages overall responsibility for climate change mitigation (emissions reduction) and adaptation (climate risk reduction).

#### **Response Options**

This is an open text question.

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

1.2 Please describe the administrative structure of your government.

#### **Response Options**

Please complete the following table:

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

#### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 1.4:

1.4a Please detail which goals and targets are incorporated in your city's master plan and describe how these goals are addressed in the table below.

# **Response Options**

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

How are these goals/targets addressed in the city master plan?
Text field

[Add Row]

# **Hazards and Adaptation**

### Climate Hazards

2.0 Has a climate change risk or vulnerability assessment been undertaken for your local government area?

### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes or In progress is selected in response to 2.0:

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

#### **Response Options**

Please complete the following table:

Primary methodology	Description
Select from:	Text field
IPCC climate change impact assessment guidance	
OECD Strategic Environmental Assessment and Adaptation to Climate Change	
UNDP climate risk management methodologies	
ICLEI climate adaptation methodology (ADAPT)	
UK Climate Impacts Partnership Framework (UKCIP)	
World Bank Urban Risk Assessment (URA)	
Shaping climate resilient development: A framework for decision making (ECA)	
Sendai Framework for Disaster Risk Reduction	
US Federal Emergency Management Agency (FEMA) Hazard Identification and Risk Assessment	
Australian/New Zealand Standard for Risk Management	
State or region vulnerability and risk assessment methodology	
Agency specific vulnerability and risk assessment methodology	
Proprietary methodology	
• Unknown	
Other: please specify	

If Yes is selected in response to 2.0:

2.0b Please attach and provide details on your climate change risk or vulnerability assessment. Please provide details on the boundary of your assessment, and where this differs from

your city's boundary, please provide an explanation.

### **Response Options**

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

Publication title	Year of publication	Attach the document	Web link	Boundary of assessment relative to city boundary (reported in 0.1)	Explanation of boundary choice	Primary author of assessment	Does the assessment identify vulnerable populations?
Text field	Numerical field	Attach your document here.	Text field	Select from:  Same – covers entire city and nothing else Smaller – covers only part of the city Larger – covers the whole city and adjoining areas Partial – Covers part of the city and adjoining areas	Text field	Select from:  Dedicated city team Relevant city department Consultant International organization Community group Regional / state / provincial government National / central government Other: please specify	Select from: • Yes • No

[Add Row]

If Yes is selected in response to 2.0:

2.1 Does your city have an update / revision process for the climate risk or vulnerability assessment?

### **Response Options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes is selected in response to 2.1:

2.1a Please provide more details on the update / revision process for your city's climate risk or vulnerability assessment.

### **Response Options**

Time period for update (years)	Status of current update	Number of times previously updated	Comment
Numerical field	Select from:	Numerical field	Text field
	Update completed		
	In progress		
	Intending to undertake in future		
	Not intending to undertake		
	Do not know		

2.2 Do the current and/or anticipated effects of climate change present risks to your city at present or in the future?

Res	ponse	0	ptio	ns
-----	-------	---	------	----

Select one of the following options:

- Yes
- No
- Do not know

If Yes or Do not know is selected in response to 2.2:

2.2a 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 top 3 assets or services that are affected by the climate hazard, and provide a description of the impact.

### **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	Hazard status	Magnitude of impact	Anticipated timescale	Probability of hazard	Consequence of hazard
See drop-down options below	Select from:  Currently affecting the city  Expected to affect the city in future	Select from:  Extremely serious  Serious  Less serious	Select from:     Short-term     Medium-term     Long-term	Select from:  High  Medium High  Medium  Medium  Low	Select from:  High  Medium High  Medium  Medium Low  Low
				Do not know	Do not know

Future change in frequency	Future change in intensity	Top three assets/ services affected	Impact description
Select from:	Select from:	Select top 3 from:	Text field
Increasing	<ul> <li>Increasing</li> </ul>	• Energy	
Decreasing	Decreasing	Water Supply & Sanitation	
• None	• None	Transport	
Do not know	Do not know	Food and agriculture	
		Waste Management	
		Information & Communications Technology	
		Environment	
		Industrial	
		Commercial	
		Residential	
		Education	
		Public health	
		Community & Culture	
		Law & Order	
		Emergency Management	
		Other: please specify	

[Add Row]

#### Climate Hazards drop-down options:

#### Select all that apply:

- Rain storm
- Monsoon
- Heavy snow
- Hail
- Severe wind
- Tornado
- Cyclone (Hurricane/Typhoon)
- Extratropical storm
- Tropical storm
- Lightning / thunderstorm
- Fog
- Extreme winter conditions
- Cold wave
- Extreme cold days
- Heat wave
- Extreme hot days
- Drought
- Forest fire
- Land fire
- Flash/surface flood
- River flood
- Coastal flood
- Groundwater flood
- Storm surge
- Permanent inundation
- Salt water intrusion
- Ocean acidification
- Atmospheric CO2 concentrations
- Landslide
- Avalanche
- Rockfall
- Subsidence
- Water-borne disease
- Vector-borne disease
- Air-borne disease
- Insect infestation

If No is selected in response to 2.2:

2.2b Please explain why the anticipated effects of climate change present no risk to your city at present or in the future.

### **Response Options**

Please complete the following table:

Reason	Explanation
Select from:	Text field
Risk assessment not undertaken	
Risk assessment not completed	
Actions are in place to reduce vulnerability	
The city is not presently affected by climate change risks and is yet to understand their future impact	
Climate change risks pose no present or future risks to the city	
Primary current risks have been addressed and future impacts are not considered risks	
Other: please specify	

2.3 Do you consider that the effects of climate change could negatively impact the ability of businesses to operate successfully in your city?

### **Response Options**

Please complete the following table:

Response	Explanation
Select from:  Yes – business in my city will be negatively impacted by climate change  No – businesses in my city will not be negatively impacted by climate change  Do not know	Text field

2.4 Please identify the factors that most greatly affect your city's ability to adapt to climate change, and indicate how those factors either enhance or challenge this ability.

