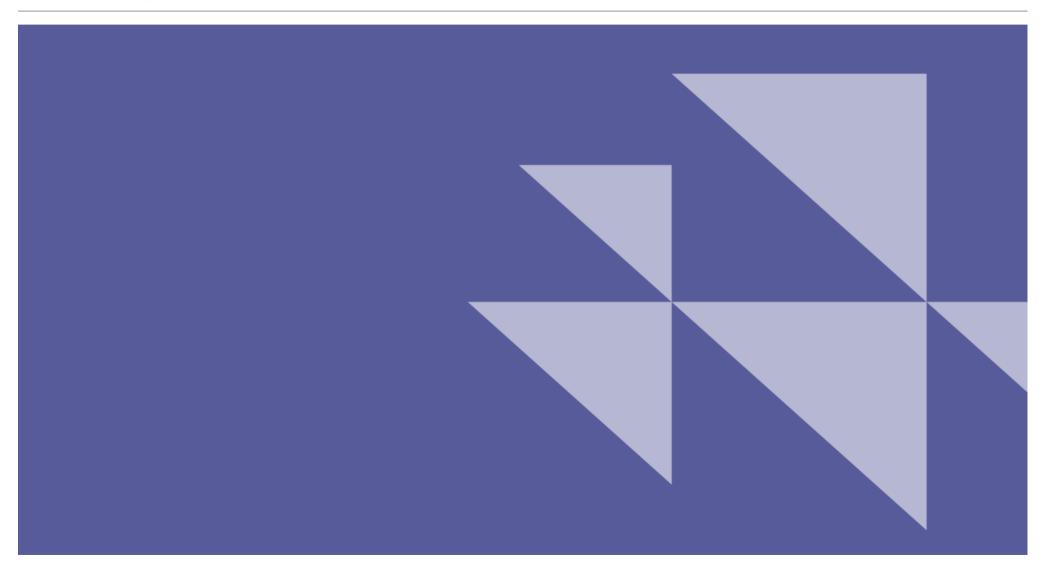


Cities 2020 Questionnaire



CDP Cities disclosure cycle 2020

Cities 2020 Questionnaire

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

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

How to respond

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

Please note, you must submit your response in the ORS, CDP cannot accept responses provided in other formats (i.e. PDF or Word documents).

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

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

Help and resources

- 2020 Online Reporting Guidance: This document provides a high-level overview of each questionnaire section as well as guidance on every question. It provides information on the intent of each question as well as examples of good responses for selected questions
- In-ORS Guidance: Within the ORS, there will be three levels of help and guidance
- Brief help text is provided below every question. This text will give you guidance on the intent of the question.
- Clicking on the help icon above each question will show a pop-up window with information on how to respond to the question.
- More detailed guidance can be found by clicking the expandable link below the question. This link will display the full reporting guidance including detailed information on how to respond, examples, links to documentation and scoring associated with the question.
- Contact us: All cities can write to cities@cdp.net for questions which are not answered in the quidance, for help accessing the ORS, or for general inquiries.
- C40 cities can contact their regional director or reporting@c40.org for help in compiling their response.
- ICLEI cities can contact their regional director or carbonn@iclei.org for help in compiling their response.

GCoM Common Reporting Framework

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

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

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

For more detailed information on the reporting requirements, please refer to the GCoM Guidance note.

0. Introduction

Introduction

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

Administrative boundary	Description of city
Select from:	Text field and attachment function
Local government area within a greater city / metropolitan area	
City / Municipality	
Independent city	
Special city	
Federal district	
Sovereign city-state	
Metropolitan area	
Province / County	
Independent province	
Intercommunality	
Sub-municipal district	
Other, please specify	

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please attach the relevant document here.

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

Change from 2019

Minor change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

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

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

Change from 2019

Minor change

Connection to other frameworks

Global Covenant of Mayors

Question 0.4 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements, please refer to the GCOM Guidance note.

Response Options

Select from Appendix A

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

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

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

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

Numeric field

1. Governance & Data Management

Governance

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

Change from 2019

No change

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

No change

Response Options

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

Goal type	How are these goals/targets addressed in the city master plan?
Select from:	Text field
Emissions reduction targets	
Adaptation targets	
Renewable energy targets	
Energy efficiency targets	
Water security targets	
Waste management targets	
• Other, please specify	

[Add Row]

2. Climate Hazards and Vulnerability

Climate Risk and Vulnerability Assessment

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

Minor change

Response Options

Please complete the following table:

Primary methodology	Description
Select from:	Text field
IPCC climate change impact assessment guidance	
OECD Strategic Environmental Assessment and Adaptation to Climate Change	
UNDP climate risk management methodologies	
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	
CRAFT Tool - City Climate Hazard Taxonomy	
ICLEI's Green Climate Cities (GCC) integrated climate change process methodology	
Building Adaptive and Resilient Cities (BARC) toolkit (regional - Canada)	
ICLEI ACCCRN Process Toolkit (regional - Southeast Asia)	
Local Government Climate Change Adaptation Toolkit (regional - Oceania)	
• Unknown	
Other, please specify	

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 2.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.1 Climate Risk and Vulnerability Assessment – Initial stepsof the GCoM Guidance note.

Response Options

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

Publication title and attach document	Web link	Year of publication or approval from local government	Boundary of assessment relative to city boundary (reported in 0.1)	Explanation of boundary choice where the assessment boundary differs from the city boundary	Primary author of assessment	Does the assessment identify vulnerable populations?	Areas/Sectors covered by the risk and vulnerability assessment	Please explain
Text field	Text field	Numeric 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	Select all that apply: Energy Water Supply and Sanitation Transport Food and agriculture Waste Management Information & Communications Technology Environment, Biodiversity and Forestry Industrial Commercial Residential Education Public Health Community and Culture Law & Order Emergency Management Land use planning Tourism Other, please specify	Text field

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

Reason	Comment
Select one of the following options: Lack of resources/funding	Text field
Lack of expertise Lack of political will	
Climate hazards not experienced in the city Other, please specify	

Climate Hazards

2.1 Please list the most significant climate hazards faced by your city and indicate the probability and consequence of these hazards, as well as the expected future change in frequency and intensity. Please

Page 9 of 86 @cdp | www.cdp.net

also select the most relevant assets or services that are affected by the climate hazard and provide a description of the impact.

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 2.1 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.2.2 dentifying current and future climate hazards and their impacts of the GCOM Guidance note.

Response Options

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

Climate Hazards	Did this hazard significantly impact your city before 2020?	Current probability of hazard	Current magnitude of hazard	Social impact of hazard overall	Most relevant assets/services affected overall
Select from Appendix E	Select from: • Yes • No • Do not know	Select from: High Medium High Medium Medium Low Low Do not know Does not currently impact the city	Select from: High Medium High Medium Medium Low Low Do not know Does not currently impact the city	Select all that apply: Fluctuating socio-economic conditions Increased incidence and prevalence of disease and illness Increased demand for public services Increased demand for healthcare services Increased demand for healthcare services Increased conflict and/or crime Increased resource demand Loss of traditional jobs Migration from rural areas to cities Population displacement Loss of tax base to support public services Other, please specify	Select all that apply: Energy Water supply & sanitation Transport Food & agriculture Waste management Information & communications technology Environment, biodiversity, forestry Industrial Commercial Residential Education Tourism Public health Society / community & culture Law & order Emergency services Land use planning Other, please specify

Please identify which vulnerable populations are affected	Future change in frequency	Future change in intensity	Future expected magnitude of hazard	When do you first expect to experience those future changes in frequency and intensity?	Please describe the impacts experienced so far, and how you expect the hazard to impact in the future
Select all that apply: Women & girls Children & youth Elderly Indigenous population Marginalized groups Persons with disabilities Persons with chronic diseases Low-income households Unemployed persons Persons living in sub-standard housing Other, please specify	Select from: Increasing Decreasing None Do not know Not expected to happen in the future	Select from: Increasing Decreasing None Do not know Not expected to happen in the future	Select from: High Medium High Medium Medium Low Low Do not know	Select from: Immediately Short-term (by 2025) Medium-term (2026-2050) Long-term (after 2050)	Text field

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 2.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 4.3. Assessing adaptive capacity of the GCOM Guidance note.

