

Introduction

We invite a reply to the following questions. The deadline for response is 2 March 2012.

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

The following sources of support are available to responding cities:

- 2012 Reporting Guidance: <https://www.cdproject.net/en-US/Programmes/Documents/CDP-Cities-Reporting-Guidance-2012.pdf>
This document provides a high-level overview of each module and question-level guidance on every question. The guidance provides information on the intent of each question as well as examples of good responses for selected questions.
- In-ORS Guidance: Within the ORS, helpful text is provided to the right of every question. This text will give you guidance on the intent of the question and how to respond.
- Contact us: All cities can write to Cities@cdproject.net or kyra.appleby@cdproject.net for questions which are not answered in the guidance, for help accessing the ORS, or for general inquiries.
- City Director: C40 cities can contact their local city director for help in writing their response.

We encourage organizations to use the guidance within the ORS and to consult the CDP Cities 2012 reporting guidance (see <https://www.cdproject.net/en-US/Programmes/Documents/CDP-Cities-Reporting-Guidance-2012.pdf>).

Please answer the questions comprehensively while also assessing the relevance of the information you provide. Further explanation is provided in the CDP Cities 2012 reporting guidance. Where you do not have all of the information requested, please respond with what you have as this is more valuable than no response.

This year, CDP is piloting a rating methodology for internal feedback purposes. We will evaluate answers to some questions according to this methodology. No results from this pilot will be made public. However, we will share our feedback with you on how to improve your response on an individual basis. At the end of 2012, based on the experience of this pilot program and on feedback from cities, we will decide if and how to score cities' responses in future years.

Introduction

Introduction

0.1 Please give a general description and introduction to your city. [Text box]

Emissions Accounting Choice

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

Governance

Governance

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

1.1 Do you provide incentives for individual (or departmental) management of climate change issues, including the attainment of GHG reduction targets? [List of Values: Yes; No]

1.1a *If yes:* Please complete the table.

Who is entitled to benefit from these incentives?	The type of incentives	Comment
[List of Values: Heads of departments, Energy managers; Environment/Sustainability managers; Facilities managers; All employees; Citizens, Other]	[List of Values: Monetary reward; Recognition (non-monetary); Prize; Other]	[Text box]

Add Row

Risks

Physical Risks

2.0 Do current and/or anticipated physical effects of climate change present significant risks to your city?
 [List of Values: Yes; No; Don't Know]

2.0a *If yes or don't know:* Please list and describe the effects of climate change which you expect to experience in your city, together with anticipated timescales.

Effects of climate change	Level of risk	Anticipated timescale in years	Comment (please comment with particular reference to the impact on the following sectors: Agriculture, Buildings, Water, Waste, Transport; Energy, Communications / Telecommunications, Human Health, Other)
[List of Values: More hot days; Hotter summers; More frequent heatwaves; More intense heatwaves; Warmer water temperatures; Increased urban heat island effect; More frequent rainfall; More intense rainfall; Increased average annual rainfall; Reduced average annual rainfall; Reduced average annual snowfall; More frequent droughts; More intense droughts; Change in seasonality of rainfall; Increased risk of storm surges; Increased frequency of large storms; Increased wind speeds; Sea level rise; Other]	[List of Values: Extremely serious; Serious; Less serious; Other]	[List of Values: Current; Short-term; Medium-term; Long-term; Other]	[Text box]

Add row

2.0b *If no:* Please explain why the anticipated physical effects of climate change present no significant risk to your city.

2.1 Please describe any compounding factors that may worsen the physical effects of climate change in your city. [Text box]

Risks

- 2.2 Do you consider that the physical impacts of climate change could threaten the ability of businesses to operate successfully in your city?
[List of Values: Yes; No; Don't know]
- 2.2a Please explain the reasoning behind your response. [Text box]
- 2.3 Please describe the process or methodology you used to evaluate the physical risks to your city.
[Text box]

Regulatory, Social and Other Risks

- 2.4 Does your city face any regulatory, social, or other risks that you wish to detail? If so, please use the text box provided. [Text box]

Opportunities

Opportunities

3.0 Does climate change present any economic opportunities for your city?
 [List of Values: Yes; No; Don't know]

3.0a *If yes or don't know:* Please indicate the opportunities and describe how the city is positioning itself to take advantage of them.