### **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	Enhance/ Challenge	Description
Select from:	Select from:	Text field
Access to basic services	Enhance	
Access to healthcare	Challenge	
Access to education		
Cost of living		
Housing		
<ul><li>Poverty</li></ul>		
• Inequality		
Unemployment		
Public health		
Political stability		
Political engagement / transparency		
Government capacity		
Budgetary capacity		
Migration		
Safety and security		
Economic health		
Economic diversity		
Rapid urbanization		
Resource availability		
Environmental conditions		
Infrastructure conditions / maintenance		
Infrastructure capacity		
Land use planning		
Community engagement		
Access to quality / relevant data		
Other: please specify		

[Add Row]

# Adaptation

3.0 Has the Mayor or city council committed to adapting to climate change across the geographical area of the city, town or settlement?

## **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 3.0:

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3.0a Please select the type of commitment and attach evidence.

### **Response Options**

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

Type of commitment	Attach	Comments
Select from:	Attach your document here.	Text field
Global Covenant of Mayors for Climate & Energy		
Compact of Mayors		
Durban Adaptation Charter		
Mayors Adapt (EU)		
Mexico City Pact		
UNISDR, Making Cities Resilient Campaign		
Individual City Commitment		
• 100 Resilient Cities		
Resilient Communities for America		
STAR Communities		
LEED for Cities		
Other: please specify		

[Add Row]

3.1 Has your city council published a plan that addresses climate change adaptation?

### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes or In progress is selected in response to 3.1:

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

#### **Response Options**

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

Publication title	Year of publication	Attach the document	Web link	Boundary of plan relative to city boundary (reported in 0.1)	Explanation of boundary choice	Primary author of plan	Stage of implementation
Text field	Numerical field	Attach your document here.	Text field	Select from:  Same – covers entire city and nothing else Smaller – covers only part of the city Larger – covers the whole city and adjoining areas Partial – Covers part of the city and adjoining areas	Text field	Select from: Dedicated city team Relevant city department; Consultant International organization Community group Regional / state / provincial government National / central government Other: please specify	Select from:  Plan in development  Plan developed but not implemented  Plan in implementation  Implementation complete  Measurement in progress  Plan update in progress  Other: please specify

[Add Row]

If No or Not intending to undertake is selected in response to 3.1:

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

### **Response Options**

Please complete the following table:

Reason	Comment
Select from:	Text field
Adaptation is not within city control	
Adaptation is covered under main city strategy	
Lack of resources/funding	
Lack of expertise	
Lack of political will	
Adaptation is covered in the city plans	
Adaptation is not currently a priority for my city	
Other: please specify	

If Yes is selected in response to 3.1:

3.2 Does your city have an update / revision process for the climate adaptation plan(s)?

### **Response Options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes is selected in response to 3.2:

3.2a Please provide more details on the update / revision process for your city's climate adaptation plan(s)?

### **Response Options**

Please complete the following table:

Time period for update (years)	Status of current update	Number of times previously updated	Comment
Numerical field	Select from:  Update completed  In progress  Intending to undertake in future  Not intending to undertake  Do not know	Numerical field	Text field

If Yes is selected in response to 2.2:

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

#### **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	Status of action	Action description
Drop-down populated with selections from 2.2a column 1	Select from Appendix B	Select from:	Text field
		Scoping	
		Pre-feasibility study	
		Pre-implementation	
		Implementation	
		Operation	
		Complete	
		Monitoring and reporting	

[Add Row]

3.7 Please describe your progress in engaging stakeholders for adaptation planning.

### **Response Options**

Implementation of stakeholder engagement plan	Describe stakeholder engagement process
Select from:	Text field
• Yes	
• No	
• In progress	
Intending to undertake in future	
Not intending to undertake	
• Do not know	
	Select from:  Yes  No In progress Intending to undertake in future  Not intending to undertake

	4.0	Does	your cit	y face an	v social	risks a	s a	result	of c	limate	change?
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### **Response Options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes or Do not know is selected in response to 4.0:

4.0a Please complete the table below to indicate which social risks your city faces as a result of climate change and indicate if these risks have been covered by your city's action plan.

#### **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.

Social risks	Anticipated timescale in years	Impact description
Select from:	Select from:	Text field
Fluctuating socio-economic conditions	Current	
Increased incidence and prevalence of disease and illness	Short-term	
<ul> <li>Increased demand for public services (including health)</li> </ul>	Medium-term	
Increased risk to already vulnerable populations	Long-term	
Increased conflict and/or crime		
Increased resource demand		
Loss of traditional jobs		
Migration from rural areas to cities		
Population displacement		
Other: please specify		

[Add Row]

If No is selected in response to 4.0:

4.0b Please explain why not.

### **Response Options**

Reasoning	Explanation
Select from:	Text field
Adaptation / resilience measures are expected to mitigate social risks	
Social risks have not been assessed	
No social risks have been identified through assessment	
Social risks identified are not significant	
Other: please specify	

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# **Opportunities**

# Opportunities

5.0 Does addressing climate change provide any opportunities for your city?

### **Response Options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes or Do not know is selected in response to 5.0:

5.0a Please indicate the opportunities and describe how the city is positioning itself to take advantage of them.

### **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
Select from:	Text field
Development of local/sustainable food businesses	
Development of energy efficiency measures and technologies	
Increase in clean technology businesses	
Development of waste management / recycling businesses	
Development of tourism industry	
Development of sustainable transport sector	
Development of sustainable construction sector	
Increase opportunities for trading and investment	
Increase opportunities for partnerships	
Development of climate change resiliency projects	
Development of carbon markets	
Development of resource conservation and management	
Development of sustainable water management	
Extended agricultural seasons	
Additional funding opportunities	
• Improved efficiency of operations	
Increased energy security	
Increased attention to other environmental concerns	
Increased infrastructure investment	
Other: please specify	

[Add Row]

If No is selected in response to 5.0:

### 5.0b Why do you not foresee any opportunities for your city?

#### **Response Options**

Please complete the following table:

Reason	Comment
Select from:	Text field
Negative impacts on the economy and environment	
Opportunities have not been assessed	
Increase in costs for public administration and investment	
Negative impacts on tourism, agriculture or industries	
Negative impacts for citizens	
Opportunities are not significant	
Other: please specify	

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

#### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 5.1:

5.1a Please provide some key examples of how your city collaborates with business in the table below.