Response Options

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

Factors that affect ability to adapt	Indicate if this factor either supports or challenges the ability to adapt	Level of degree to which factor challenges/supports the adaptive capacity of your city	Please describe how the factor supports or challenges the adaptive capacity of your city
Select from:	Select from:	Select from:	Text field
Access to basic services	Challenges	If Challenges:	
Access to healthcare	Supports	Significantly challenges	
Access to education		Moderately challenges	
Public health		Somewhat challenges	
Cost of living		If Supports:	
Housing		Significantly supports	
Poverty		Moderately supports	
Inequality		Somewhat supports	
Unemployment			
Underemployment			
Migration			
Safety and security			
Economic health			
Economic diversity			
Rapid urbanization			
Resource availability			
Environmental conditions			
Political stability			
Political engagement / transparency			
Government capacity			
Budgetary capacity			
Infrastructure conditions / maintenance			
Infrastructure capacity			
Land use planning			
Community engagement			
Access to quality / relevant data			
Other, please specify			

[Add Row]

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

Change from 2019

New question

Response Option

Select form:

- Yes
- No
- Do not know

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

Question Dependencies

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

Change from 2019

New question

Response Option

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

Area affected by climate change	Health-related risk and vulnerability assessment undertaken	Identify the climate hazards most significantly impacting the selected area	Identify the climate-related health issues faced by your city	Timescale of climate-related issues for the selected health area	Please identify which vulnerable populations are affected by these climate related impacts	Please explain
Select all that apply: Health outcomes Health systems (service provision, infrastructure and technologies) Areas outside the health sector (e.g. agriculture, water and sanitation, transport, power generation, built environment)	Select from: • Yes • No	Select all that apply: Appendix E	Select all that apply: Heat-related illnesses Vector-borne infectious diseases (e.g. malaria, dengue, Lyme disease, tick-borne encephalitis) Water-borne and food-borne infectious diseases (e.g. diarrheal diseases and wound infections) Air-pollution related illnesses Exacerbation of Non-Communicable Disease Symptoms (e.g. respiratory disease, cardiovascular disease, renal disease) Mental health impacts Direct physical injuries and deaths due to extreme weather events Food & Nutrition Security Disruption to water, sanitation and wastewater services Disruption to health service provision Overwhelming of health service provision due to increased demand Lack of climate-informed surveillance, preparedness, early warning and response Damage/destruction to health infrastructure and technology Disruption of health-related services (e.g. roads, electricity, communications, emergency/ambulatory response, laboratories, pharmacies) Other, please specify	Select from: Current Short-term (by 2025) Medium-term (2026-2050) Long-term (after 2050)	Select all that apply: Women Children and youth Elderly Indigenous populations Marginalized groups Outdoor workers Factory workers Persons with disabilities Persons with pre-existing medical conditions Low-income households Unemployed persons Persons living in sub-standard housing Other, please specify	Text field

[Add Row]

3. Adaptation

Adaptation Actions

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 3.0 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 7 Developing a Climate Action Plan(s) of the GCOM Guidance note.

Response Options

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

Climate hazards	Action	Action title	Status of action	Means of implementation	Co-benefit area	Sectors/areas adaptation action applies to	Action description and implementation progress
Drop-down populated with selections from 2.1 column 1	Select from Appendix B	Text field	Select from: Scoping Pre-feasibility/impact assessment study Pre-implementation Implementation Implementation complete but not in operation Operation Monitoring and reporting Other, please specify	Select all that apply: Education Capacity building and training activities Awareness raising program or campaign Stakeholder engagement Infrastructure development Assessment and evaluation activities Monitor activities Verification activities Development and implementation of action plan Policy and regulation Financial mechanism Sustainable public procurement Other, please specify	Select from Appendix F	Select all that apply: Energy Transport (Mobility) Building and Infrastructure Industry ICT (Information and Communication Technology) Spatial Planning Agriculture and Forestry Fishery Water Waste Public Health and Safety Business and Financial Service Social Services Other, please specify	Text field

Page 13 of 86 @cdp | www.cdp.net

Finance status	Majority funding source	Total cost of the project (currency)	Total cost provided by the local government (currency)	Total cost provided by the majority funding source (currency)	Web link
Select from: Pre-feasibility/impact assessment study status Feasibility undertaken Feasibility finalized, and finance partially secured Finance secured Seeking funding	Select from: Local (Sub)national International (ODA) Climate finance (carbon credits) Public-private partnership Other, please specify	Numeric field	Numeric field	Numeric field	Text field

Adaptation Planning

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

Change from 2019

No change (2019 3.1)

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select one of the following options:

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

3.2a Please provide more information on your plan that addresses climate change adaptation and attach the document. Please provide details on the boundary of your plan, and where this differs from your city's boundary, please provide an explanation.

Question dependencies

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

Change from 2019

Modified question (2019 3.1a)

Connection to other frameworks

Global Covenant of Mayors

Question 3.2a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 7.2 Key considerations on developing and implementing climate action plan(s) at the municipal level of the GCoM Guidance note.

Response Options

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

Publication title and attach document	Weblink	Sectors/areas covered by plan that addresses climate change adaptation	Climate hazards factored into plan that addresses climate change adaptation	Year of adoption from local government	Boundary of plan relative to city boundary (reported in 0.1)	If the city boundary is different from the plan boundary, please explain why	Stage of implementation
Text field and attachment function	Text field	Select all that apply: Energy Transport (mobility) Building and Infrastructure Industry ICT (Information and Communication Technology) Spatial Planning Agriculture and Forestry Fishery Water Waste Public Health and Safety Business and Financial Service Social Services	Select all that apply from: Appendix E	Numeric 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: Plan in development Plan developed but not implemented Plan in implementation Implementation complete Monitoring and evaluation in progress Plan update in progress Other, please specify

		Describe the synergies, trade-offs, and co- benefits of this interaction		engagement process	Update/revision process in place for the Adaptation Plan For GCC cities only
Select from: Standalone Integrated mitigation / adaptation Addressed in general city master plan Addressed in city sector plan Other, please specify	Select from: • Yes • In Progress • Intending to undertake in the next 2 years • Not intending to undertake • Don't know	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	Text field	Select from: Formal schedule for update No formal schedule for update Not known

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

Question dependencies

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

Change from 2019

No change (2019 3.1b)

Response Options

Please complete the following table:

Reason	Comment
Select from:	Text field
Adaptation is not within city jurisdiction	
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	

Adaptation Goals

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 3.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.7 Setting adaptation goals of the GCOM Guidance note.

Response Options

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

Page 16 of 86 @cdp | www.cdp.net

Adaptation goal	Climate hazards that adaptation goal addresses	Target year of goal	Description of metric / indicator used to track goal	Does this goal align with a requirement from a higher level of government?	Select the initiatives related to this adaptation goal that your city has committed to	Comment
Text field	Select all that apply from Appendix E	Numeric field	Text field	Select from: Yes Yes, and it exceeds its scale or requirements No Do not know	Select all that apply: Global Covenant of Mayors for Climate & Energy Durban Adaptation Charter Mexico City Pact UNISDR, Making Cities Resilient Campaign 100 Resilient Cities Resilient Cities Catalyst Resilient Communities for America STAR Communities LEED for Cities Mayors National Climate Action Agenda Chicago Climate Charter Klimakommune (Climate Municipality) 100% Renewable Energy Cities & Regions Network Building Efficiency Accelerator District Energy in Cities Initiative One Planet City Challenge EcoMobility Alliance ICLEI's Green Climate Cities Program Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way Urban-LEDS Declaring Climate Emergency Individual City Commitment Other, please specify This target does not contribute towards an initiative commitment	Text field

Page 17 of 86 @cdp | www.cdp.net

4. 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

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

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

From	То
Drop-down calendar	Drop-down calendar

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

Boundary of inventory relative to city boundary (reported in 0.1)		Explanation of boundary choice where the inventory boundary differs from the city boundary (include inventory boundary, GDP and population)
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	Text field

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 4.3 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.5.2 Reporting data sources and methodologies of the GCoM Guidance note.

