### Introduction

We invite a reply to the following questions. The deadline for response is 30 April 2015.

Please respond to the information request using CDP's Online Response System (ORS). 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 via the ORS please e-mail <a href="mailto:cities@cdp.net">cities@cdp.net</a>.

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

- 2015 Reporting Guidance: This document provides a high-level overview of each module 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, helpful text is provided to the right of every question. This text will give you guidance on the intent of the question and how to respond.
- Contact us: All cities can write to <a href="mailto:cities@cdp.net">cities@cdp.net</a> (or <a href="mailto:sara.telahoun@cdp.net">sara.telahoun@cdp.net</a>) 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 is provided in the CDP Cities 2015 reporting guidance. Where you do not have all of the information requested, please respond with what you have as this is more valuable than no response.

This year, your city has the opportunity to participate in the <u>Compact of Mayors</u> simply by participating in CDP. Compact of Mayors questions can be found <u>here</u> and appear in **blue text** in this document.

### Introduction

#### Introduction

0.1 Please give a general description and introduction to your city including your city's boundary in the text box below. [Text box]

#### **Emissions Accounting Choice**

By checking the boxes below you are indicating that you have fuel and/or greenhouse gas (GHG) emissions data to report at this time.

Select 'Government' to report emissions from your local government operations (sometimes referred to as 'corporate' or 'municipal' emissions).

Select 'Community' to report emissions 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 'city-wide' emissions.

Select both boxes to report fuel and/or emissions for both inventories.

## IF YOU HAVE NO FUEL AND/OR GREENHOUSE GAS EMISSIONS TO REPORT DO NOT CHECK EITHER BOX.

0.2 Please indicate which greenhouse gas measurement inventories you are disclosing. [Tick boxes: Government; Community]

### Governance

### **City Details**

0.3 Please provide information about your city's Mayor in the table below:

Leader title	Leader name	Leader term start	Leader term end
[Text box]	[Text box]	[LOV: 2010-2015; Other]	[LOV: 2015 -2023; Other]

0.4 Please provide details of your city's annual operating budget.

Annual operating budget \$	Budget year start	Budget year end
[Numeric field]	[Drop down calendar: From]	[Drop down calendar: To]

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

Current population	Current population year	Projected population	Projected population
			year
[Numeric field]	[LOV: 2010-2015]	[Numeric field]	[LOV: 2020; 2025;
		Ī -	2030; 2035; 2040;
			2045; 2050]

0.6 Please provide details of your city's GDP.

GDP (\$USD)	Year of GDP	Source
[Numeric field]	[LOV: 2010-2015]	[Text box]

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

Average annual	Land area	Average	Longitude	Latitude
temperature (in	(in square km)	altitude (m)	(e.g120.9762)	(e.g. 41.25)
Celsius)		, ,	,	,
[Numeric field]				
-			-	-

### Governance

#### Governance

1.0 Please describe the process by which the city reviews its progress and manages overall responsibility for climate change.

Emissions reduction	Adaptation
[Text box]	[Text box]

- 1.1 Has the Mayor or local government committed to adapting to climate change across the geographical area of the city, town or settlement? [LOV: Yes; No; In progress]
- 1.1a *If yes:* Please select the type of commitment and attach evidence.

Type of commitment	Attach	Comments
[LOV: Durban Adaptation Charter; Mayors Adapt (EU); Mexico City Pact; UNISDR, Making Cities Resilient Campaign; Individual City Commitment; Other]	[Attachment function]	[Text box]

- 1.2 Does your local government have a plan that addresses climate change adaption? [LOV: Yes; No; In progress]
- 1.2a *If yes*: Please indicate the title of your plan, the year it was published and attach the document in the space provided.

