

# Introduction

We invite a reply to the following questions. The deadline for response is 29 April 2016.

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 [cities@cdp.net](mailto:cities@cdp.net).

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

- 2016 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 [cities@cdp.net](mailto:cities@cdp.net) (or [sara.telahoun@cdp.net](mailto:sara.telahoun@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 is provided in the CDP Cities 2016 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 [Compact of Mayors](#) simply by participating in CDP. Compact of Mayors questions can be found [here](#) 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.

Administrative boundary	Description of city
[LOV: City / Municipality; Local government area within a city / metropolitan area; Independent city; Special city; Federal district; Sovereign city-state; Metropolitan area; County; Other]	[Text box]

## Emissions Accounting Choice

Reporting emissions is optional for all cities. 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	Current term start	Current term end	Total time in office (years)
[Text box]	[Text box]	[LOV: 2010-2016; Other]	[LOV: 2016 - 2023; Other]	[Numeric field]

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

Annual operating budget	Currency	Budget year start	Budget year end
[Numeric field]	[LOV: Appendix E]	[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; 2030; 2035; 2040; 2045; 2050]

0.6 Please provide details of your city’s GDP.

GDP	Currency	Year of GDP	Source
[Numeric field]	[LOV: Appendix E]	[LOV: 2010-2015]	[Text box]

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

Average annual temperature (in Celsius)	Land area (in square km)	Average altitude (m)	Longitude (e.g. -120.9762)	Latitude (e.g. 41.25)
[Numeric field]	[Numeric field]	[Numeric field]	[Numeric field]	[Numeric field]

# Governance

## Governance

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

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

Response	Description
[LOV: Yes; No]	[Text box]

1.2 Please describe how your city collaborates with businesses in your city on sustainability issues or projects. [Text box]

# Risks and Adaptation

## Climate Hazards

2.0 Has a climate change risk or vulnerability assessment been undertaken for your local government area? [LOV: Yes; No; In progress; Not intending to undertake; Do not know]

2.0a If yes: Please attach and provide details on your climate change risk or vulnerability assessment.

Publication title	Year of publication	Attach the document	Boundary of assessment	Primary author of assessment
[Text box]	[Numeric field]	[Attachment function]	[LOV: City / Municipality; Local government area within a city / metropolitan area; Independent city; Special city; Federal district; Sovereign city-state; Metropolitan area; County; Other]	[LOV: Dedicated city team; Relevant city department; Consultant; International organization; Community group; Regional / state / provincial government; National / central government; Other]

2.0b 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 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]	[Text box]

2.1 Do the current and/or anticipated effects of climate change present a significant risk to your city? [LOV: Yes; No; Don't know]

# Risks and Adaptation

2.1a *If yes or Don't know:* Please list the most significant climate hazards currently faced by your city and indicate the probability and consequence of these hazards.

Climate Hazards	Probability of hazard	Consequence of hazard
[LOV: 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]	[LOV: High; Medium High; Medium; Low; Low; Do not know]	[LOV: High; Medium High; Medium; Low; Do not know]

Add Row

2.1b *If no to 2.1:* Please explain why the anticipated effects of climate change present no significant risk to your city. [Text box]

2.1c Please identify how you expect climate change to affect the frequency and intensity of the hazards faced by your city and when you expect to experience those changes.

Climate Hazards	Change in frequency	Change in intensity	Anticipated timescale
[LOV: 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]	[LOV: Increasing; Decreasing; None; Don't know]	[LOV: Increasing; Decreasing; None; Don't know]	[LOV: Current; Short-term; Medium-term; Long-term]

Add row

# Risks and Adaptation

## Climate Hazards II

2.1d If yes: Please describe the magnitude of the impact of these hazards and identify three critical assets or services that may be most impacted.

Climate Hazards	Magnitude of impact	Impact description	Asset or service	Asset or service	Asset or service
[Populated from 2.1c]	[LOV: Extremely serious; Serious; Less serious]	[Text box]	[LOV: Energy; Water Supply & Sanitation; Transport; Food and agriculture; Waste Management; Information & Communications Technology; Environment; Industrial; Commercial; Residential; Education; Public health; Community & Culture; Law & Order; Emergency Management; Other]	[LOV: Energy; Water Supply & Sanitation; Transport; Food and agriculture; Waste Management; Information & Communications Technology; Environment; Industrial; Commercial; Residential; Education; Public health; Community & Culture; Law & Order; Emergency Management; Other]	[LOV: Energy; Water Supply & Sanitation; Transport; Food and agriculture; Waste Management; Information & Communications Technology; Environment; Industrial; Commercial; Residential; Education; Public health; Community & Culture; Law & Order; Emergency Management; Other]

2.2 Do you consider that the effects of climate change could threaten the ability of businesses to operate successfully in your city?