Response Options

Please complete the following table:

Primary protocol	Comment
Select from:	Text field
Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)	
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)	
Regional or country specific methodology	
City specific methodology	
• Other, please specify	

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select all that apply:

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

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

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

Question dependencies

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

Change from 2019

Minor change

Connection to other frameworks

Global Covenant of Mayors

Question 4.5 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 3.6 calculating and reporting emissions by sources of the GCoM Guidance note

Response Options

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

Emissions inventory format	Document title and attachment	Emissions factors used	Global Warming Potential (select relevant IPCC Assessment Report)	Please select if these additional sectors are included in the inventory	Population in inventory year	Overall level of confidence	Comment on level of confidence
Select from: GPC format: City Inventory Reporting and Information System (CIRIS) GPC Reporting tool GPC format: ClearPath (ICLEI) Custom or older GPC format SCATTER This inventory is in a format other than the GPC	Text Field and attachment function	Select from: IPCC LCA Other, please specify	Select from: IPCC 2nd AR (1995) IPCC 3rd AR (2001) IPCC 4th AR (2007) IPCC 5th AR (2013)	Industrial process and/or product use Agriculture, forestry or other land use sectors No additional sectors included	Numeric field	Select from: High Medium Low	Text field

[Add Row]

4.6a The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new Common Reporting Framework, to encourage standard reporting of emissions data. Please provide a breakdown of your city-wide emissions by sector and sub-sector in the table below. Where emissions data is not available, please use the relevant notation keys to explain the reason why.

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

Sectors and sub-sectors	CO2e)	to report, please select a	of grid-supplied electricity, heat,		city boundary as a result of in-		Please explain any excluded sources, identify any emissions
		пошной кеу ю ехран миу	tonnes CO2e)	notation key to explain willy	CO2e)	in-city activities, please select a notation key to explain why	

Stationary energy > Residential buildings	Numeric field	Select from: Not Occuring Integrated Elsewhere Not Estimated Confidential Combination of notation keys N/A	Numeric field	Select from: Not Occuring Integrated Elsewhere Not Estimated Confidential Combination of notation keys N/A	Numeric field	Select from: Not Occuring Integrated Elsewhere Not Estimated Confidential Combination of notation keys N/A	Text field
Stationary energy > Commercial buildings & facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Institutional buildings and facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Industrial buildings & facilities	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Agriculture	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Stationary energy > Fugitive emissions	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total Stationary Energy	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > On-road	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Rail	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Waterborne navigation	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Aviation	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Transportation > Off-road	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Total Transport	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above	Same as above
Waste > Solid waste disposal	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Waste > Biological treatment	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Waste > Incineration and open burning	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Waste > Wastewater	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total Waste	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
IPPU > Industrial process	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
IPPU > Product use	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total IPPU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Livestock	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Land use	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
AFOLU > Other AFOLU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total AFOLU	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above

Page 22 of 86 @cdp | www.cdp.net

Generation of grid-supplied energy > Electricity-only generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > CHP generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Heat/cold generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Generation of grid-supplied energy > Local renewable generation	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above	Same as above	Same as above
Total Generation of grid-supplied energy	Same as above	Same as above	Not applicable for this sub-sector	Not applicable for this sub-sector	Not applicable for this sub-sector	Not applicable for this sub-sector	Same as above
Total Emissions (excluding generation of grid-supplied energy)	Same as above	Same as above	Numeric field	Select from: Not Occuring Integrated Elsewhere Not Estimated Confidential Combination of notation keys N/A	Numeric field	Select from: Not Occuring Integrated Elsewhere Not Estimated Confidential Combination of notation keys N/A	Same as above

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Please complete the following table:

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

Page 23 of 86 @cdp | www.cdp.net

Transportation - Scope 2 (U.X.2) Numeric field Text field Text field Text field Text field Wester waste generated within the city boundary - Scope 1 (UIX.1) Numeric field Numeric field Text field			
Transportation - Scopp 3 (IV.3) Numeric field Numeric field Text field Waster waste generated within the city boundary - Scopp 1 (III.X.1) Numeric field Numeric field Text field Tox field Text field	Transportation – Scope 1 (II.X.1)	Numeric field	Text field
Transportation - Scopp 3 (IV.3) Numeric field Numeric field Text field Waste: waste generated within the city boundary - Scopp 1 (III.X.1) Numeric field Numeric field Text field			
Wester: waste generated within the city boundary - Scope 3 (III.X.1) Numeric field Waster: waste generated within the city boundary - Scope 3 (III.X.2) Numeric field Numeric field Tout field	Transportation – Scope 2 (II.X.2)	Numeric field	Text field
Wester: waste generated within the city boundary – Scope 3 (III.X.1) Numeric field Text field Waster: waste generated within the city boundary – Scope 3 (III.X.2) Numeric field Numeric field Text field			
Waste: waste generated within the city boundary – Scope 3 (III.X.2) Waste: waste generated outside the city boundary – Scope 1 (IVI.X.3) Numeric field Numeric field Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Text field Text field Text field Total Scope 1 (Territorial) emissions Numeric field Numeric field Text field	Transportation – Scope 3 (II.X.3)	Numeric field	Text field
Waste: waste generated within the city boundary – Scope 3 (III.X.2) Waste: waste generated outside the city boundary – Scope 1 (IVI.X.3) Numeric field Numeric field Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Text field Text field Text field Total Scope 1 (Territorial) emissions Numeric field Numeric field Text field			
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) Text field Text field Text field Text field TotAL Scope 1 (Territorial) emissions Numeric field Text field Text field Text field Text field Text field Text field	Waste: waste generated within the city boundary – Scope 1 (III.X.1)	Numeric field	Text field
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) Text field Text field Text field Text field TotAL Scope 1 (Territorial) emissions Numeric field Text field Text field Text field Text field Text field Text field			
Industrial Processes and Product Use – Scope 1 (IV) Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Text field Total Scope 1 (Territorial) emissions Numeric field Total Scope 2 emissions Numeric field Text field Text field Text field Text field Text field	Waste: waste generated within the city boundary – Scope 3 (III.X.2)	Numeric field	Text field
Industrial Processes and Product Use – Scope 1 (IV) Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Text field Total. Scope 1 (Territorial) emissions Numeric field Total. Scope 2 emissions Numeric field Text field Text field Text field Text field Text field			
Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Total Scope 1 (Territorial) emissions Numeric field Total Scope 2 emissions Numeric field Text field Text field Text field	Waste: waste generated outside the city boundary – Scope 1 (III.X.3)	Numeric field	Text field
Agriculture, Forestry and Land Use – Scope 1 (V) Numeric field Text field Total Scope 1 (Territorial) emissions Numeric field Total Scope 2 emissions Numeric field Text field Text field Text field			
TOTAL Scope 1 (Territorial) emissions Numeric field TOTAL Scope 2 emissions Numeric field Text field Text field Text field	Industrial Processes and Product Use – Scope 1 (IV)	Numeric field	Text field
TOTAL Scope 1 (Territorial) emissions Numeric field TOTAL Scope 2 emissions Numeric field Text field Text field Text field			
TOTAL Scope 2 emissions Numeric field Text field Text field	Agriculture, Forestry and Land Use – Scope 1 (V)	Numeric field	Text field
TOTAL Scope 2 emissions Numeric field Text field Text field			
	TOTAL Scope 1 (Territorial) emissions	Numeric field	Text field
TOTAL Scope 3 emissions Numeric field Text field	TOTAL Scope 2 emissions	Numeric field	Text field
TOTAL Scope 3 emissions Numeric field Text field T			
	TOTAL Scope 3 emissions	Numeric field	Text field

Page 24 of 86 @cdp | www.cdp.net

TOTAL BASIC emissions	Numeric field	Text field
TOTAL BASIC+ emissions	Numeric field	Text field

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

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

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

Question dependencies

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

Page 25 of 86 @cdp | www.cdp.net

Change from 2019

No change

Response Options

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

Select from:	Select from:	Numeric 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		
	Stationary energy (buildings) Residential buildings Public buildings Commercial buildings Industrial buildings Transportation Road Rail Waste Wastewater	 Stationary energy (buildings) Residential buildings Public buildings Commercial buildings Industrial buildings Transportation Road Rail Waste Wastewater Scope 1 Scope 2 Total figure

[Add Row]

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

Question dependencies

This question only appears if you select <u>U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI)</u> in response to 4.3 and "Yes" in response to 4.0.