Publication title	Year of publication	Attach the document
[Text box]	[Numeric field]	[Attachment function]

- 1.2b *If no or In progress:* Please explain why not and any future arrangements you have to create a plan. [Text box]
- 1.3 Please describe the impact of national and/or regional climate change activities on your city's own climate change activities. [Text box]
- 1.4 Does your city incorporate desired sustainability goals and targets (e.g. GHG reductions) into the master planning for the city? [LOV: Yes; No]
- 1.4a *If yes:* Please describe the ways that the master plan is designed to meet sustainability goals and targets (including GHG reductions). [Text box]
- 1.5 Does your city have a climate change action plan for reducing GHG emissions? [LOV: Yes, No]

## Governance

1.5a If yes: Please attach your city's climate change action plan below.

Publication Title	Year of publication	Attach
[Text box]	[Numeric field]	[Attachment function]

1.5b If no: Please describe any future plans to create a city climate change action plan. [Text box]

#### **Risks**

- 2.0 Do the current and/or anticipated effects of climate change present a significant risk to your city? [LOV: Yes; No; Don't Know]
- 2.0a If yes or don't know: Please list and describe the effects of climate change which you expect to experience in your city, together with their impacts, magnitudes and anticipated timescales.

Effects of climate change	Impact description	Magnitude	Anticipated timescale
[LOV: More hot days; Hotter summers; Greater temperature variability; More frequent heat waves; More intense heat waves; Warmer water temperatures; Changes in humidity; More frequent rainfall; More intense rainfall; Increased average annual rainfall; Reduced average annual rainfall; Reduced average annual snowfall; More frequent droughts; More intense droughts; Change in seasonality of rainfall; Increased frequency of large storms; Increased wind speeds; Sea level rise; Other]	[Text box]	[LOV: Extremely serious; Serious; Less serious]	[LOV: Current; Short-term; Medium- term; Long- term]

Add row

- 2.0b *If no:* Please explain why the anticipated effects of climate change present no significant risk to your city. [Text box]
- 2.1 Please describe any compounding factors that may worsen the effects of climate change in your city. [Text box]
- 2.2 Do you consider that the effects of climate change could threaten the ability of businesses to operate successfully in your city? [LOV: Yes; No; Don't know]
- 2.2a Please explain the reasoning behind your response. [Text box]
- 2.3 Has a climate change risk or vulnerability assessment been undertaken for your local government area? [LOV: Yes; No; In progress]
- 2.3a *If yes:* Please attach your climate change risk or vulnerability assessment. [Attachment function]

2.3b *If yes:* Please select the primary process or methodology used to undertake the risk or vulnerability assessment of your city.

Primary methodology	Description
[LOV: IPCC climate change impact assessment guidance; OECD Strategic Environmental Assessment and Adaptation to Climate	[Text box]
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); State or region vulnerability and risk assessment methodology; Agency specific vulnerability	
and risk assessment methodology; Proprietary Methodology; Unknown; Other]	

#### **Climate Hazards**

2.4 If yes to 2.0: Please list the city climate hazards you are currently experiencing within your local government area.

Effects of climate change (Populated from 2.0a)	City climate hazard
[LOV: More hot days; Hotter summers; Greater	[LOV: Rain storm; Heavy snow; Severe wind;
temperature variability; More frequent heat	Tornado; Cyclone (Hurricane/Typhoon);
waves; More intense heat waves; Warmer water	Tropical storm; Electrical storm; Fog; Extreme
temperatures; Changes in humidity; More	winter conditions; Cold wave; Extreme cold
frequent rainfall; More intense rainfall; Increased	weather; Heat wave; Extreme hot weather;
average annual rainfall; Reduced average	Drought; Forest fire; Land fire; Flash/surface
annual rainfall; Reduced average annual	flood; River flood; Coastal flood; Groundwater
snowfall; More frequent droughts; More intense	flood; Storm surge; Salt water intrusion; Ocean
droughts; Change in seasonality of rainfall;	acidification; Landslide; Avalanche; Rockfall;
Increased frequency of large storms; Increased	Subsidence; Water-borne disease; Vector-
wind speeds; Sea level rise; Other]	borne disease; Air-borne disease; Insect
	infestation]

2.5 Please list the future city climate hazards you are expecting within your local government area. Tick all that apply.