Economic opportunity	Describe how the city is maximizing this opportunity
[List of Values: Development of new business industries (e.g. clean tech); Additional funding options; Improved efficiency of operations; Green jobs; Increased energy security; Increased attention to other environmental concerns; carbon finance income; Increased green entrepreneurship; Other]	[Text box]

Add row

3.0b *If no:* Why not? [Text box]

3.1 Please describe any other opportunities (e.g. social or physical) that climate change presents for your city. [Text box]

Emissions – Local Government Operations

Methodology

- LGO 1.0 Please state the dates of the accounting year or 12-month period for which you are reporting a GHG measurement inventory for your local government operations.
 [Drop Down Calendar: From]
 [Drop Down Calendar: To]
- LGO 1.1 Please indicate the category that best describes the boundary of your municipal GHG emissions inventory.
 [List of Values: (a) Companies, entities or departments over which operational control is exercised; (b) Companies, entities, or departments over which financial control is exercised; (c) Companies, entities, or departments of which a majority equity share is held; (d) Other]
- LGO 1.2 Please indicate which of the following major sources of emissions are included in your municipal GHG emissions inventory.

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

- LGO 1.3 Please give the name of the primary protocol, standard, or methodology you have used to calculate GHG emissions.
 [List of Values: Chicago Climate Exchange; Greenhouse Gas Protocol: Public Sector Standard; International Emissions Analysis Protocol (ICLEI); ISO 14064; Local Government Operations Protocol (ICLEI/The Climate Registry/California Climate Action Registry/ California Air Resources Board); Australian National Greenhouse and Energy Reporting (Measurement) Determination; Other]
- LGO 1.3a Please explain your methodology, including additional protocols used and methods of calculation. [Text box]

Emissions – Local Government Operations

Energy Data

LGO 1.4 Please give the total amount of fuel (in energy units) that your local government has consumed this year.

Fuel	Amount	Energy units
[List of Values: Appendix A]	[Numeric field]	[GWh; MWh; kWh; TJ; GJ; MJ]

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LGO 1.5 How much electricity, heat, steam, and cooling (in energy units) has your local government purchased for its own consumption during the reporting year?

Type	Amount	Energy units
[List of Values: Electricity; Heat; Steam; Cooling; Other]	[Numeric field]	[GWh; MWh; kWh; TJ; GJ; MJ]

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GHG Emissions Data

LGO 1.6 Please provide total GHG emissions for your local government’s operations, in metric tonnes CO2e. [Numeric field]

LGO 1.7 If applicable, please provide the following GHG emissions.

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

LGO 1.8 Do you measure Scope 3 emissions?
[List of values: Yes, No]

LGO 1.9 Please provide more detail about how you measure Scope 3 emissions, including total Scope 3 emissions in metric tonnes CO2e. If you do not measure Scope 3 emissions, please explain why not and detail your plans to do so in the future, if any. [Text box]

LGO 1.11 Where it will facilitate a greater understanding of your government emissions, please provide a breakdown of these emissions by department, facility, greenhouse gas (CO2, CH4, N2O etc) or by any other classification system used in your city.

Department / Facility / GHG / Other	Type	Emissions (Metric Tonnes CO2e)
[Text box]	[List of Values: Scope	[Numeric field]

Emissions – Local Government Operations

	1;Scope 2; Scope 3; Total figure, Other]	
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LGO 1.12 Please provide any further details about your process for collecting and managing GHG emissions data. [Text box]

External Verification

LGO 1.13 Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole?
[List of Values: Yes; No]

LGO 1.13a Please provide any other relevant information about the emissions verification process.
[Text box]

Emissions- Community

Date and Boundary

- C1.0 Please state the dates of the accounting year or 12-month period for which you are reporting a GHG measurement inventory for your community.
[Drop Down Calendar: From]
[Drop Down Calendar: To]
- C1.1 Please indicate the category that best describes the boundary of your community GHG emissions inventory.
[List of Values: Geopolitical Boundary—physical areas over which local government has jurisdictional control; Other]

Emissions and Energy Data

- C1.2 Please give the name of the primary protocol, standard, or methodology you have used to calculate GHG emissions.
[List of Values: International Emissions Analysis Protocol (ICLEI); International Standard for Determining Greenhouse Gas Emissions for Cities (UNEP and World Bank); 2006 IPCC Guidelines for National Greenhouse Gas Inventories; The International Basic Standard for Community-Scale GHG Emission Inventories (ICLEI, C40 and World Bank); Other]
- C1.3 Please explain your methodology, including use of additional protocol, and methods of calculation. [Text box]
- C1.4 Please detail total emissions for your community, in metric tonnes CO2e. [Numeric field]
- C1.5 If applicable, please provide a breakdown of your GHG emissions by scope.