Change from 2019

No change

Response Options

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

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

[Add Row]

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

Question dependencies

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

Change from 2019

No change

Response Options

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

Source	Sector	Scope	Emissions (metric tonnes CO2e)
Text field	Select from:	Select from:	Numeric 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]

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

Change in emissions	Reason for change	Please explain and quantify changes in emissions
Select from:	If "Increased" or "Decreased" 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	
Do not know	Change in weather conditions	
	Change in accounting methodology	
	Change in calculation following verification	
	Behavioural change	
	Technological change	
	Legislative change	
	Change in available data	
	Change in data collection methods	
	Policy change	
	Financial conditions	
	• Other, please specify	
	If "This is our first year of calculation" is selected:	
	Lack of resource / funding overcome	
	Lack of knowledge overcome	
	• Other, please specify	
	If "Stayed the same" is selected:	
	No new inventory to report	
	Emissions have not changed	
	• Other, please specify	
	If "Do not know" is selected:	
	Change in staff	
	Lack of documentation	
	Change in methodology	
	Other, please specify	

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

Provide an overview and attach your consumption-based inventory if relevant
Text field and attachment function

Page 28 of 86 @cdp | www.cdp.net

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

Question dependencies

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

Change from 2019

No change (2019 4.11)

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

No change (2019 4.11a)

Response Options

Please complete the following table:

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

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

Question dependencies

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

Change from 2019

No change (2019 4.11b)

Response Options

Please complete the following table:

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

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

Change from 2019

No change (2019 4.12)

Response Options

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

Inventory date from	Inventory date to	Scopes/boundary covered	Previous emissions (metric tonnes CO2e)	Is this inventory used as the base year inventory?	Methodology	File name and attach your inventory	Comments
Date field	Date field	Select all that apply: Total emissions Scope 1 (direct) Scope 2 (indirect) Cope 3 (other indirect) Other, please specify	Numeric field	Select from: • Yes • No	Select from: Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC) 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) Regional or country specific methodology City specific methodology Other, please specify	Text field and attachment function	Text field

[Add Row]

Re-stating previous emissions inventories

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

Question dependencies

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

Change from 2019

No change (2019 4.13)

Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

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

Change from 2019

No change (2019 4.13a)

Response Options

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

Inventory date from	Inventory date to	Scope/boundary covered	Previous emissions (metric tonnes CO2e)	Updated emissions (metric tonnes CO2e)	Updated methodology	File name and attach your new inventory	Reason for recalculation
Date field	Date field	Select from: Total emissions Scope 1 (direct) Scope 2 (indirect) Cother, please specify	Numeric field	Numeric field	Select from: Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC) 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) Regional or country specific methodology City specific methodology Other, please specify	Text field and attachment function	Text field

[Add Row]

Emissions Factors

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

Change from 2019

New question

Connection to other frameworks

Global Covenant of Mayors

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

Response Option

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

Applicable sub-sector	Category	Fuel type or activity	Emission factor source	Gas
Select from: Appendix G	Select all that apply: Direct emissions Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling Emissions occurring outside the city boundary as a result of in-city activities	Select from: Appendix H	Text field	Select from:

Emission factor value	Emission factor unit (numerator)	Emission factor unit (denominator)	Activity level (per emission factor unit denominator)	Comment
Numeric field	Select from: Gram (g) Kilogram (kg) Kiloton (kt) Tonne (t) Long ton (lt) Stone (st) Pound (lb) Other, please specify	Text field	Numeric field	Text field

Page 32 of 86 @cdp | www.cdp.net

5. Emissions Reduction

Mitigation Target setting

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select all that apply:

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

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

Question dependencies

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.0a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 Choose the target type of the GCoM Guidance note.

Response Options

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

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target introduction	Base year emissions (metric tonnes CO2e)	Percentage reduction target
Select from: All emissions sources included in city inventory Energy Transport Waste Other, please specify	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 Administrative - covers only emission sources owned and operated by city administration	Numeric field	Numeric field	Numeric field	Numeric field

Target year	Target year absolute emissions (metric tonnes CO2e) (Auto-calculated)	Percentage of target achieved so far	Does this target align with the global 1.5 - 2°c pathway set out in the Paris Agreement?	Select the initiatives that this target contributes towards	Does this target align to a requirement from a higher level of sub-national government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numeric field	Auto-calculated numeric field	Numeric field	Select from: • Yes - 1.5 c • Yes - 2°c • No • Do not know	Select all that apply: Global Covenant of Mayors for Climate & Energy Durban Adaptation Charter Mexico City Pact UNISDR, Making Cities Resilient Campaign 100 Resilient Cities Resilient Cities Catalyst Resilient Communities for America STAR Communities LEED for Cities Mayors National Climate Action Agenda Chicago Climate Charter Klimakommune (Climate Municipality) 100% Renewable Energy Cities & Regions Network Building Efficiency Accelerator District Energy in Cities Initiative One Planet City Challenge EcoMobility Alliance ICLEI's Green Climate Cities Program UN-Habitat Guiding Principles for City Climate Action Planning Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way Cities Power Partnership Malaysia Low Carbon Cities 2030 Challenge Urban-LEDS Declaring Climate Emergency Individual City Commitment Other, please specify This target does not contribute towards an initiative commitment	Select from: Yes Yes, but it exceeds its scale or requirement No Do not know	Text field

Page 34 of 86 @cdp | www.cdp.net

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

Question dependencies

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.0b is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 Choose the target type of the GCoM Guidance note.

Response Options

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

	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Year of target introduction	Target year	Projected population in target year
Select from: • All emissions sources included in city inventory • Energy • Transport • Waste • Other, please specify	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 Administrative –covers only emission sources owned and operated by city administration	Numeric field	Numeric field	Numeric field

Target year absolute emissions goal (metric tonnes CO2e)	Percentage of target achieved	Does this target align with the global 1.5 - 2°c pathway set out in the Paris Agreement?	Select the initiatives that this target contributes towards	Does this target align to a requirement from a higher level of government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numeric field	Numeric field	Select from: • Yes - 1.5°c • Yes - 2°c • No • Do not know	Select all that apply: Global Covenant of Mayors for Climate & Energy Durban Adaptation Charter Mexico City Pact UNISDR, Making Cities Resilient Campaign 100 Resilient Cities Resilient Cities Catalyst Resilient Communities for America STAR Communities LEED for Cities Mayors National Climate Action Agenda Chicago Climate Charter Klimakommune (Climate Municipality) 100% Renewable Energy Cities & Regions Network Building Efficiency Accelerator District Energy in Cities Initiative One Planet City Challenge EcoMobility Alliance ICLE's Green Climate Cities Program UN-Habitat Guiding Principles for City Climate Action Planning Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way Cities Power Partnership Malaysia Low Carbon Cities 2030 Challenge Urban-LEDS Declaring Climate Emergency Individual City Commitment Other, please specify This target does not contribute towards an initiative	Select from: Yes Yes, but it exceeds its scale or requirement No Do not know	Text field

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

Question dependencies

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.0c is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 Choose the target type of the GCoM Guidance note.

Response Options

Page 36 of 86 @cdp | www.cdp.net

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

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target introduction	Intensity unit (Emissions per)	Base year emissions per intensity unit (metric tonnes CO2e per denominator)	Base year emissions (metric tonnes CO2e)
Select from: All emissions sources included in city inventory Energy Transport Waste Other, please specify	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 Administrative – covers only emission sources owned and operated by city administration	Numeric field	Numeric field	Select from: Metric tonnes of CO2e per capita Metric tonnes of CO2e per unit GDP Other, please specify	Numeric field	Numeric field

Page 37 of 86 @cdp | www.cdp.net

Percentage reduction target in emissions intensity	Target year	Target year absolute emissions (metric tonnes CO2e)	Percentage of target achieved	Does this target align with the global 1.5 - 2°c pathway set out in the Paris Agreement?	Select the initiatives that this target contributes towards	Does this target align to a requirement from a higher level of government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numeric field	Numeric field	Numeric field	Numeric field	Select from: • Yes - 1.5°c • Yes - 2°c • No • Do not know	Select all that apply: Global Covenant of Mayors for Climate & Energy Durban Adaptation Charter Mexico City Pact UNISDR, Making Cities Resilient Campaign 100 Resilient Cities Resilient Cities Catalyst Resilient Communities for America STAR Communities LEED for Cities Mayors National Climate Action Agenda Chicago Climate Charter Klimakommune (Climate Municipality) 100% Renewable Energy Cities & Regions Network Building Efficiency Accelerator District Energy in Cities Initiative One Planet City Challenge EcoMobility Alliance ICLEI's Green Climate Cities Program UN-Habitat Guiding Principles for City Climate Action Planning Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way Cities Power Partnership Malaysia Low Carbon Cities 2030 Challenge Urban-LEDS Declaring Climate Emergency Individual City Commitment Other, please specify This target does not contribute towards an initiative commitment	Select from: Yes Yes, but it exceeds its scale or requirement No Do not know	Text field

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

Question dependencies

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

Change from 2019

Modified question

Connection to other frameworks

Page 38 of 86 @cdp | www.cdp.net

Global Covenant of Mayors

Question 5.0d is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.3 Choose the target type of the GCoM Guidance note.