[Tick boxes: Rain storm; Heavy snow; Severe wind; Tornado; Cyclone (Hurricane/Typhoon); Tropical storm; Electrical storm; Fog; Extreme winter conditions; Cold wave; Extreme cold weather; Heat wave; Extreme hot weather; Drought; Forest fire; Land fire; Flash/surface flood; River flood; Coastal flood; Groundwater flood; Storm surge; Salt water intrusion; Ocean acidification; Landslide; Avalanche; Rockfall; Subsidence; Water-borne disease; Vector-borne disease; Air-borne disease; Insect infestation]

### Adaptation

3.0 If yes to 2.0: Please describe the actions you are taking to reduce the risk to, or vulnerability of, your city's infrastructure, citizens, and businesses from climate change as identified on the previous page.

Effects of climate change	Hazard	Action	Action description
[Prepopulated from 2.0a]	[LOV: Precipitation; Wind; Lightening; Fog; Extreme temperature – cold; Extreme temperature – Hot; Water scarcity; Wildfire; Flood; Wave action; Chemical change; Mass movement; Insects and micro-organisms]	[LOV: Appendix A]	[Text box]

### **Social Risks**

- 4.0 Does your city face any social risks as a result of climate change? [LOV: Yes; No; Don't know]
- 4.0a If yes or don't know: Please complete the table.

Social risks	Anticipated timescale in years	Impact description
[LOV: Fluctuating socio-economic conditions; Increased incidence and prevalence of disease; Increased demand for public services (including health); Increased risk to already vulnerable populations; Increased conflict and/or crime; Increased resource demand; Loss of traditional jobs; Migration from rural areas to cities; Population displacement; Other]	[LOV: Current; Short-term; Medium- term; Long- term]	[Text box]

Add row

4.0b *If no:* Please explain why not. [Text box]

# **Opportunities**

### **Opportunities**

- 5.0 Does climate change provide any economic opportunities for your city? [LOV: Yes; No; Don't know]
- 5.0a *If yes or don't know:* Please indicate the opportunities and describe how the city is positioning itself to take advantage of them.

Economic opportunity	Describe how the city is maximizing this opportunity
[LOV: Development of new business industries (e.g. clean tech); Additional funding opportunities; Improved efficiency of operations; Increased energy security; Increased attention to other environmental concerns; Increased infrastructure investment]	[Text box]

- 5.0b If no: Why not? [Text box]
- 5.1 List any climate change-related projects for which you hope to attract private sector involvement. [Text box]

### **Emissions - Local Government Operations**

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

### Methodology

LGO 1.0 Please state the dates of the accounting year or 12-month period for which you are reporting a GHG emissions inventory for your local government operations.

[Drop down calendar: From]

[Drop down calendar: From] [Drop down calendar: To]

- LGO 1.1 Please indicate the category that best describes the boundary of your municipal GHG emissions inventory. [LOV: Departments, entities or companies over which operational control is exercised; Departments, entities or companies over which financial control is exercised; Other]
- LGO 1.2 Please indicate which of the following major sources of emissions are included in your municipal GHG emissions inventory.

Source of emissions	Status
[Fixed LOV: Airport (s); Buildings; Buses; Electricity generation; Electricity transmission and distribution; Employee commuting; Incineration of waste; Landfills; Local trains; Maritime port; Municipal vehicle fleet; Regional trains; Roads / highways; Street lighting and traffic signals; Subway / underground; Thermal energy; Waste collection; Wastewater treatment; Water supply]	[LOV: Included; Not included; Not applicable]

LGO 1.3 Please give the name of the primary protocol, standard, or methodology you have used to calculate GHG emissions.