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

- C1.6 *If protocol besides the International Basic Standard for Community-Scale GHG Emission Inventories:* Where it will facilitate a greater understanding of your community’s emissions, please provide a breakdown of these emissions by end user (buildings, water, waste, transport), economic sector (residential, commercial, industrial, institutional), IPCC sector (Stationary combustion; mobile combustion, Industrial processes, waste), greenhouse gas (CO2, CH4, N2O, etc) or any other classification system used in your city.

End user / Economic sector / IPCC sector / GHG / Other	Emissions (metric tonnes CO2e)
[Text box]	[Numeric field]

Add Row

Emissions- Community

C1.7 *If protocol besides the International Basic Standard for Community-Scale GHG Emission Inventories:* Please give the total amount of fuel (in energy units) consumed in your city during the reporting year.

Fuel	Amount	Energy units
[List of Values: Appendix A]	[Numeric field]	[GWh; MWh; kWh; TJ; GJ; MJ]

Add Row

C 1.8 *If protocol besides the International Basic Standard for Community-Scale GHG Emission Inventories:* How much electricity, heat, steam, and cooling (in energy units) has been consumed by your city during the reporting year?

Type	Amount	Energy units
[List of Values: Electricity; Heat; Steam; Cooling; Other]	[Numeric field]	[GWh; MWh; kWh; TJ; GJ; MJ]

Add Row

C1.9 *If The International Basic Standard for Community-Scale GHG Emission Inventories:* Please provide a breakdown of fuel use and emissions by source as defined in the Global Protocol for Community GHG Inventories.

Emissions Source	Energy / Fuel Type	Fuel consumed / Electricity used / Other energy activity measure	Energy Units	Emissions Metric Tonnes CO2e	Type
[List of Values: Residential buildings; Commercial/Institutional buildings; Industrial buildings; Energy industry/production; Road transportation (Cars, LDV, HDV/Buses, others); In-city railway (urban/metro rail system); Inter-city railways; In-city water-borne navigation (local purposes); Inter-city marine navigation; Civil aviation (local purposes); Inter-city aviation; Off-road fuel use; Solid waste disposal – Landfill sites; Solid waste disposal – Incineration facilities; Solid waste disposal – Biological treatment of waste; Wastewater treatment and discharge; Fugitive emissions; Industrial process and product use	[List of Values: Appendix B]	[Numeric field]	[List of Values : GWh; MWh; kWh; TJ; GJ; MJ]	[Numeric Field]	[List of Values: Scope 1; Scope 2; Scope 3; Total; Other]

Emissions- Community

emissions; Utilities located outside the geopolitical boundary under municipal control; Other]					
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C1.11 Do you measure Scope 3 emissions?
[List of values: Yes; No]

C1.12 Please provide more detail about how you measure Scope 3 emissions, including total Scope 3 emissions in metric tonnes CO2e. If you do not measure Scope 3 emissions, please explain why not and detail your plans to do so in the future, if any. [Text box]

C1.13 Please provide the following measures of emissions intensity for your community, as appropriate.

Annual emissions per resident (emissions per capita)	Annual emissions per sq. kilometer	Other measures of emissions intensity
[Numeric field]	[Numeric field]	[Text box]

C1.14 Please provide any further details about your process for collecting and managing GHG emissions data. [Text box]

External Verification

C1.15 Has the GHG data you reported been externally verified or audited in part or in whole?
[List of Values: Yes; No]

C1.15a Please provide any other relevant information about the emissions verification process.
[Text box]

Strategy

GHG Emissions Reduction – Local Government Operations

4.0 Do you have a GHG emissions reduction target in place for your city government operations?
 [List of Values: Yes; No]

4.0a *If yes:* Please provide details of your reduction target.