#### **Response Options**

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

Collaboration area	Description of collaboration
Select from:	Text field
• Energy	
Buildings	
Transport	
Waste	
Water	
Other: please specify	

[Add Row]

5.2 List any emission reduction, adaptation, water related or resilience projects you have planned within your city for which you hope to attract financing, and provide details on the

estimated costs and status of the project. If your city does not have any relevant projects, please select No relevant projects under Project Area.

### **Response Options**

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

Project area	Status of project	Status of financing	Project description	Total cost of project	Total investment cost needed (if relevant)
Select from:  Buildings Energy efficiency / retrofit Outdoor lighting Renewable energy Transport Waste management Waste recycling Water management No relevant projects Other: please specify	Select from: Scoping Pre-feasibility study Pre-implementation Implementation Operation Implementation complete Monitoring and reporting	Select from:  Project not funded and seeking partial funding Project not funded and seeking full funding Project partially funded and seeking additional funding Project fully funded Other: please specify	Text field	Numerical field	Numerical field

[Add Row]

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# **Local Government Emissions**

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

# Boundary and scope

#### 6.0 Do you have an emissions inventory for your local government operations to report?

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

#### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Not intending to undertake

If Yes is selected in response to 6.0:

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

#### **Response Options**

Please complete the following table:

From	То
Drop-down calendar	Drop-down calendar

If Yes is selected in response to 6.0:

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

#### **Response Options**

Select one of the following options:

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

If Yes is selected in response to 6.0:

6.3 Please give the name of the primary protocol, standard, or methodology used to calculate your local government operations emissions inventory.

#### **Response Options**

Please complete the following table:

Primary protocol	Comment
Select from:	Text field
Greenhouse Gas Protocol: Public Sector Standard	
• International Emissions Analysis Protocol (ICLEI)	
• ISO 14064	
• Local Government Operations Protocol (ICLEI/The Climate Registry/California Climate Action Registry/ California Air Resources Board)	
Australian National Greenhouse and Energy Reporting (Measurement) Determination	
Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI)	
2006 IPCC Guidelines for National Greenhouse Gas Inventories	
Other: please specify	

If Yes is selected in response to 6.0:

### 6.4 Which gases are included in your emissions inventory?

### **Response Options**

Select all that apply:

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

# **Energy Data**

If Yes is selected in response to 6.0:

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

### **Response Options**

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

Source	Fuel	Amount	Units
Select from:	Select from Appendix C	Numerical field	Select from:
• Airport (s)			• GWh
Buildings			• MWh
• Buses			• kWh
Electricity generation			● TJ
Electricity transmission and distribution			• GJ
Employee commuting			• MJ
<ul> <li>Incineration of waste</li> </ul>			Therms
• Landfills			Btu m3
Local trains			• L
Maritime port			Metric tonnes
Municipal vehicle fleet			Short tons
Regional trains			
Roads / highways			
Street lighting and traffic signals			
Subway / underground			
Thermal energy			
Waste collection			
Wastewater treatment			
Water supply			
Unknown source			
• Total			
Other: please specify			

[Add row]

If Yes is selected in response to 6.0:

6.6 How much electricity, heat, steam, and cooling (refers to Scope 2 emissions) has your local government purchased for its own consumption during the reporting year?

### **Response Options**

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

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Source	Туре	Amount	Units
Select from:	Select from:	Numerical field	Select from:
<ul><li>Airport (s)</li></ul>	Electricity		• GWh
Buildings	Heat		• MWh
Buses	• Steam		• kWh
Electricity generation	<ul><li>Cooling</li></ul>		• TJ
Electricity transmission and distribution	Other: please specify		• GJ
Employee commuting			• MJ
<ul> <li>Incineration of waste</li> </ul>			• Therms
• Landfills			• Btu
Local trains			• m3
Maritime port			• L
Municipal vehicle fleet			Metric tonnes
Regional trains			Short tons
Roads / highways			
Street lighting and traffic signals			
Subway / underground			
Thermal energy			
Waste collection			
Wastewater treatment			
Water supply			
<ul> <li>Unknown source</li> </ul>			
Other: please specify			

[Add Row]

### **GHG** Emissions Data

If Yes is selected in response to 6.0:

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

Scope 1: All direct GHG emissions

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

### **Response Options**

Please complete the following table:

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

If Yes is selected in response to 6.0:

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### 6.8 Do you measure local government Scope 3 emissions?

### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake

If Yes is selected in response to 6.8:

### 6.8a Please complete the table.

### **Response Options**

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

Emissions (metric tonnes CO2e)	Comment
Numerical field	Text field

[Add Row]

If No or Not intending to undertakeis selected in response to 6.8:

6.8b Please explain why not and detail your plans to do so in the future, if any.

### **Response Options**

Reasoning	Explanation
Select from:	Text field
Lack of data	
Low data quality	
Lack of knowledge/capacity	
Lack of funding/resources	
Scope categorization not used	
Not required by national authorities	
Not required by international agreements	
Local government Scope 3 emissions have been assessed as insignificant	
Other: please specify	

If Yes is selected in response to 6.0:

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

### **Response Options**

Please complete the following table:

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Change in emissions	Reason for change	Please explain
Select from:	If "Increased" is selected:	Text field
• Increased	Increased energy/electricity consumption	
Decreased	Population increase	
Stayed the same	Improved data accuracy	
This is our first year of calculation	Emissions reduction actions not implemented	
<ul><li>Do not know</li></ul>	Change in weather conditions	
	Change in accounting methodology	
	Change in calculation following verification	
	Financial conditions	
	If "Decreased" is selected:	
	Behavioural change	
	Technological change	
	Legislative change	
	Financial conditions	
	Change in available data	
	Change in data collection methods	
	Policy change	
	Change in weather conditions	
	If "This is our first year of calculation" is selected:	
	Previous data was not reliable	
	Lack of resource / funding overcome	
	Lack of knowledge overcome	
	If "Stayed the same" is selected:	
	No new inventory to report	
	Emissions have not changed	
	If "Do not know" is selected:	
	Change in staff	
	Lack of documentation	
	Change in methodology	
	Other: please specify	
	· · · ·	

# **External Verification**

If Yes is selected in response to 6.0:

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

### **Response Options**

Select one of the following options:

Yes

- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 6.10:

6.10a Please provide the following information about the emissions verification process.