Primary protocol	Comment
[LOV: 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; Other]	[Text box]

LGO 1.4	Which gases are inc	luded in your emissions	s inventory? Tick	call that apply.
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□ CO2	□ PFCs
□ CH4	□ SF6
□ N2O	□ NF3
□ HFCs	

## **Emissions - Local Government Operations**

### **Energy Data**

LGO 1.5 Please give the total amount of fuel (refers to Scope 1 emissions) that your local government has consumed this year.

Source	Fuel	Amount	Units
[LOV: Airport (s); Buildings; Buses; Electricity	[LOV: Appendix B]	[Numeric field]	[LOV: GWh;
generation; Electricity transmission and			MWh; kWh;
distribution; Employee commuting; Incineration			TJ; GJ; MJ;
of waste; Landfills; Local trains; Maritime port;			Therms; Btu
Municipal vehicle fleet; Regional trains; Roads			m³;L; Metric
/ highways; Street lighting and traffic signals;			tonnes;
Subway / underground; Thermal energy;			Short tons ]
Waste collection; Wastewater treatment; Water			
supply; Unknown source; Total; Other]			

Add Row

LGO 1.6 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?

Source	Туре	Amount	Units
[LOV: Airport (s); Buildings; Buses; Electricity	[LOV: Electricity;	[Numeric field]	[LOV:
generation; Electricity transmission and	Heat; Steam;		GWh;
distribution; Employee commuting; Incineration	Cooling; Other]		MWh; kWh;
of waste; Landfills; Local trains; Maritime port;			TJ; GJ; MJ;
Municipal vehicle fleet; Regional trains; Roads			Therms;
/ highways; Street lighting and traffic signals;			Btu; m <sup>3</sup> ;L;
Subway / underground; Thermal energy;			Metric
Waste collection; Wastewater treatment; Water			tonnes;
supply; Unknown source; Other]			Short tons]

Add Row

### **GHG Emissions Data**

- LGO 1.7 Please provide total (Scope 1 + Scope 2) GHG emissions for your local government's operations, in metric tonnes CO2e. [Numeric field]
- LGO 1.8 If applicable, please provide the following GHG emissions.

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.

Total Scope 1 activity in metric tonnes CO2e emitted	Total Scope 2 activity in metric tonnes CO2e emitted
[Numeric field]	[Numeric field]

## **Emissions - Local Government Operations**

- LGO 1.9 Do you measure Scope 3 emissions? [LOV: Yes, No]
- LGO 1.9a *If yes:* Please complete the table.

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
[LOV: Employee Commuting; Employee Business Travel; Emissions from Contracted Services; Upstream Production of Materials and Fuels; Upstream and Downstream Transportation of Materials and Fuels; Waste Related Scope 3 Emission Sources; Other]	[Numeric field]	[Text box]

Add Row

- LGO 1.9b *If No:* Please explain why not and detail your plans to do so in the future, if any. [Text box]
- LGO 1.11 Where it will facilitate a greater understanding of your government emissions, please provide a breakdown of these emissions by department, facility, source, or by any other classification system used in your city.

Department / Facility / Source/ Other	Scope	Emissions (metric tonnes CO2e)
[Text box]	[LOV: Scope 1; Scope 2; Total figure]	[Numeric field]

Add Row

LGO 1.12 Please indicate if your emissions have increased, decreased, or stayed the same since your last emissions inventory, and please describe why.

Change in emissions	Reason for change
[LOV: Increased; Decreased; Stayed the same; This is our first year of calculation; Other]	[Text box]

#### **External Verification**

- LGO 1.13 Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole? [LOV: Yes; No]
- LGO 1.13a *If yes:* Please provide the following information about the emissions verification process.