Response	Explanation
[LOV: Yes; No; Don't know]	[Text box]

# Risks and Adaptation

## Adaptation

3.0 Please describe the process by which the city reviews its progress and manages overall responsibility for climate change adaptation. [Text box]

3.1 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]

3.1a If yes: Please select the type of commitment and attach evidence.

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

3.2 Does your local government have a plan that addresses climate change adaptation? [LOV: Yes; No; In progress]

3.2a If yes: Please provide more information on your plan that addresses climate change adaptation and attach the document.

Publication title	Year of publication	Attach the document	Scope of plan	Area under your city's control	Primary author of plan
[Text box]	[Numeric field]	[Attachment function]	[LOV: City / Municipality; Local government area within a city / metropolitan area; Independent city; Special city; Federal district; Sovereign city-state; Metropolitan area; County; Other]	[LOV: Financial boundary of city governance; Operational boundary of city governance; Administrative boundary of city governance]	LOV: Dedicated city team; Relevant city department; Consultant; International organization; Community group; Regional / state / provincial government; National / central government; Other]

3.2b *If no or In progress:* Please explain why not and any future arrangements you have to create a plan. [Text box]

3.3 The Compact of Mayors requires cities to complete [these additional questions](#) on the climate hazards affecting your city and your city's plans to adapt to these hazards. Other cities wishing to disclose further detail about their adaptation efforts are also encouraged to fill out the download. [Attachment function]



# Risks and Adaptation

3.4 *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 in the Climate Hazards section.

Climate hazards	Action	Action description
[Populated from 2.1c]	[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; Other]	[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, and provide any details on the estimated cost of the project.

Project area	Project description	Cost of project (USD\$)
[LOV: Buildings; Energy efficiency / retrofit; Infrastructure improvement; Outdoor lighting; Renewable energy; Transport; Waste management; Waste recycling; Water management; Other]	[Text box]	[Numeric field]

Add row

# 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: 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 included in your emissions inventory? Tick all that apply.

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

# 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 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; Unknown source; Total; Other]	[LOV: Appendix B]	[Numeric field]	[LOV: GWh; MWh; kWh; TJ; GJ; MJ; Therms; Btu m <sup>3</sup> ; L; Metric tonnes; Short tons]

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	Type	Amount	Units
[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; Unknown source; Other]	[LOV: Electricity; Heat; Steam; Cooling; Other]	[Numeric field]	[LOV: GWh; MWh; kWh; TJ; GJ; MJ; Therms; Btu; m <sup>3</sup> ; L; Metric tonnes; 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 CO<sub>2</sub>e. [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 CO <sub>2</sub> e emitted	Total Scope 2 activity in metric tonnes CO <sub>2</sub> e 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 - 2016]	[Attachment function]	[Text box]

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

# Emissions - Community

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]

## GHG Emissions 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); Other]	[Text box]

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

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

- C1.4 Please detail total (Scope 1 +Scope 2) emissions for your community, in metric tonnes CO2e and provide a comment on the level of confidence in the accuracy of your community emissions figure.

Total emissions (metric tonnes CO2e)	Attach your inventory	Level of confidence	Comment on level of confidence
[Numeric field]	[Attachment function]	[LOV: High; Medium; Low]	[Text box]

# Emissions - Community

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

Scope	Metric tonnes CO2e	Level of confidence
Scope 1 emissions excluding emissions from grid-supplied energy generation	[Numeric field]	[LOV: High; Medium; Low]
Scope 1 emissions from grid-supplied energy generation within the city boundary	[Numeric field]	[LOV: High; Medium; Low]
Total Scope 1 emissions (Row 1 + Row 2)	[Numeric field]	[LOV: High; Medium; Low]
Total Scope 2 emissions	[Numeric field]	[LOV: High; Medium; Low]

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 / Other	Sector	Scope	Emissions (metric tonnes CO2e)
[Text box]	[LOV: Stationary energy (buildings); Residential buildings; Public buildings; Commercial buildings; Industrial buildings; Transportation; Road; Rail; Waste; Wastewater; Other]	[LOV: Scope 1, Scope 2, Total figure]	[Numeric field]

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	End user / Economic sector / IPCC sector / Other	Sector
[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]	[LOV: Stationary energy (buildings); Residential buildings; Public buildings; Commercial buildings; Industrial buildings; Transportation; Road; Rail; Waste; Wastewater; Other]

Add Row

# Emissions - Community

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?

Type	Amount	Units	End user / Economic sector / IPCC sector / Other	Sector
[LOV: Electricity; Heat; Steam; Cooling; Other]	[Numeric field]	[LOV: GWh; MWh; kWh; TJ; GJ; MJ; m <sup>3</sup> ;L; Metric tonnes; Short tons; Therms; Btus]	[Text box]	[LOV: Stationary energy (buildings); Residential buildings; Public buildings; Commercial buildings; Industrial buildings; Transportation; Road; Rail; Waste; Wastewater; Other]

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 [here](#). [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]



# Emissions - Community

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 our first year of calculation; Other]	[Text box]

## 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 - 2016]	[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.

Sector	Define target boundary	Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	Target date	Comment
[LOV: Total; Buildings; Transport; Waste; Other]	[Text box]	[LOV: 1990 – 2015; Other]	[Numeric field]	[Numeric field]	[LOV: 2016; 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 activity	Anticipated emissions reduction – cumulative at action end date (metric tonnes CO2e)	Action description
[LOV: Appendix C]	[Numeric field]	[Text box]

Add row

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.