### **Response Options**

Please complete the following table:

Name of verifier	Year of verification	Attach verification certificate	Comments
Text field	Numerical field	Attach your document here.	Text field

If No, Not intending to undertake or Intending to undertake in future is selected in response to 6.10:

6.10b Please explain why your local government operations inventory is not verified and describe any future plans for verification.

### **Response Options**

Reason	Comments
Select from:	Text field
Verification under consideration	
Lack of funding / resources	
Lack of expertise / knowledge	
Verification is not prioritised	
Data is internally verified	
Other: please specify	

# **City-wide Emissions**

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

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

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

#### **Response Options**

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake

If Yes is selected in response to 7.0:

7.1 Please state the dates of the accounting year or 12-month period for which you are reporting a city-wide GHG emissions inventory.

#### **Response Options**

Please complete the following table:

From	То
Drop-down calendar	Drop-down calendar

If Yes is selected in response to 7.0:

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

#### **Response Options**

Select one of the following options:

- Administrative boundary of a local government
- Combination of administrative divisions
- A metropolitan area
- Other: please specify

If Yes is selected in response to 7.0:

7.3 Does your city have a city-wide emissions inventory that aligns with the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC)?

### **Response Options**

Select one of the following options:

- Yes
- No
- In progress

If Yes is selected in response to 7.3:

7.3a 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.

#### **Response Options**

Please complete the following table:

Sector and scope (GPC reference number)	Emissions (metric tonnes CO2e)
Stationary Energy: energy use – Scope 1 (I.X.1)	Numerical field
Stationary Energy: energy use – Scope 2 (I.X.2)	Numerical field
Stationary Energy: energy use – Scope 3 (I.X.3)	Numerical field
Stationary Energy: energy generation supplied to the grid – Scope 1 (I.4.4)	Numerical field
Transportation – Scope 1 (II.X.1)	Numerical field
Transportation – Scope 2 (II.X.2)	Numerical field
Transportation – Scope 3 (II.X.3)	Numerical field
Waste: waste generated within the city boundary – Scope 1 (III.X.1)	Numerical field
Waste: waste generated within the city boundary – Scope 3 (III.X.2)	Numerical field
Waste: waste generated outside the city boundary – Scope 1 (III.X.3)	Numerical field
Industrial Processes and Product Use – Scope 1 (IV)	Numerical field
Agriculture, Forestry and Land Use – Scope 1 (V)	Numerical field
TOTAL Scope 1 (Territorial) emissions	Numerical field
TOTAL Scope 2 emissions	Numerical field
TOTAL Scope 3 emissions	Numerical field
TOTAL BASIC emissions	Numerical field
TOTAL BASIC+ emissions	Numerical field

If No or In progress is selected in response to 7.3:

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

### **Response Options**

Please complete the following table:

Primary protocol	Comment
Select from:	Text field
International Emissions Analysis Protocol (ICLEI)	
<ul> <li>International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank)</li> </ul>	
2006 IPCC Guidelines for National Greenhouse Gas Inventories	
U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)	
Greenhouse gas Inventory & Research Center of Korea (GIR)	
Regional or country specific methodology	
City specific methodology	
Other: please specify	

If No or In progress is selected in response to 7.3:

7.4a Which gases are included in your city-wide emissions inventory?

### **Response Options**

Select all that apply:

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

If No or In progress is selected in response to 7.3:

7.4b Please provide a breakdown of your GHG emissions by scope. Where values are not available, please use the comment field to indicate the reason why.

### **Response Options**

Scope	Metric tonnes CO2e	Level of confidence	Comments
Scope 1 emissions excluding emissions from grid-supplied energy generation	Numerical field	Select from:  High Medium Low	Text field
Scope 1 emissions from grid-supplied energy generation within the city boundary	Numerical field	Select from:  High Medium Low	Text field
Total Scope 1 emissions (Row 1 + Row 2)	Numerical field	Select from:  High  Medium  Low	Text field
Total Scope 2 emissions	Numerical field	Select from:  High  Medium  Low	Text field
Total (Scope 1 + Scope 2) emissions	Numerical field	Select from:  High Medium Low	Text field
Total Scope 3 emissions	Numerical field	Select from:  High Medium Low	Text field

If Yes is selected in response to 7.0:

### 7.5 Please attach your city-wide inventory in the table below.

If you have an inventory in the format of the GPC, please attach it below. You can download the GPC Reporting Tool (CIRIS) here. If you are using the ClearPath tool, please attach both extracts in the table below. If your inventory is not in the format of a GPC, you can also attach it below.

#### **Response Options**

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

Emissions inventory format	Document title	Attachment	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	Text Field	Attach your document here.	Select from:  High Medium Low	Text field
This inventory is in a format other than the GPC				

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If 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Greenhouse gas Inventory & Research Center of Korea (GIR), or International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank) is selected in response to 7.4:

7.6a Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by IPCC sector in the table below.

### **Response Options**

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

IPCC sector	Sector	Scope	Emissions (metric tonnes CO2e)
Select from:	Select from:	Select from:	Numerical field
• Energy	<ul> <li>Stationary energy (buildings)</li> </ul>	• Scope 1	
<ul> <li>Industrial processes and product use (IPPU)</li> </ul>	Residential buildings	• Scope 2	
Agriculture, Forestry and other land use (AFOLU)	Public buildings	Total figure	
Waste	Commercial buildings		
Other: please specify	Industrial buildings		
	Transportation		
	• Road		
	• Rail		
	Waste		
	Wastewater		
	Other: please specify		

[Add Row]

If International Emissions Analysis Protocol (ICLEI) is selected in response to 7.4:

7.6b Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by UNFCCC Sector.