Name of verifier	Year of verification	Attach verification certificate	Comments
[Text box]	[LOV: 2000 - 2015]	[Attachment function]	[Text box]

LGO 1.13b *If no:* Please describe your plans to verify your emissions in the future. [Text box]

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

### **Date and Boundary**

C1.0 Please state the dates of the accounting year or 12-month period for which you are reporting a GHG emissions inventory for your community.

[Drop down calendar: From] [Drop down calendar: To]

C1.1 Please indicate the category that best describes the boundary of your community GHG emissions inventory. [LOV: Administrative boundary of a local government; Combination of administrative divisions; A metropolitan area; Other]

### **Emissions and Energy Data**

C1.2 Please give the name of the primary protocol, standard, or methodology you have used to calculate GHG emissions.

Primary protocol	Comment
[LOV: Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI); 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);	[Text box]
Other]	

C1.3 Which gases are included in your emissions inventory? Tick all that apply.

□ CO2 □ PFCs
□ CH4 □ SF6
□ N2O □ NF3

□ HFCs

C1.4 Please detail total (Scope 1 +Scope 2) emissions for your community, in metric tonnes CO2e. [Numeric field]

C1.5 If applicable, please provide a breakdown of your GHG emissions by scope.

Scope	Metric tonnes CO2e
Scope 1 emissions excluding emissions from grid-supplied energy generation	[Numeric field]
Scope 1 emissions from grid- supplied energy generation within the city boundary	[Numeric field]
Total Scope 1 emissions (Row 1 + Row 2)	[Numeric field]
Total Scope 2 emissions	[Numeric field]

C1.6 If protocol besides Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), (WRI, C40 and ICLEI): Where it will facilitate a greater understanding of your community's emissions, please provide a breakdown of these emissions by end user (buildings, water, waste, transport), economic sector (residential, commercial, industrial, institutional), IPCC sector (stationary combustion; mobile combustion, Industrial processes, waste), or any other classification system used in your city.

End user / Economic sector / IPCC sector	Scope	Emissions (metric tonnes
/ Other		CO2e)
[Text box]	[LOV: Scope 1, Scope 2,	[Numeric field]
	Total figure]	

Add Row

C1.7 If protocol besides Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), (WRI, C40 and ICLEI): Please give the total amount of fuel (referring to Scope 1 emissions) consumed in your city during the reporting year.

Fuel	Amount	Units	Source
[LOV: Appendix B]	[Numeric field]	[LOV: GWh; MWh; kWh; TJ; GJ; MJ; m <sup>3</sup> ;L; Metric tonnes; Short tons; Therms; Btus]	[Text box]

Add Row

C 1.8 If protocol besides Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), (WRI, C40 and ICLEI): How much electricity, heat, steam, and cooling (referring to Scope 2) has been consumed by your city during the reporting year?

Туре	Amount	Units	Source
[LOV: Electricity; Heat;	[Numeric	[LOV: GWh; MWh; kWh;	[Text box]
Steam; Cooling; Other]	field]	TJ; GJ; MJ; m <sup>3</sup> ;L; Metric	
		tonnes; Short tons;	
		Therms; Btus]	

Add Row

C1.9a If Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI): Please provide a summary of emissions by sector and scope as defined in the Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI). Please complete the corresponding emissions for each row in the table below.

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

- C1.9b If Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI): Please provide a breakdown of fuel use and emissions by subsector and scope as defined in the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), (WRI, C40 and ICLEI) and attach GHG emissions report. Download the GPC Reporting Tool <a href="https://example.com/here">here</a>. [Attachment function]
- C1.11 If protocol besides Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI): Do you measure Scope 3 emissions? [LOV: Yes; No]
- C1.11a If yes: Please complete the table.

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
[LOV: Goods and services; Upstream emissions from energy use; Water; Wastewater; Road; Aviation; Waste; Transmission and distribution losses; Railways; Water-borne navigation; Food; Other]	[Numeric field]	[Text box]

Add Row

C1.11b If no: Please explain why not and detail your plans to do so in the future, if any. [Text box]

C1.12 Please indicate if your emissions have increased, decreased, or stayed the same since your last emissions inventory, and please describe why.