Response Options

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

Sector	Where sources differ from the inventory, identify and explain these additions / exclusions	Boundary of target relative to city boundary (reported in 0.1)	Base year	Year of target introduction	Base year emissions (metric tonnes CO2e)	Target year	Estimated business as usual absolute emissions in target year (metric tonnes CO2e)
Select from: All emissions sources included in city inventory Energy Transport Waste Other, please specify	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 Administrative - covers only emission sources owned and operated by city administration	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field

Percentage reduction target from business as usual	Percentage of target achieved	Does this target align with the global 1.5 - 2°c pathway set out in the Paris Agreement?	Please describe the target and the modelling methodology(ies) and parameters used to define it	Select the initiatives that this target contributes towards	Does this target align to a requirement from a higher level of government?	Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.
Numeric field	Numeric field	Select from: • Yes - 1.5°c • Yes - 2°c • No • Do not know	Text field	Select all that apply: Global Covenant of Mayors for Climate & Energy Durban Adaptation Charter Mexico City Pact UNISDR, Making Cities Resilient Campaign 100 Resilient Cities Resilient Cities Catalyst Resilient Communities for America STAR Communities LEED for Cities Mayors National Climate Action Agenda Chicago Climate Charter Klimakommune (Climate Municipality) 100% Renewable Energy Cities & Regions Network Building Efficiency Accelerator District Energy in Cities Initiative One Planet City Challenge EcoMobility Alliance ICLEI's Green Climate Cities Program UN-Habitat Guiding Principles for City Climate Action Planning Deadline 2020 - Delivering the 1.5 degree ambition of the Paris Agreement in a resilient, inclusive way Cities Power Partnership Malaysia Low Carbon Cities 2030 Challenge Urban-LEDS Declaring Climate Emergency Individual City Commitment Other, please specify This target does not contribute towards an initiative commitment	Select from: Yes Yes, but it exceeds its scale or requirement No Do not know	Text field

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

Page 40 of 86 @cdp | www.cdp.net

Reason	Comment
Select from:	Text field
Emissions not fully 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	

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

Question dependencies

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

Change from 2019

No change

Response Options

This is an open text question.

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

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

Question 5.2 is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Section 6.5 Set the level of ambition of the GCOM Guidance note.

Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

This is an open text question.

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

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

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

Change from 2019

No change

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

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

Type of transferable emissions	Emissions saved (metric tonnes CO2e)	represent?	Please identify which target this refers to and describe the transferable emissions unit in particular the source of the transferable units
Select from: 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	Numeric field	Numeric field	Text field

Mitigation Actions

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

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

Response Options

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

Mitigation action	Action title	Means of implementation	Implementation status	Estimated emissions reduction (metric tonnes CO2e)	Energy savings (MWh)	Renewable energy production (MWh)	Timescale of reduction / savings / energy production
Select from Appendix D	Text field	Select all the apply from: Education Capacity building and training activities Awareness raising program or campaign Stakeholder engagement Infrastructure development Assessment and evaluation activities Monitor activities Verification activities Development and implementation of action plan Policy and regulation Financial mechanism Sustainable public procurement	Select from: Scoping Pre-feasibility study Pre-implementation Implementation Operation Monitoring and reporting	Numeric field	Numeric field	Numeric field	Select from: Per year Projected lifetime Other, please specify

Co-benefit area	Scope and impact of action	Finance status	Total cost of the project	Total cost provided by the local government	Majority funding source	Total cost provided by the majority funding source (currency)	Web link to action website
Select all that apply from Appendix F	Text field	Select from: Pre-feasibility study status Feasibility undertaken Feasibility finalized, and finance partially secured Finance secured	Numeric field	Numeric field	Select from: Local (Sub) national International (ODA) Climate finance (carbon credits) Public-private partnership Other, please specify	Numeric field	Text field

[Add Row]

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

Change from 2019

No change

Response Options

Select one of the following options:

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

Connection to other frameworks

Global Covenant of Mayors

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

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

Question dependencies

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

Change from 2019

Modified question

Connection to other frameworks

Global Covenant of Mayors

Question 5.5a is required for the Global Covenant of Mayors. For more detailed information on the reporting requirements for this question, please refer to Chapter 8 GCoM monitoring and reporting of the GCoM Guidance note.

Response Options

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

Publication title and attach document	Web link	Focus area of plan	Year of adoption from local government	Areas covered by action plan	Boundary of plan relative to city boundary (reported in 0.1)	If the city boundary is different from the plan boundary, please explain why
Text field and attachment function	Text field	Select from: Climate change mitigation plan Energy access plan Climate change mitigation and energy access plan	Numeric field	Select all that apply from: Energy Transport (Mobility) Building and Infrastructure Industry ICT (Information and Communication Technology) Spatial Planning Agriculture and Forestry Fishery Water Waste Public Health and Safety Business and Financial Service Social Services	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

Stage of implementation	Has your local government assessed the synergies, trade-offs, and co- benefits, if any, of the main mitigation and adaptation actions you identified?	and co-benefits of this interaction	Description of the stakeholder engagement process	Does your plan include policy goals that explicitly reflect one of the following principles? For GCC cities only	Primary author of plan	Comment
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	Select from: Yes In progress Intending to undertake in the next 2 years Not intending to undertake Don't know	Text field	Text field	Select one from: • An aim not to unfairly or excessively burden the poor with the costs and any negative impacts associated with climate action • The principle of 'common but differentiated responsibility' and/or 'the emitter (or polluter) pays' principle. • Plan includes policy goals that explicitly reflect both principles above • Other, please specify	Select from: Dedicated city team Relevant city department Consultant International organization Community group Regional / state / provincial government National / central government Other, please specify	Text field

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

Question dependencies

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

Change from 2019

No change

Page 45 of 86 @cdp | www.cdp.net

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	

Page 46 of 86 @cdp | www.cdp.net

6. Opportunities

Opportunities

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

Change from 2019

Minor change

Response Options

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

Opportunity	Describe how the city is maximizing this opportunity
Select from:	Text field
Development of clean energy technologies/businesses	
Development of energy efficiency measures and technologies	
Development of waste management sector	
Development of water management sector	
Development of circular economy models and businesses	
Development of tourism industry and eco-tourism sector	
Development of sustainable transport sector	
Development of sustainable construction/real estate sector	
Development of local sustainable food businesses	
Increased opportunities for investment in infrastructure projects	
Increased opportunities for trade (nationally or internationally)	
Additional funding opportunities	
Increase opportunities for partnerships	
Improved flood risk mitigation	
Increased water security	
Increased energy security	
Development of climate change resiliency projects	
Increased food security	
Extended agricultural seasons	
Reduced risk to natural capital	
Reduced risk to human health	
Creation/development of carbon markets	
Carbon tax revenue	
Development of resource conservation and management	
Improved efficiency of municipal operations	
Other, please specify	
No opportunities identified	

[Add Row]

Collaboration

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

Change from 2019

Minor change (2019 6.1)

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

Modified question (2019 6.1a)

Response Options

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

Collaboration area	Type of collaboration	Description of collaboration
Select from:	Select from:	Text field
• Energy	Financial mechanism (grants etc.)	
• Transport (Mobility)	Policy and regulation consultation	
Building and Infrastructure	Climate Action Plan consultation	
• Industry	Climate action target setting consultation	
ICT (Information and Communication Technology)	Collaborative initiative	
Spatial Planning	Knowledge or data sharing	
Agriculture and Forestry	Capacity development	
• Fishery	Labour market training initiatives	
Water	Economic development	
Waste	Project implementation	
Public Health and Safety	Convening industry groups	
Business and Financial Services	Trade union engagement	
Social Services	Other, please specify	

[Add Row]

Finance & Economic Opportunities

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

Change from 2019

Modified question (2019 6.2)

Response Options

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

Project area	Project Title	Stage of project development
Select from:	Text field	Select from:
Buildings		Scoping
Energy efficiency / retrofit		Pre-feasibility/impact assessment
Outdoor lighting		Project feasibility
Renewable energy		Project structuring
Transport		Transaction preparation
Waste management		Implementation
Waste recycling		Post implementation
Water management		
Other, please specify		
No relevant projects		

Status of financing	Financing model identified	Identified financing model description	Project description and attach project proposal	Total cost of project	Total investment cost needed (if relevant)
Select from: Project not funded and seeking partial funding Project not funded and seeking full funding Project partially funded and seeking additional funding Other, please specify	Select from: Yes No Do not know	Text field	Text field Attachment function	Numeric field	Numeric field