#### **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.

UNFCCC Sector	Sector	Scope	Emissions (metric tonnes CO2e)
Select from:	Select from:	Select from:	Numerical field
Stationary energy	Stationary energy (buildings)	• Scope 1	
Transport	Residential buildings	• Scope 2	
Fugitive emissions	Public buildings	Total figure	
Industrial processes	Commercial buildings		
Agriculture	Industrial buildings		
Land use	Transportation		
Land use change and forestry	• Road		
Solid waste disposal	Rail		
Wastewater	Waste		
Treatment and discharge	Wastewater		
	Other: please specify		

If U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI) is selected in response to 7.4:

7.6c Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by the US Community Protocol sources.

#### **Response Options**

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

US Community Protocol Sources	Sector	Scope	Emissions (metric tonnes CO2e)
Select from:  Built environment  Transportation and other mobile sources Solid waste Wastewater and water Agricultural livestock Upstream impacts of community-wide activities	Select from: Stationary energy (buildings) Residential buildings Public buildings Commercial buildings Industrial buildings Transportation Road Rail Waste	Scope Select from: Scope 1 Scope 2 Total figure	Numerical field
	Waste     Wastewater     Other: please specify		

[Add Row]

If Regional or country specific methodology, City specific methodology or Other is selected in response to 7.4:

7.6d Where it will facilitate a greater understanding of your city-wide emissions, please provide a breakdown of these emissions by end user, or any other classification system used in your city.

#### **Response Options**

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

Source	Sector	Scope	Emissions (metric tonnes CO2e)
Text field	Select from:	Select from:	Numerical field
	Stationary energy (buildings)	Scope 1	
	Residential buildings	• Scope 2	
	Public buildings	Total figure	
	Commercial buildings		
	Industrial buildings		
	Transportation		
	• Road		
	• Rail		
	Waste		
	Wastewater		
	Other: please specify		

[Add Row]

If No or In progress is selected in response to 7.3:

7.7 Please give the total amount of fuel (referring to Scope 1 emissions) consumed in your city during the reporting year.

### **Response Options**

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

Fuel	Amount	Units	End user/ Economic sector/ IPCC sector/ Other	Sector
Select from Appendix C	Numerical field	Select from:	Text field	Select from:
		• GWh		Stationary energy (buildings)
		MWh		Residential buildings
		• kWh		Public buildings
		• TJ		Commercial buildings
		• GJ		Industrial buildings
		• MJ		Transportation
		• m3		Road
		• L		Rail
		Metric tonnes		Waste
		Short tons		Wastewater
		Therms		Other: please specify
		Btus		

[Add Row]

If No or In progress is selected in response to 7.3:

7.8 How much electricity, heat, steam, and cooling (referring to Scope 2) has been consumed by your city during the reporting year?

### **Response Options**

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

Туре	Amount	Units	End user / Economic sector / IPCC sector / Other	Sector
Select from:  Electricity  Heat  Steam  Cooling  Other: please specify	Numerical field	Select from:  GWh  MWh  kWh  TJ  GJ  MJ  m3  L  Metric tonnes  Short tons  Therms  Btus	Text field	Select from:  Stationary energy (buildings)  Residential buildings  Public buildings  Commercial buildings  Industrial buildings  Transportation  Road  Rail  Waste  Wastewater  Other: please specify

If No or In progress is selected in response to 7.3:

7.9 Does your city have a breakdown by source of city-wide Scope 3 emissions?

### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake

If Yes is selected in response to 7.9:

7.9a Please provide a breakdown of your city's scope 3 emissions.

### **Response Options**

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

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
Select from:	Numerical field	Text field
Goods and services		
Upstream emissions from energy use		
Water		
Wastewater		
• Road		
Aviation		
Waste		
Transmission and distribution losses		
• Railways		
Water-borne navigation		
• Food		
Other: please specify		

[Add Row]

If No, Intending to undertake in future or Not intending to undertake is selected in response to 7.9:

7.9b Please explain why not and detail your plans to do so in the future, if any.

#### **Response Options**

Reasoning	Explanation
Select from:	Text field
Lack of data	
Low data quality	
Lack of knowledge/capacity	
Lack of funding/resources	
Scope categorization not used	
Not required by national authorities	
Not required by international agreements	
Local government Scope 3 emissions have been assessed as insignificant	
Scope 3 calculations are in progress	
Other: please specify	

If Yes is selected in response to 7.0

7.10 Do you have any credits or offsets resulting in a change to your city's net emissions that you would like to report?

## **Response Options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes is selected in response to 7.10

## 7.10a Please provide details on the credits or offsets.

# **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 offset or credit	Emissions saved (metric tonnes CO2e)	Sector	Comment
Select from:  Scope 2 emissions based on a market-based method calculation  Offset credit transactions generated within the boundary and sold  Offset credit transactions purchased from outside of the boundary  Renewable energy generation produced within the geographic boundary, or reflecting an investment by the city  Renewable energy credits  Other: please specify	Numerical field	Select from: Stationary energy (buildings) Residential buildings Public buildings Commercial buildings Industrial buildings Transportation Road Rail Waste Wastewater Other: please specify	Text field

[Add Row]

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

# **Response Options**

Please complete the following table:

Change in emissions	Reason for change	Please explain
Select from:	If "Increased" is selected:	Text field
<ul><li>Increased</li></ul>	Increased energy/electricity consumption	
Decreased	Population increase	
Stayed the same	Improved data accuracy	
This is our first year of calculation	Emissions reduction actions not implemented	
Do not know	Change in weather conditions	
	Change in accounting methodology	
	Change in calculation following verification	
	Financial conditions	
	If "Decreased" is selected:	
	Behavioural change	
	Technological change	
	Legislative change	
	Financial conditions	
	Change in available data	
	Change in data collection methods	
	Policy change	
	Change in weather conditions	
	If "This is our first year of calculation" is selected:	
	Previous data was not reliable	
	Lack of resource / funding overcome	
	Lack of knowledge overcome	
	If "Stayed the same" is selected:	
	No new inventory to report	
	Emissions have not changed	
	If "Do not know" is selected:	
	Change in staff	
	Lack of documentation	
	Change in methodology	
	Other: please specify	

# City-wide External Verification

If Yes is selected in response to 7.0:

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

## **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 7.12:

7.12a Please provide the following information about the city-wide emissions verification.