# Strategy

## GHG Emissions Reduction – Community

7.0 Please describe the process by which the city reviews its progress and manages overall responsibility for emissions reduction. [Text box]

7.1 Does your city have a climate change action plan for reducing GHG emissions? [LOV: Yes, No]

7.1a If yes: Please attach your city’s climate change action plan below.

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

7.1b If no: Please describe any future plans to create a city climate change action plan. [Text box]

7.2 Do you have a GHG emissions reduction target in place for your community? [LOV: Yes; No]

7.2a If yes to 7.2: Please provide details of your **total** city-wide emissions reduction target. In addition you may provide details of your sector-specific targets, by providing the baseline emissions specific to that target.

Sector	Define target boundary	Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	Target date	Comment
[LOV: Total; Buildings; Transport; Waste; Other]	[Text box]	[LOV: 1990 – 2015, Other]	[Numeric field]	[Numeric field]	[LOV: 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

7.2b If no: Please explain why you do not have a city-wide emissions reduction target. [Text box]

# Strategy

7.3 What actions are you undertaking to reduce emissions city-wide?

Emissions reduction activity	Anticipated emissions reduction – cumulative at action end date (metric tonnes CO2e)	Action description
[LOV: Appendix D]	[Numeric field]	[Text box]

Add row

## 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.

Scale	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: 2016; 2020; 2025; 2030; 2035; 2040; 2045; 2050; Other]	[Text box]

Add row

# Strategy

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: 2016; 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
[Populated from 9.0a]	[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

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

## **What are the financial implications of responding?**

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

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

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

## **Scoring of responses**

Responses to CDP Cities 2016 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 29 April 2016. 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](http://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 [Cities@cdp.net](mailto:Cities@cdp.net) 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, CDP is a US registered 501(c)(3) with tax-exempt 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)

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 7.3)

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

# Appendix E

## Appendix E - 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	Azerbaijani 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

# Appendix E

NIO	Cordoba Oro	XBC	European Unit of Account 9 (E.U.A.-9) (Bonds market unit)
NOK	Norwegian Krone	XBD	European Unit of Account 17 (E.U.A.- 17) (Bonds market unit)
NPR	Nepalese Rupee	XCD	East Caribbean Dollar
NZD	New Zealand Dollar	XDR	Special Drawing Rights
OMR	Rial Omani	XFO	Gold franc (special settlement currency)
PAB	Balboa	XFU	UIC franc (special settlement currency)
PEN	Nuevo Sol	XOF	CFA Franc BCEAO
PGK	Kina	XPD	Palladium (one Troy ounce)
PHP	Philippine Peso	XPF	CFP franc
PKR	Pakistan Rupee	XPT	Platinum (one Troy ounce)
PLN	Zloty	XTS	Code reserved for testing purposes
PYG	Guarani	XXX	No currency
QAR	Qatari Rial	YER	Yemeni Rial
RON	Romanian New Leu	ZAR	South African Rand
RSD	Serbian Dinar	ZMK	Kwacha
RUB	Russian Ruble	ZWD	Zimbabwe Dollar
RWF	Rwanda Franc		
SAR	Saudi Riyal		
SBD	Solomon Islands Dollar		
SCR	Seychelles Rupee		
SDG	Sudanese Pound		
SEK	Swedish Krona		
SGD	Singapore Dollar		
SHP	Saint Helena Pound		
SKK	Slovak Koruna		
SLL	Leone		
SOS	Somali Shilling		
SRD	Surinam Dollar		
STD	Dobra		
SYP	Syrian Pound		
SZL	Lilangeni		
THB	Baht		
TJS	Somoni		
TMM	Manat		
TND	Tunisian Dinar		
TOP	Pa'anga		
TRY	New Turkish Lira		
TTD	Trinidad and Tobago Dollar		
TWD	New Taiwan Dollar		
TZS	Tanzanian Shilling		
UAH	Hryvnia		
UGX	Uganda Shilling		
USD	US Dollar		
UYU	Peso Uruguayo		
UZS	Uzbekistan Som		
VEB	Venezuelan bolívar		
VND	Vietnamese đồng		
VUV	Vatu		
WST	Samoan Tala		
XAF	CFA Franc BEAC		
XAG	Silver (one Troy ounce)		
XAU	Gold (one Troy ounce)		
XBA	European Composite Unit (EURCO) (Bonds market unit)		
XBB	European Monetary Unit (E.M.U.-6) (Bonds market unit)		