Change in emissions	Reason for change
[LOV: Increased; Decreased; Stayed the same; This is	[Text box]
our first year of calculation; Other]	

#### **External Verification**

- C1.13 Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole? [LOV: Yes; No]
- C1.13a If yes: Please provide the following information about the emissions verification process.

Name of verifier	Year of verification	Attach verification certificate	Comments
[Text box]	[LOV: 2000 - 2015]	[Attachment function]	[Text box]

C1.13b *If no:* Please describe your plans to verify your emissions in the future. [Text box]

# Strategy

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 Community (also known as "city-wide") inventory should be reported on the next page in questions 7.0 and 7.1.

#### **GHG Emissions Reduction – Local Government Operations**

- 6.0 Do you have a GHG emissions reduction target in place for your local government operations? [LOV: Yes; No]
- 6.0a If yes: Please provide details of your local government operations emissions reduction target.

Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	GHG sources to which the target applies	Target date	Comment
[LOV: 1990 – 2014; Other]	[Numeric field]	[Numeric field]	[Text box]	[LOV: 2015; 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

- 6.0b *If no:* Please explain why you do not have a local government operations emissions reduction target. [Text box]
- 6.1 What actions are you undertaking to reduce your emissions in your local government operations?

Emissions reduction sector	Emissions reduction activity	Anticipated emissions reduction – cumulative at action end date (metric tonnes CO2e)	Action description
[LOV: Buildings; Community-Scale Development; Energy Supply; Finance and Economic Development; Food and Agriculture; Outdoor Lighting; Private Transport; Mass Transit; Waste; Water]	[LOV: Appendix C]	[Numeric field]	[Text box]

Add row

### **Strategy**

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 6.0 and 6.1.

### **GHG Emissions Reduction – Community**

- 7.0 Do you have a GHG emissions reduction target in place for your community? [LOV: Yes; No]
- 7.0a If yes: Please provide details of your city-wide emissions reduction target.

Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	GHG sources to which the target applies	Target date	Comment
[LOV: 1990 – 2014, Other]	[Numeric field]	[Numeric field]	[Text box]	[LOV:2015; 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

- 7.0b If no: Please explain why you do not have a city-wide emissions reduction target. [Text box]
- 7.1 What actions are you undertaking to reduce emissions city-wide?

Emissions reduction sector	Emissions reduction activity	Anticipated emissions reduction – cumulative at action end date (metric tonnes CO2e)	Action description
[LOV: Buildings; Community-Scale Development; Energy Supply; Finance and Economic Development; Food and Agriculture; Outdoor Lighting; Private Transport; Mass Transit; Waste; Water]	[LOV: Appendix D]	[Numeric field]	[Text box]

Add row

# Strategy

### **Renewable Energy**

8.0 Please indicate the energy mix of your electricity at the city-wide scale.

Energy source	Percent
Coal	[Numeric field]
Gas	[Numeric field]
Oil	[Numeric field]
Nuclear	[Numeric field]
Hydro	[Numeric field]
Biomass	[Numeric field]
Wind	[Numeric field]
Geothermal	[Numeric field]
Solar	[Numeric field]

- 8.1 Does your city have a renewable energy or electricity target? [LOV: Yes my city has a renewable ELECTRICITY target; Yes my city has a renewable ENERGY target; Yes my city has renewable electricity AND energy targets; No my city does not have any renewable energy or electricity targets]
- 8.1a If Yes my city has a renewable **electricity** target or Yes my city has renewable **electricity and energy** targets: Please provide details of your renewable electricity targets and how the city plans to meet those targets.