Page 49 of 86 @cdp | www.cdp.net

8. Energy

Energy

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

Change from 2019

No change

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

Modified question

Response Options

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

Scale	Туре	Energy/electricity types covered by target	Base year	Total renewable energy / electricity covered by target in base year (in unit specified in column 3: Energy/electricity types covered by target)	Percentage renewable energy / electricity of total energy or electricity in base year
Select from: City-wide Local government operations	Select from: • Energy • Electricity	Select from: Energy: Total installed capacity of renewable energy (in MW) All energy produced (in MWh) Energy produced (percentage) All energy consumed (in MWh) All energy consumed (percentage) Other, please specify Electricity: Total installed capacity of renewable electricity (in MW) All electricity produced (in MWh) All electricity to produced (percentage) All electricity consumed (in MWh) All electricity consumed (in MWh) All electricity consumed (percentage) Other, please specify	Numeric field	Numeric field	Percentage field

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

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

Reason	Comment
Select from:	Text field
Target already achieved	
Energy / electricity is not within the city jurisdiction	
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	

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

Change from 2019

Minor change (2019 8.2)

Response Options

Please complete the following table:

Page 51 of 86 @cdp | www.cdp.net

Electricity source	Percent
Coal	Percentage field
Gas	Percentage field
Oil	Percentage field
Nuclear	Percentage field
Hydro	Percentage field
Biomass	Percentage field
Wind	Percentage field
Geothermal	Percentage field
Solar	Percentage field
Other sources	Percentage field
Total	Auto-calculated field
Year data applies to	Select from: Drop-down list: 2000-2020

8.2 What scale is the electricity mix data reported above?

Change from 2019

No change (2019 8.3)

Response Options

Select from:

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

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

Change from 2019

Minor change (2019 8.5)

Response Options

Please complete the following table:

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

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

Change from 2019

No change (2019 8.6)

Response Options

Select from:

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

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

Question dependencies

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

Change from 2019

No change (2019 8.6a)

Response Options

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

Scale	Energy efficiency type covered by target		Total energy consumed/produced covered by target in base year (in unit specified in column 2)	Target year
Select from: City-wide Local government operations	Select from: Reduce total energy produced (in MWh) Reduce total energy consumed (in MWh) Other, please specify	Numeric field	Numeric field	Numeric field

Total energy consumed/produced covered by target in target year (in unit specified in column 2)	Percentage of energy efficiency improvement in target year compared to base year levels	Percentage of target achieved		Please indicate to which energy sector(s) the target applies (Multiple choice)
Numeric field	Numeric field	Numeric field	Text field	Select all that apply: Energy industry Heating and cooling supply Commercial buildings Residential buildings Public facility Industrial facilities Transport Other, please specify

Page 53 of 86 @cdp | www.cdp.net

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

Question dependencies

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

Change from 2019

No change (2019 8.6b)

Response Options

Please complete the following table:

Reason	Comment
Select from:	Text field
Target already achieved	
Lack of funding	
The grid is not controlled by the city	
Target is under development / consideration	
Energy generation transmission and distribution infrastructure requires upgrade to achieve energy efficiency	
The implementation of decentralized smart grids and smart meters are not under the city's control	
Retrofit policy for energy efficiency is not aware by the city government	
• Other, please specify	

10. Transport

Transport

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

Change from 2019

No change

Response Options

Select all that apply:

- Freight transport
- Passenger transport

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

Question dependencies

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

Change from 2019

Minor change

Response Options

Please complete the following table:

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

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

Question dependencies

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

Change from 2019

Modified question

Response Options

Please complete the following table:

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

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

Change from 2019

Minor change (2019 10.5)

Response Options

Please complete the following table:

Mode of transport	Number of private cars		Number of municipal fleet (excluding buses)	Number of freight vehicles			Customer-drive carshares (e.g. Car2Go, Drivenow) fleet size	Comment
Total fleet size	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Text field
Electric	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Text field
Hybrid	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Text field
Plug in hybrid	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Text field
Hydrogen	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Numeric field	Text field

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

Change from 2019

No change

Response Options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

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

Change from 2019

No change

Response Options

Please complete the following table:

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

Page 57 of 86 @cdp | www.cdp.net

12. Food

Food Consumption

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

Change from 2019

Modified question

Response Options

Please complete the following table:

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

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

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

Change from 2019

Modified question (2019 12.2)

Response Options

Please complete the following table:

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

Sustainable Food Policies and Actions

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

Change from 2019

No change (2019 12.4)

Response Options

Please complete the following table:

Response	Please describe the expected outcome of the policy
Select from:	Text field
• Yes	
YesNoDo not know	
Do not know	

12.4 How does your city increase access to sustainable foods?

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

Change from 2019

Modified question (2019 12.5)

Response Options

Please complete the following table:

Response	Action implemented	Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods
Do you subsidize fresh fruits and vegetables?	Select from: • Yes • No • Do not know	Text field
Do you tax/ban higher carbon foods (meat, dairy, ultra-processed)?	Select from: • Yes • No • Do not know	Text field
Do you use regulatory mechanisms that limit advertising of higher carbon foods (meat, dairy, ultra-processed)?	Select from: • Yes • No • Do not know	Text field
Do you incentivize fresh fruit/vegetable vendor locations?	Select from: • Yes • No • Do not know	Text field

Page 59 of 86 @cdp | www.cdp.net

13. Waste

Waste

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

Change from 2019

Modified question

Response Options

Please complete the following table:

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

Page 60 of 86 @cdp | www.cdp.net

14. Water Security

Water Supply

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

Change from 2019

Minor change

Response options

Select all that apply:

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

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

Change from 2019

No change (2019 14.2)

Response options

Percentage field.

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

Change from 2019

No change (2019 14.3)

Response options

Select one of the following options:

- Yes
- No
- Do not know

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

Question dependencies

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

Change from 2019

Modified question (2019 14.3a)

Response Options

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

Water security risk drivers	Anticipated timescale	Estimated magnitude of potential impact	Estimated probability of impact	Risk description
Select from:	Select from:	Select from:		Text field
Increased water stress	Current	Extremely serious	Select from:	
Increased water scarcity	Short-term (by 2025)	Serious	High	
Declining water quality	Medium-term (by 2050)	Less Serious	Medium-high	
Inadequate or ageing water supply infrastructure	Long-term (after 2050)		Medium	
Higher water prices			Medium-low	
Environmental regulations			• Low	
Increased water demand			Do not know	
Drought				
Energy supply issues				
Rationing of municipal water supply				
Severe weather events				
Ecosystem vulnerability				
Change in land-use				
Pollution incidents				
Increased levels of plastic in freshwater bodies				
Water infestation/disease				
Unauthorized/unregistered water connections				
Other, please specify				

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

Question dependencies

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

Change from 2019

No change (2019 14.3b)

Response Options

Please complete the following table:

Reason	Please explain
Select from:	Text field
City water supply is secureRisks are not substantive	
Risks are not substantive	
No assessment of water risks undertaken	
• Other, please explain	

Water Management

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

Question dependencies

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

Change from 2019

No change (2019 14.4)

Response Options

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

Risks	Adaptation action	Status of action	Action description and implementation progress
Populated from 14.2a	Select from:	Select from:	Text field
	Conservation awareness and education	Scoping	
	Conservation incentives	Pre-feasibility study/impact assessment	
	Water use restrictions	Pre-implementation	
	Efficiency regulations or standards	Implementation	
	Water metering	Implementation complete but not in operation	
	Municipal water efficiency retrofits	Operation	
	Diversifying water supply (including new sources)	Monitoring and reporting	
	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)		
	Nature-based solution		
	Water recycling/reclamation		
	Other, please specify		

[Add Row]

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

Change from 2019

No change (2019 14.5)

Response Options

Select one of the following options:

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

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

Question dependencies

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

Change from 2019

No change (2019 14.5a)

Response Options

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

Publication title and attach document	Year of adoption from local government	Web link	Does this strategy include sanitation services?	Stage of implementation
Text field and attachment function	Numeric field	Text field	Select from: • Yes • No • Do not know	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

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

Question dependencies

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

Change from 2019

No change (2019 14.5b)

Response Options

Please complete the following table:

Reason	Please explain
Select from:	Text field
Water Resource Management is not a priority for the city	
Lack of funding/resources	
Lack of knowledge	
Water Resource Management is covered in other plans	
• Other, please explain	

Terms & Conditions for responding cities:

Page 65 of 86 @cdp | www.cdp.net

Cities 2020 Questionnaire

1. DEFINITIONS

CDP means CDP Worldwide, a charitable company registered with the Charity Commission of England and Wales (registered charity no. 1122330 and a company number 05013650). References tower, "our" and "us" in these terms are references to CDP.