## **Response Options**

Please complete the following table:

Name of verifier	Year of verification	Attach verification certificate	Comments
Text field	Numerical field	Attachment your document here.	Text field

If No, Not intending to undertake or Intending to undertake in future is selected in response to 7.12:

7.12b Please explain why your city-wide emissions inventory is not verified and describe any plans to verify your city-wide emissions in the future.

## **Response Options**

Please complete the following table:

Reason	Comments
Select from:	Text field
Verification under consideration	
Lack of funding / resources	
Lack of expertise / knowledge	
Verification is not prioritised	
Data is internally verified	
Other: please specify	

# Re-stating previous emissions inventories

If Yes is selected in response to 7.0:

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

Response	O	pti	ons
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Select one of the following options:

- Yes
- No
- Do not know

If Yes is selected in response to 7.13:

7.13a Please provide your city's recalculated total city-wide emissions figures for any previous inventories along with Scope 1, 2 and 3 breakdowns where applicable.

#### **Response Options**

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

Inventory date from	Inventory date to	Scope	Previous emissions (metric tonnes CO2e)	Updated emissions (metric tonnes CO2e)	Updated methodology	Attach your new inventory	Reasoning for recalculating
Date field	Date field	Select from:  Total emissions  Scope 1  Scope 2  Scope 3  Other: please specify	Numerical field	Numerical field	See drop-down options below	Attach your document here.	Text field

[Add Row]

#### Updated methodology drop-down options

#### Select from:

- Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)
- International Emissions Analysis Protocol (ICLEI)
- International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank)
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)
- Greenhouse gas Inventory & Research Center of Korea (GIR)
- Regional or country specific methodology
- City specific methodology
- Other: please specify

# **Strategy**

# GHG Emissions Reduction - Local Government Operations

The questions in this section refer to emissions reduction targets and actions associated with your local government operations (sometimes referred to as "corporate" or "municipal") emissions. Targets related to the city-wide emissions (also known as "community") inventory should be reported on the next page in questions 8.2 and 8.3.

8.0 Do you have a GHG emissions reduction target in place for your local government operations?

## **Response Options**

Select one of the following options:

- Yes
- No

If Yes is selected in response to 8.0:

8.0a Please provide details of your local government operations emissions reduction target.

#### **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	Target start year	Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	Target date	Percentage of target acheived	Comment
Select from:  Total  Buildings Transport  Waste Other: please specify	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Numerical field	Text field

[Add Row]

If No is selected in response to 8.0:

8.0b Please explain why you do not have a local government operations emissions reduction target.

#### **Response Options**

This is an open text question.

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

8.1 What actions are you undertaking to reduce your emissions in your local government operations?

# **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 reduction project activity	Status of project	Estimated emissions reduction (metric tonnes CO2e)	Estimated emissions reduction timescale	Project description	Web link to project website
Select from Appendix D	Select from: Scoping Pre-feasibility study Pre-implementation Implementation; Operation Implementation complete Monitoring and reporting	Numerical field	Select from: Per year Projected lifetime Other: please specify	Text field	Text field

[Add Row]

# Emissions reduction – City-wide

The questions in this section refer to emissions reduction targets and actions associated with your city's Community (sometimes referred to as "geographic" or "city-wide") emissions. Targets related to the local government operations (also known as "municipal") inventory should be reported on the previous page in questions 8.0 and 8.1.

#### 8.2 Does your city have a climate change action plan for reducing city-wide GHG emissions?

#### **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 8.2:

8.2a Please attach your city's climate change action plan below.

#### **Response Options**

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

Publication title	Year of publication	Attach	Web link	Stage of implementation
Text field	Numerical field	Attach your document here.	Text field	Select from:  Plan in development  Plan developed but not implemented  Plan in implementation  Implementation complete  Measurement in progress  Plan update in progress  Other: please specify

[Add Row]

If No, Not intending to undertake, or Intending to undertake in future is selected in response to 8.2:

8.2c Please explain why you do not have a city climate change action plan and any future plans to create one.

## **Response Options**

Please complete the following table:

Reason	Comment
Select from:	Text field
No plans yet to create an action plan	
Resources lacking to create an action plan	
Action plan in early stages of project planning	
Action planning in progress	
Lack of budget/resources	
Other: please specify	

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

## **Response Options**

Select all that apply:

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

If "Base year emissions (absolute) target" is selected in response to 8.3

8.3a Please provide details of your total city-wide base year emissions reduction (absolute) target. In addition, you may add rows to provide details of your sector-specific targets, by providing the base year emissions specific to that target.

#### **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	Target start year	Base year	Base year emissions (metric tonnes CO2e)	Percentage reduction target	Target year	Percentage of target achieved so far	Comment
Select from:  Total city-wide emissions  Stationary energy (buildings)  Residential buildings  Commercial buildings  Industrial buildings  Transportation  Road  Rail  Waste  Wastewater  Other: please specify	Numerical field	Numerical field	Numerical field	Percentage field	Numerical field	Percentage field	Text field

## [Add Row]

If "Base year intensity target" is selected in response to 8.3:

8.3b Please provide details of your total city-wide base year intensity target. An intensity target is usually measured per capita or per unit GDP. If you have an absolute emissions reduction target, please select "Base year emissions (absolute) target" in question 8.3.

## **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	Target start year	Intensity unit (Emissions per)		Base year emissions per intensity unit (metric tonnes CO2e per denominator)
Select from:  Total city-wide emissions  Stationary energy (buildings)  Residential buildings  Commercial buildings  Industrial buildings  Transportation  Road  Rail  Waste  Wastewater  Other: please specify	Numerical field	Select from:  Metric tonnes of CO2e per capita  Metric tonnes of CO2e per unit GDP  Other: please specify	Numerical field	Numerical field

Percentage reduction target in emissions intensity	Target year	Percentage of target achieved	Comment
Numerical field	Numerical field	Percentage field	Text field

[Add Row]

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If "Baseline scenario (business as usual) target" is selected in response to 8.3:

8.3c Please provide details of your total city-wide baseline scenario target, including projected business as usual emissions.