	Total installed capacity of renewable electricity (in MW)	Proportion of total electricity from renewable energy sources	Target Date	Plans to meet target (include details on types of energy)
[LOV: City- wide, Municipal]	[Numeric field]	%	[LOV: 2015; 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

8.1b If Yes – my city has a renewable **energy** target or Yes – my city has renewable **electricity and energy** targets: Please provide details of your renewable energy targets and how the city plans to meet those targets.

Scale	Total installed capacity of renewable energy (in MW)	Proportion of total energy from renewable energy sources	Target date	Plans to meet target (include details on types of energy)
[LOV: City-wide, Municipal]	[Numeric field]	%	[LOV: 2015; 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

8.1c If No – my city does not have any renewable energy or electricity target. Please explain why you do not have a renewable energy target or a renewable electricity target and any plans to introduce one in the future. [Text box]

### Water

### **Water Supply Risks**

- 9.0 Do you foresee substantive risks to your city's water supply in the short or long term? [List of values: Yes; No]
- 9.0a *If yes:* Please identify the risks to your city's water supply as well as the timescale and level of risk.

Risks	Timescale	Level of risk	Risk description
[LOV: Increased water stress or scarcity; Declining water quality; Inadequate or aging infrastructure; Flooding; Higher water prices; Regulatory; Other]	[LOV: Current; Short-term; Medium-term; Long-term]	[LOV: Extremely serious, Serious, Less Serious]	[Text box]

Add row

9.0b *If no to 9.0:* Please explain why you do not consider your city to be exposed to any substantive water-related risk. [Text box]

### **Water Supply Management**

9.1 *If yes to 9.0:* Please select the actions you are taking to reduce the risks to your city's water supply.

Risks	Adaptation action	Action description
[LOV: Increased water stress or scarcity; Declining water quality; Inadequate or aging infrastructure; Flooding; Higher water prices; Regulatory; Other]	[LOV: 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]	[Text box]

Add row

### Important Information

The Carbon Disclosure Project (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.

#### 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.

#### **Scoring of responses**

Responses to CDP Cities 2015 will not be scored publicly by CDP or its partners. CDP will consider publicly scoring responses (for example, for the comprehensiveness of the organization's disclosure and on performance factors) in the future.

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

In order for responses and any revisions to be included in the annual reports CDP publishes each year, they must be received by 30 April 2015. After you submit your response via the Online Response System, it will become 'read-only' and can then only be amended by CDP staff. CDP can accept revisions to responses in writing at any time and will aim to make these available from www.cdp.net within five days of receipt.

#### How can a city confirm its participation?

If you received this document in hard copy, please email <u>Cities@cdp.net</u> to confirm your participation.

### What is the legal status of CDP?

The Carbon Disclosure Project is a UK Registered Charity no. 1122330 and a company limited by guarantee registered in England no. 05013650. In the US, the Carbon Disclosure Project is a special project of Rockefeller Philanthropy Advisors with United States IRS 501(c)(3) charitable status.

The Carbon Disclosure Project 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.

### **Appendix A**

#### Appendix A: Actions to reduce vulnerability

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

Other

## **Appendix B**

### **Appendix B: 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 C**

### Appendix C: Emissions reduction activities Local Government (question 6.1)

Based on your selected Emissions Reduction Sector, you will only view the relevant Emissions Reduction Activities in the Appendix below.

Buildings > Building codes and standards

Buildings > Building performance rating and reporting

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 > Compact cities

Community-Scale Development > Eco-district development strategy

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

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

Finance and Economic Development > Developing the green economy

Food and Agriculture > Encourage sustainable food production and consumption

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 motorized vehicles

Private Transport > Infrastructure for non motorized transport

Private Transport > Transportation demand management

Waste > Recycling or composting collections and/or facilities

Water > Wastewater to energy initiatives

Water > Water metering and billing

Water > Water recycling and reclamation

### **Appendix D**

### Appendix D: Emissions reduction activities City-wide (question 7.1)

Based on your selected Emissions Reduction Sector, you will only view the relevant Emissions Reduction Activities in the Appendix below.

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