C40 City means a city that is a member or affiliate city of the C40 Cities Climate Leadership Group administered by C40 Cities Climate Leadership Group, Inc. C40") and is identified as such on CDP's online dashboard.

Deadline means 26 August 2020 (unless otherwise stated by CDP).

GCoM City means a city committed to the Global Covenant of Mayors for Climate & Energy (GCoM") and is identified as such on CDP's online dashboard.

ICLEI means ICLEI - Local Governments for Sustainability e.V, World Secretariat.

Personal Data means data which relates to an individual who can be identified from the data, such as a person's name and job title.

Questionnaire means the Cities 2020 Questionnaire. This comprises guestions common to all cities and additional questions under our partner initiatives including with C40, GCoM and ICLEI.

Responding City means the city responding to the Questionnaire. References to "you" and "your" in these terms are references to the Responding City.

2. PARTIES

The parties to these terms shall be CDP and the Responding City.

3. THESE TERMS

These are the terms that apply when you submit a response to our Questionnaire. If you do not agree to these terms, please contact us atities@cdp.net to discuss them with us.

4. RESPONDING TO THE QUESTIONNAIRE

General. When responding to the Questionnaire, you will be given a choice as to whether your response can be made public or whether your response is non-public, unless you are a GCoM City in which case you can only respond publicly. We strongly encourage you to make your response public.

When responding to the Questionnaire, you are responsible for checking that the data you submit through any third party (e.g. Google Environmental Insights Explorer, GCoM's and WRI's Data Portal for Cities or C40's City Inventory Reporting and Information System (CIRIS)) is complete and correct.

Deadline for responding. You must submit your response to us using our online response system by the Deadline to ensure it is eligible for scoring and inclusion in reports.

Public responses. If you agree that your response can be made public, we may use it in furtherance of our charitable mission, including by:

- (a) making it available as soon as it is received by CDP to our partners (including C40, GCoM and ICLEI), appointed report writers and any other parties we deem appropriate;
- (b) making it publicly available at www.cdp.net, and through our Open Data Portal (https://data.cdp.net/) and stored and preserved on our servers indefinitely thereafter;
- (c) compiling it in CDP databases and making it available in original, modified or adapted form for use by commercial (for a fee or otherwise) and non-commercial organizations;
- (d) amalgamating it with information about the Responding City from other public sources; an
- (e) using in any other way that accords with our charitable mission.

Non-public responses. If your response is non-public, we may use the data you submit only as follows:

- (a) for all cities, make it available as soon as it is received by CDP to our group companies and to companies we license to operate using the CDP name and brand (for example, CDP North America, Inc. and CDP Europe AISBL), our country partners, research partners, data management partners, report writers and scoring partners (each from time to time):
- (i) to score your response; and
- (ii) for any other use within their organizations but not for publication unless any data from your response has been anonymized or aggregated in such manner that it has the effect of being anonymized. CDP and its agents will make all reasonable efforts to safeguard the confidentiality of the data in your response;
- (b) for all cities, we may make it available as soon as it is received by CDP to ICLEI for any use within their organization and who will be entitled to make it available to its report writers but who will not publish or otherwise make available any data from your response unless it has been anonymized or aggregated in such manner that is has the effect of being anonymized. ICLEI and its report writers are required to make all reasonable efforts to safeguard the confidentiality of the data in your response; and
- (c) for C40 Cities, make it available as soon as it is received by CDP to C40 for any use within their organization and who may make it available to its report writers, but will not publish or otherwise make available any data from your response unless it has been anonymized or aggregated in such manner that is has the effect of being anonymized. C40 and its report writers will make all reasonable efforts to safeguard the confidentiality of the data in your response.

Amending your response. You may amend a response you have submitted at any time before 31 December 2020, but please note that any changes you make to your response after the Deadline may not be reflected in any score or report.

Scoring of responses. If you submit your response to the Questionnaire using our online response system we may score your response.

Publication and use of scores. If your response is scored and you receive an A grade, we may make your score public and publish it. If you do not receive an A grade we will only disclose your score to you and to our group companies, companies we license to operate using the CDP name and brand (for example, CDP North America, Inc. and CDP Europe AISBL), our reporting partners (including ICLEI, C40 and GCoM), research partners, report writers and scoring partners, in each case for use only within their organizations and not for publication.

5. RIGHTS IN THE RESPONSES

Ownership. All intellectual property rights in your response will be owned by you or your licensors.

License. You grant to us, or shall procure for us, a perpetual, irrevocable, non-exclusive, assignable, sub-licensable, royalty-free and global license to use your response and any copyright and data base rights in your response for the uses set out in these terms.

6. IMPORTANT REPRESENTATIONS

You confirm that:

- (a) the person submitting the response to us is authorized by you to submit the response;
- (b) you have obtained all necessary consents and permissions to submit the response to us; and
- (c) the response that you submit:
- (i) does not infringe the rights of any third party (including privacy, publicity or intellectual property rights);
- (ii) does not defame any third party; and
- (iii) does not include any Personal Data except for the name and title of the leader of the Responding City (in question 0.3).

7. LIABILITY

We do not exclude or limit in any way our liability to you where it would be unlawful to do so. This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation.

We are not liable for business losses. Subject to these terms, CDP has no liability to you in any circumstances for any loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, loss of revenue, loss of profit, loss of business, business interruption, loss of business opportunity, loss of goodwill, l

Exclusion of liability. Subject to these terms, CDP has no liability to you in any circumstances arising from the content or submission of your response to us, our use of your response, our publication of your A grade score and/or the use of your response or your A grade score by any third parties.

Limitation of liability. Subject to these terms, CDP's total liability to you in all circumstances shall be limited to £625.

8. GENERAL

We may transfer our rights to someone else. We may transfer our rights and obligations under these terms to another organization.

Nobody else has any rights under these terms. These terms are between you and us. No other person shall have any rights to enforce any of its terms.

Entire agreement. These terms constitute the entire agreement between you and us.

Variation. CDP reserves the right to change these terms at any time. Such changes shall be effective immediately or at such other time as CDP elects. In the event of any materially adverse changes, you may request to withdraw your response within 30 days of us notifying you of the change.

If a court finds part of these terms illegal, the rest will continue in force. Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

Governing law and jurisdiction. These terms are governed by English law and you and us both agree to the exclusive jurisdiction of the English courts to resolve any dispute or claim arising out of or in connection with these terms or their subject matter or formation.

Language. If these terms are translated into any language other than English, the English language version will prevail.

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	
LYD Libyan Dinar	
MAD Moroccan Dirham	
MDL Moldovan Leu	
MGA Malagasy Ariary	
MKD Denar	
MMK Kyat	
MNT Tugrik	
MOP Pataca	
MRO Ouguiya	

MTL Maltese Lira
MUR Mauritius Rupee
MVR Rufiyaa
MWK Kwacha
MXN Mexican Peso
MXV Mexican Unidad de Inversion (UDI) (Funds code)
MYR Malaysian Ringgit
MZN Metical
NAD Namibian Dollar
NGN Naira
NIO Cordoba Oro
NOK Norwegian Krone
NPR Nepalese Rupee
NZD New Zealand Dollar
OMR Rial Omani
PAB Balboa
PEN Nuevo Sol
PGK Kina
PHP Philippine Peso
PKR Pakistan Rupee
PLN Zloty
PYG Guarani
QAR Qatari Rial
RON Romanian New Leu
RSD Serbian Dinar

RUB Russian Ruble	
RWF Rwanda Franc	
SAR Saudi Riyal	
SBD Solomon Islands Dollar	
SCR Seychelles Rupee	
SDG Sudanese Pound	
SEK Swedish Krona	
SGD Singapore Dollar	
SHP Saint Helena Pound	
SKK Slovak Koruna	
SLL Leone	
SOS Somali Shilling	
SRD Surinam Dollar	
STD Dobra	
SYP Syrian Pound	
SZL Lilangeni	
THB Baht	
TJS Somoni	
TMM Manat	
TND Tunisian Dinar	
TOP Pa'anga	
TRY New Turkish Lira	
TTD Trinidad and Tobago Dollar	
TWD New Taiwan Dollar	
TZS Tanzanian Shilling	