## **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	Target start year	Base year	Base year emissions (metric tonnes CO2e)	Target year
Select from:	Numerical field	Numerical field	Numerical field	Numerical field
Total city-wide emissions				
Stationary energy (buildings)				
Residential buildings				
Commercial buildings				
Industrial buildings				
Transportation				
• Road				
• Rail				
Waste				
Wastewater				
Other: please specify				

Estimated business as usual absolute emissions in target year (metric tonnes CO2e)	Percentage reduction target from business as usual	Percentage of target achieved	Comment
Numerical field	Percentage field	Percentage field	Text field

[Add Row]

If "No target" is selected in response to 8.3:

8.3d Please explain why you do not have a city-wide emissions reduction target and any plans to set one in the future.

## **Response Options**

Please complete the following table:

Reason	Comment
Select from:	Text field
Emissions not calculated	
Not intending to set a target	
Lack of resources	
Lack of available data	
Policies/projects prioritized over target setting	
Target is set at regional level	
Target is set at national level	
Target is in development	
Target already achieved	
Other: please specify	

8.4 What actions is your city taking to reduce emissions? Please also indicate estimated emissions reduction potential and status of the emissions reduction actions your city has planned.

## **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 reduction project activity	Status of project	Estimated emissions reduction (metric tonnes CO2e)	Estimated emissions reduction timescale	Project description	Web link to project website
Select from Appendix E	Select from: Scoping Pre-feasibility study Pre-implementation Implementation Operation Implementation complete Monitoring and reporting	Numerical field	Select from: Per year Projected lifetime Other: please specify	Text field	Text field

[Add Row]

# Energy

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

# **Response Options**

Please complete the following table:

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

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

## **Response Options**

Please complete the following table:

Туре	MW capacity
Renewable district heat/cooling	Numerical field
Solar PV	Numerical field
Solar thermal	Numerical field
Ground or water source	Numerical field
Wind	Numerical field
Other: please specify	Numerical field

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

## **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Intending to undertake in future
- Not intending to undertake
- Do not know

If Yes is selected in response to 9.2:

9.2a Please provide details of your renewable energy or electricity target and how the city plans to meet those targets.

## **Response Options**

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

Scale	Energy / electricity types covered by target	Base year	Total renewable energy / electricity covered by target in base year (in unit specified in column 2)	Percentage renewable energy / electricity of total energy or electricity in base year
Select from:  City-wide  Local government operations	Select from:  Total installed capacity of renewable energy (in MW)  Total installed capacity of renewable electricity (in MW)  All energy produced (in MWh)  All electricity produced (in MWh)  All energy consumed (in MWh)  All electricity consumed (in MWh)  Other: please specify	Numerical field	Numerical field	Percentage field

	Total renewable energy / electricity covered by target in target year (in unit specified in column 2)			Plans to meet target (include details on types of energy/electricity)
Numerical field	Numerical field	Percentage field	Percentage field	Text field

#### [Add Row]

If No, Not intending to undertake, or Intending to undertake is selected in response to 9.2

9.2b Please explain why you do not have a renewable energy or electricity target and any plans to introduce one in the future.

#### **Response Options**

Please complete the following table:

Reasoning	Comment
Select from:	Text field
Target already achieved	
Energy / electricity is not in city control	
Lack of renewable energy potential within the city	
Lack of funding	
The grid is not controlled by the city	
Renewable energy not prioritized	
Target is under development / consideration	
Other: please specify	

9.3 Does your city have an agreement to purchase a level of renewable electricity from the grid or from a national or municipal utility?

## **Response Options**

Select one of the following options:

- Yes
- No
- In progress
- Do not know

If Yes is selected in response to 9.3:

## 9.3a What is the agreement or target?

## **Response Options**

This is an open text question.

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

# Transport

# 11.0 What is the mode share of each transport mode in your city?

# **Response Options**

Please complete the following table:

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

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

# **Response Options**

Please complete the following table:

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

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# Water

# Water Supply

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

## **Response options**

Select all that apply:

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

## 15.3 Do you foresee substantive risks to your city's water supply in the short or long term?

## **Response options**

Select one of the following options:

- Yes
- No
- Do not know

If Yes or Do not know is selected in response to 15.3:

# 15.3a Please identify the risks to your city's water supply as well as the timescale and level of risk.

#### **Response Options**

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

Risks	Timescale	Magnitude	Risk description
Select from:	Select from:	Select from:	Text field
Increased water stress or scarcity	Current	Extremely serious	
Declining water quality	Short-term	Serious	
Inadequate or aging infrastructure	Medium-term	Less Serious	
Higher water prices	Long-term		
Regulatory			
Increased water demand			
Energy supply issues			

[Add Row]

If No is selected in response to 15.3:

15.3b Please explain why you do not consider your city to be exposed to any substantive water-related risk.

## **Response Options**

Please complete the following table:

Reason	Explanation
Select from:	Text field
City water supply is secure	
Risks are not substantive	
No assessment of water risks undertaken	
Other: please specify	

# Water Supply Management

If Yes is selected in response to 15.3:

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

# **Response Options**

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

Risks	Adaptation action	Action description
Populated from 15.3a	Select from:	Text field
	Conservation awareness and education	
	Conservation incentives	
	Water use restrictions	
	Efficiency regulations or standards	
	Water metering	
	Municipal water efficiency retrofits	
	Diversifying water supply (including new sources)	
	Investment in existing water supply infrastructure	
	Use of non-potable water outside	
	Use of non-potable water indoors (within building)	
	Watershed preservation	
	Stormwater management (natural or man-made infrastructure)	
	Other: please specify	

[Add Row]

# **Important Information**

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 <a href="https://www.cdp.net.">www.cdp.net.</a>

#### 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 2018 information request, the scoring methodology can be foundhere. Responses to CDP Cities 2018 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 emailCities@cdp.net to confirm your participation.

#### What is the legal status of CDP?

CDP Worldwide (CDP) 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 Level 3, 71 Queen Victoria Street, London EC4V 4AY. The charity has wholly owned subsidiaries in Germany and China and companies in Australia, Brazil and India over which it exercises control through majority Board representation. In the US, CDP North America, Inc. is an independently incorporated affiliate which has United States IRS 501(c)(3) charitable 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.