Baseline year	Percentage reduction target	GHG sources to which the target applies	Target date	Comment
[List of Values: 1990 – 2012; Other]	[Numeric field]	[Text box]	[List of Values: 2010 – 2020; Other]	[Text box]

Add row

4.0b *If no:* Please explain why you do not have an emissions reduction target. [Text box]

4.1 What activities are you undertaking to reduce your emissions in your local government operations?

Emissions reduction activity	What is the current status of this initiative as it relates to your city?	Which statement best characterizes the type of initiative?	Anticipated emissions reduction over lifetime (metric tonnes CO2e)	Which statement best describes how this initiative is funded or financed?	Comment
[List of Values: Appendix C]	[List of Values: Currently in-effect at a transformative scale across the entire city; Currently in-effect at a significant scale across most of the city; Currently in-effect and being piloted; Still under current consideration or awaiting final authorization; Once considered by your city and is now discontinued; Not currently being considered; Other]	[List of Values: Mostly mandate, regulatory, or policy-driven; Mostly project or program based; Utilizes incentives and/or disincentives to affect behaviours; Based around the collection of data or information; Other]	[Numeric field]	[List of Values: Mostly funded through general municipal funds; Project specific financing was obtained for this initiative; Financed from outside or private financing; Financed through a development bank; A grant or subsidy was received for this initiative; Not Applicable; Other]	[Text box]

Add row

Strategy

4.2 Do you engage with city government suppliers on climate change? [List of Values: Yes; No]

4.2a *If yes:* Please provide details of your engagement with the city government’s supply chain. [Text box]

GHG Emissions Reduction – Community

4.3 Do you have a GHG emissions reduction target in place for your community? [List of Values: Yes; No]

4.3a *If yes:* Please provide details of your reduction target.

Baseline year	Percentage reduction target	GHG sources to which the target applies	Target date	Comment
[List of Values: 1990 – 2012; Other]	[Numeric field]	[Text box]	[List of Values: 2010 – 2020; Other]	[Text box]

Add row

4.3b *If no:* Please explain why you do not have an emissions reduction target. [Text box]

4.4 What activities are you undertaking to reduce emissions city-wide?

Emissions reduction activity	What is the current status of this initiative as it relates to your city?	Which statement best characterizes the type of initiative?	Anticipated emissions reduction over lifetime (metric tonnes CO2e)	Which statement best describes how this initiative is funded or financed?	Comment
[List of Values: Appendix C]	[List of Values: Currently in-effect at a transformative scale across the entire city; Currently in-effect at a significant scale across most of the city; Currently in-effect and being piloted; Still under current consideration or awaiting final authorization; Once considered by your city and is now discontinued; Not currently being considered; Unknown; Other]	[List of Values: Mostly mandate, regulatory, or policy-driven; Mostly project or program based; Utilizes incentives and/or disincentives to affect behaviours; Based around the collection of data or	[Numeric field]	[List of Values: Mostly funded through general municipal funds; Project specific financing was obtained for this initiative; Financed from outside or private financing; Financed through a development bank; A grant or subsidy was received for this initiative; Not Applicable; Unknown; Other]	[Text box]

Strategy

		information; Unknown; Other]			
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Planning

- 4.5 List any climate change-related projects for which you hope to attract private sector involvement. [Text box]
- 4.6 Does your city incorporate desired GHG reductions into the master planning for the city? [List of Values: Yes; No]
- 4.6a *If yes:* Please describe the ways that the master plan is designed to reduce GHG emissions. [Text box]
- 4.7 Please describe any renewable energy targets or goals and how the city plans to meet those targets. [Text box]

Adaptation

- 4.8 Do you have a plan for increasing your city’s resilience to the expected physical effects of climate change? [List of values: Yes, No]
- 4.8a *If No:* Please explain why not and any future arrangements you have to create a plan. [Text box]
- 4.9 Please describe the actions you are taking to reduce the risk to your city’s infrastructure, citizens, and businesses from climate change as identified in the Risks Module.

Effects of climate change	Actions to reduce vulnerability	What is the current status of this initiative as it relates to your city?	Which statement best characterizes the type of initiative?	Which statement best describes how this initiative is funded or financed?	Comment
[List of Values: More hot days; Hotter summers; More frequent heatwaves; More intense heatwaves; Warmer water temperatures; Increased urban heat island effect; More frequent rainfall;	[List of Values: Appendix D]	[List of Values: Currently in-effect at a transformative scale across the entire city; Currently in-effect at a significant scale across most of the city; Currently in-effect and being piloted; Still under current consideration or	[List of Values: Mostly mandate, regulatory, or policy-driven; Mostly project or program based; Utilizes incentives and/or disincentives to affect behaviours; Based around	[List of Values: Mostly funded through general municipal funds; Project specific financing was obtained for this	[Text box]