UAH Hryvnia
UGX Uganda Shilling
USD US Dollar
UYU Peso Uruguayo
UZS Uzbekistan Som
VEB Venezuelan bolívar
VND Vietnamese đồng
VUV Vatu
WST Samoan Tala
XAF CFA Franc BEAC
XAG Silver (one Troy ounce)
XAU Gold (one Troy ounce)
XBA European Composite Unit (EURCO) (Bonds market unit)
XBB European Monetary Unit (E.M.U6) (Bonds market unit)
XOF CFA West African Franc
ZAR South African Rand
Appendix B: Actions to reduce vulnerability
No action currently taken
Flood mapping
Heat mapping and thermal imaging
Landslide risk mapping
Sea level rise modelling

Biodiversity monitoring

Real time risk monitoring

Crisis management including warning and evacuation systems Public preparedness (including practice exercises/drills) Community engagement/education Projects and policies targeted at those most vulnerable Testing/vaccination programmes for vector-borne disease Disease prevention measures Air quality initiatives Incorporating climate change into long-term planning documents Restrict development in at risk areas Resilience and resistance measures for buildings Hazard resistant infrastructure design and construction Diversifying power/energy supply Economic diversification measures Flood defences - development and operation & storage Storm water capture systems Additional reservoirs and wells for water storage Soil retention strategies Tree planting and/or creation of green space Green roofs/walls White roofs Shading in public spaces, markets Cooling systems for critical infrastructure Retrofit of existing buildings Cooling centers, pools, water parks/plazas Cool pavement

Water extraction protection	
Promoting low flow technologies	
Water butts/rainwater capture	
Xeriscapes – low water landscaping design	
Maintenance/repair – leaking infrastructure	
Optimizing delivery fuel mix of water supply	
Improve water supply distribution method	
Promoting and incentivizing water efficiency	
Water use restrictions and standards	
Water efficient equipment and appliances	
Water smart metering	
Water use audits	
Awareness campaign/education to reduce water use	
Diversification of water supply	
Increasing use of desalination	
Nature based solutions for water	
Other, please specify	
Appendix C: Fuel Type	
Natural gas	
Compressed Natural Gas (CNG)	
Liquefied Petroleum Gas (LPG)	
Liquefied Natural Gas (LNG)	
Methane	
Butane	
Propane	

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

E85
Other liquid biofuel
Landfill gas
Other biogas
Waste (municipal)
Other, please specify
Appendix D: City-wide emissions reduction activities
Buildings > Building codes and standards
Buildings > Building performance rating and reporting
Buildings > Carbon emissions reduction from industry
Buildings > Energy efficiency/ retrofit measures
Buildings > On-site renewable energy generation
Buildings > Switching to low-carbon fuels
Community-Scale Development > Brownfield redevelopment programs
Community-Scale Development > Building standards
Community-Scale Development > Compact cities
Community-Scale Development > Eco-district development strategy
Community-Scale Development > Green space and/ or biodiversity preservation and expansion
Community-Scale Development > Low carbon industrial zones
Community-Scale Development > Transit oriented development
Community-Scale Development > Urban agriculture
Energy Supply > Low or zero carbon energy supply generation
Energy Supply > Optimize traditional power/ energy production
Energy Supply > Smart grid

Energy Supply > Transmission and distribution loss reduction

Finance and Economic Development > Developing the green economy

Finance and Economic Development > Instruments to fund low carbon projects

Finance and Economic Development > Low-carbon industrial zones

Food and Agriculture > Encourage sustainable food production and consumption

Mass Transit > Improve bus infrastructure, services, and operations

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

Mass Transit > Improve fuel economy and reduce CO2 from ferries

Mass Transit > Improve fuel economy and reduce CO2 from trucks

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

Mass Transit > Smart public transport

Outdoor Lighting > LED / CFL / other luminaire technologies

Outdoor Lighting > Smart lighting

Private Transport > Awareness and education for non-motorized transport

Private Transport > Improve fuel economy and reduce CO2 from aviation

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

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

Private Transport > Improve the efficiency of freight systems

Private Transport > Improve the operations of shipping ports

Private Transport > Infrastructure for non-motorized transport

Private Transport > Transportation demand management

Waste > Improve the efficiency of long-haul transport

Waste > Improve the efficiency of waste collection

Waste > Landfill management

Waste > Recyclables and organics separation from other waste

Waste > Recycling or composting collections and/or facilities

Waste > Waste prevention policies and programs

Water > Wastewater to energy initiatives

Water > Water metering and billing

Water > Water recycling and reclamation

Water > Water use efficiency projects

Appendix E: Climate hazards

Extreme Precipitation > Rain storm

Extreme Precipitation > Monsoon

Extreme Precipitation > Heavy snow

Extreme Precipitation > Fog

Extreme Precipitation > Hail

Storm and wind > Severe wind

Storm and wind > Tornado

Storm and wind > Cyclone (Hurricane / Typhoon)

Storm and wind > Extra tropical storm

Storm and wind > Tropical storm

Storm and wind > Storm surge

Storm and wind > Lightning / thunderstorm

Extreme cold temperature > Extreme winter conditions

Extreme cold temperature > Cold wave

Extreme cold temperature > Extreme cold days

Extreme hot temperature > Heat wave

Extreme hot temperature > Extreme hot days

Water Scarcity > Drought

Wild fire > Forest fire

Wild fire > Land fire
Flood and sea level rise > Flash / surface flood
Flood and sea level rise > River flood
Flood and sea level rise > Coastal flood
Flood and sea level rise > Groundwater flood
Flood and sea level rise > Permanent inundation
Chemical change > Salt water intrusion
Chemical change > Ocean acidification
Chemical change > Atmospheric CO2 concentrations
Mass movement > Landslide
Mass movement > Avalanche
Mass movement > Rock fall
Mass movement > Subsidence
Biological hazards > Water-borne disease
Biological hazards > Vector-borne disease
Biological hazards > Air-borne disease
Biological hazards > Insect infestation
Appendix F: Co-benefit area
Disaster Risk Reduction
Enhanced resilience
Disaster preparedness
Enhanced climate change adaptation
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)

Poverty reduction/eradication

Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours
Improved access to data for informed decision-making
Appendix G: Common Reporting Framework sub-sector list CRF - Stationary energy > Residential buildings
CRF -Stationary energy > Commercial buildings & facilities
CFR - Stationary energy > Institutional buildings & facilities
CRF - Stationary energy > Industrial buildings & facilities
CRF - Stationary energy > Agriculture
CRF - Stationary energy > Fugitive emissions
CRF - Transportation > On-road
CRF - Transportation > Rail
CRF - Transportation > Waterborne navigation
CRF - Transportation > Aviation

@cdp | www.cdp.net

CRF - Transportation > Off-road
CRF - Waste > Solid waste disposal
CRF - Waste > Biological treatment
CRF - Waste > Incineration and open burning
CRF - Waste > Wastewater
CRF - IPPU > Industrial process
CRF - IPPU > Product use
CRF - AFOLU > Livestock
CRF - AFOLU > Land use
CRF - AFOLU > Other AFOLU
CRF - Generation of grid-supplied energy > Electricity-only generation
CRF - Generation of grid-supplied energy > CHP generation
CRF - Generation of grid-supplied energy > Heat/cold generation
CRF - Generation of grid-supplied energy > Local renewable generation
Appendix H: Emission factors and activity
Aviation gasoline
Biodiesels
Biogasoline
Bitumen
Butane
Charcoal
Coal (Bituminous or Black coal)
Coke
Coking coal
Coal (manufacture solid fuels)

Compressed Natural Gas (CNG)
Crude oil
Diesel oil
E85
Ethanol
Hydrogen
Gas oil
Jet gasoline
Jet kerosene
Kerosene (paraffin)
Landfill gas
Liquefied Natural Gas (LNG)
Liquefied Petroleum Gas
Lubricants
Methanol
Motor gasoline (petrol)
Municipal wastes (all)
Municipal wastes (non-biomass fraction)
Municipal wastes (biomass fraction)
Naphtha
Natural gas
Other biogas
Other Liquid BioFuels
Petroleum coke
Propane

Residual fuel oil	
Sewage sludge	
Sludge gas	
Town gas or city gas	
Wood or wood waste	
Electricity	
Electricity (CHP)	
Heating	
Heating (CHP)	
Steam	
Steam (CHP)	
Cooling	
Cooling (CHP)	
T&D losses from grid-supplied	
Hydrogen	
Distance travelled (vehicle)	
Distance travelled (passenger)	
Distance travelled (freight)	
Travel expenditure	
Travel time	
Other, please specify	