# **Appendices**

# **Appendix A: Currency** AED United Arab Emirates dirham AFN Afghani ALL Lek AMD Armenian Dram ANG Netherlands Antillian Guilder AOA Kwanza ARS Argentine Peso AUD Australian Dollar AWG Aruban Guilder AZN Azerbaijanian Manat BAM Convertible Marks BBD Barbados Dollar BDT Bangladeshi Taka BGN Bulgarian Lev BHD Bahraini Dinar BIF Burundian Franc BMD Bermudian Dollar (customarily known as Bermuda Dollar) BND Brunei Dollar **BOB** Boliviano BOV Bolivian Mvdol (Funds code)

BRL Brazilian Real
BSD Bahamian Dollar
BTN Ngultrum
BWP Pula
BYR Belarussian Ruble
BZD Belize Dollar
CAD Canadian Dollar
CDF Franc Congolais
CHE WIR Euro (complementary currency)
CHF Swiss Franc
CHW WIR Franc (complementary currency)
CLF Unidades de formento (Funds code)
CLP Chilean Peso
CNY Yuan Renminbi
COP Colombian Peso
COU Unidad de Valor Real
CRC Costa Rican Colon
CUP Cuban Peso
CVE Cape Verde Escudo
CYP Cyprus Pound
CZK Czech Koruna
DJF Djibouti Franc
DKK Danish Krone

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

IDR Rupiah	
ILS New Israeli Shekel	
INR Indian Rupee	
IQD Iraqi Dinar	
IRR Iranian Rial	
ISK Iceland Krona	
JMD Jamaican Dollar	
JOD Jordanian Dinar	
JPY Japanese yen	
KES Kenyan Shilling	
KGS Som	
KHR Riel	
KMF Comoro Franc	
KPW North Korean Won	
KRW South Korean Won	
KWD Kuwaiti Dinar	
KYD Cayman Islands Dollar	
KZT Tenge	
LAK Kip	
LBP Lebanese Pound	
LKR Sri Lanka Rupee	
LRD Liberian Dollar	

LSL Loti
LTL Lithuanian Litas
LVL Latvian Lats
LYD Libyan Dinar
MAD Moroccan Dirham
MDL Moldovan Leu
MGA Malagasy Ariary
MKD Denar
MMK Kyat
MNT Tugrik
MOP Pataca
MRO Ouguiya
MTL Maltese Lira
MUR Mauritius Rupee
MVR Rufiyaa
MWK Kwacha
MXN Mexican Peso
MXV Mexican Unidad de Inversion (UDI) (Funds code)
MYR Malaysian Ringgit
MZN Metical
NAD Namibian Dollar
NGN Naira

NIO Cordoba Oro	
NOK Norwegian Krone	
NPR Nepalese Rupee	
NZD New Zealand Dollar	
OMR Rial Omani	
PAB Balboa	
PEN Nuevo Sol	
PGK Kina	
PHP Philippine Peso	
PKR Pakistan Rupee	
PLN Zloty	
PYG Guarani	
QAR Qatari Rial	
RON Romanian New Leu	
RSD Serbian Dinar	
RUB Russian Ruble	
RWF Rwanda Franc	
SAR Saudi Riyal	
SBD Solomon Islands Dollar	
SCR Seychelles Rupee	
SDG Sudanese Pound	
SEK Swedish Krona	
SEK SWEUISH KIUHA	

GD Singapore Dollar
HP Saint Helena Pound
KK Slovak Koruna
LL Leone
OS Somali Shilling
RD Surinam Dollar
TD Dobra
YP Syrian Pound
ZL Lilangeni
HB Baht
JS Somoni
MM Manat
ND Tunisian Dinar
DP Pa'anga
RY New Turkish Lira
TD Trinidad and Tobago Dollar
ND New Taiwan Dollar
ZS Tanzanian Shilling
AH Hryvnia
GX Uganda Shilling
SD US Dollar
YU 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.U6) (Bonds market unit)
Appendix B: Actions to reduce vulnerability  No action currently taken
Flood mapping
Flood mapping  Heat mapping and thermal imaging
Heat mapping and thermal imaging
Heat mapping and thermal imaging  Landslide risk mapping
Heat mapping and thermal imaging  Landslide risk mapping  Sea level rise modelling
Heat mapping and thermal imaging  Landslide risk mapping  Sea level rise modelling  Biodiversity monitoring
Heat mapping and thermal imaging  Landslide risk mapping  Sea level rise modelling  Biodiversity monitoring  Real time risk monitoring
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
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)

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
Other
Appendix C: Fuel Type Natural gas
Compressed Natural Gas (CNG)
Liquefied Petroleum Gas (LPG)
Liquefied Natural Gas (LNG)
Methane
Butane
Propane
Town gas or city gas
Coal (Bituminous or Black coal)

Coking coal	
Crude oil	
Diesel/Gas oil	
Motor gasoline (petrol)	
Aviation gasoline	
Jet gasoline	
Jet kerosene	
Kerosene	
Residual fuel oil	
Distillate fuel oil No 1	
Distillate fuel oil No 2	
Distillate fuel oil No 3	
Distillate fuel oil No 4	
Distillate fuel oil No 5	
Distillate fuel oil No 6	
Liquified petroleum gas (LPG)	
Naptha	
Bitumen	
Petroleum coke	
Wood or wood waste	
Biodiesel	
Biogasoline	

Ethanol
E85
Other liquid biofuel
Landfill gas
Other biogas
Waste (municipal) Other
Appendix D: Local government operations emissions reduction activities (question 8.1)  Building codes and standards
Building performance rating and reporting
Energy efficiency/ retrofit measures
On-site renewable energy generation
Switching to low-carbon fuels
Brownfield redevelopment programs
Compact cities
Eco-district development strategy
Green space and/ or biodiversity preservation and expansion
Transit oriented development
Urban agriculture
Low or zero carbon energy supply generation
Optimize traditional power/ energy production
Smart grid
Developing the green economy
Encourage sustainable food production and consumption

LED / CFL / other luminaire technologies Smart lighting Awareness and education for non-motorized transport Improve fuel economy and reduce CO2 from motorized vehicles Infrastructure for non-motorized transport Transportation demand management Recycling or composting collections and/or facilities Wastewater to energy initiatives Water metering and billing Water recycling and reclamation Appendix E: City-wide emissions reduction activities (question 8.4) 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