Strategy

More intense rainfall; Increased average annual rainfall; Reduced average annual rainfall; Reduced average annual snowfall; More frequent droughts; More intense droughts; Change in seasonality of rainfall; Increased risk of storm surges; Increased frequency of large storms; Increased wind speeds; Sea level rise; Other]		awaiting final authorization; Once considered by your city and is now discontinued; Not currently being considered; Unknown; Other]	the collection of data or information; Unknown; Other]	initiative; Financed from outside or private financing; Financed through a development bank; A grant or subsidy was received for this initiative; Not Applicable; Unknown; Other]	
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4.11 Please describe any other efforts you have undertaken or will undertake to ensure business and operational continuity—for both the city government and the businesses located in your city—in the event of a significant weather-related event. [Text box]

Water

4.12 Do you foresee substantive risks to your city’s water supply in the short or long term? [List of Values: Yes; No]

4.12a *If yes:* Please identify the risks to your city’s water supply as well as the timescale.

Risks	Timescale	Comment
[Text box]	[List of Values: Current; Short-term; Medium-term; Long-term; other]	[Text box]

Add row

4.12b *If yes:* Please describe the actions (on the supply and demand side) you are taking to reduce the risks to your city’s water supply. [Text box]

4.12c *If no:* Please explain why you do not consider your city to be exposed to any substantive water-related risk. [Text box]

Important Information

The Carbon Disclosure Project (CDP) has been making information requests relating to carbon and climate change on behalf of investors since 2003. To find out more about CDP and the previous responses from other organizations, please refer to our website at www.cdproject.net.

What are the financial implications of responding?

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

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

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

Scoring of responses

Responses to CDP Cities 2012 will not be scored publicly by CDP or its partners. CDP and other organizations write and publish reports that include an overview of CDP responses. In 2012, CDP is piloting a scoring methodology for internal feedback purposes, but no results will be made public. CDP will consider publicly scoring responses (for example, for the comprehensiveness of the organization's disclosure and on performance factors) in the future.

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

In order for responses and any revisions to be included in the annual reports CDP publishes each year, they must be received by 2 March 2012. After you submit your response via the Online Response System, it will become 'read-only' and can then only be amended by CDP staff. CDP can accept revisions to responses in writing at any time and will aim to make these available from www.cdproject.net within five days of receipt.

How can a city confirm its participation?

If you received this document in hard copy, please email Cities@cdproject.net to confirm your participation. If your city is a member or an affiliate of the C40, city staff will have received an email with further instructions on how to confirm your participation.

What is the legal status of CDP?

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

The Carbon Disclosure Project is an independent not-for-profit organization holding the largest database of primary corporate climate change information in the world.

Thousands of organizations from across the world's major economies measure and disclose their greenhouse gas emissions and climate change strategies through CDP. CDP puts this information at the heart of financial and policy decision-making and its goal is to collect and distribute high quality information that motivates investors, corporations and governments to take action to prevent dangerous climate change.

Appendix A

Appendix A: Fuel Type

Anthracite	Metallurgical coke
Asphalt / Bitumen	Methane
Aviation gasoline	Motor gasoline
Biodiesels Biogas	Municipal waste
Biogasoline	Naptha
Bituminous coal	Natural gas
BXB	Oil shale/tar sands
Blast furnace gas	Orimulsion
Brown coal	Oxygen steel furnace gas
Brown coal briquettes	Patent fuel
Butane	Peat
Charcoal	Petroleum coke
Coke breeze	Pitch
Coke oven coke	Propane
Coking coal	Refinery feedstocks
Crude oil	Refinery gas
Distillate fuel oil No 1	Refuse-derived fuel
Distillate fuel oil No 2	Residual fuel oil
Distillate fuel oil No 3	Semi-coke
Distillate fuel oil No 4	Shale oil
Distillate fuel oil No 5	Sludge gas
Distillate fuel oil No 6	Sub-bituminous coal
Ethane	Sulphite lyes (Black liquor)
Gas works gas	Tar
Gas/diesel oil	Town gas or city gas
Jet gasoline	Turpentine
Jet kerosene	Vegetable oils
Kerosene	Waste oil
Landfill gas	Waste plastics
Lignite	Waste-tire derived fuels
Lignite coke	Waxes
Liquefied Natural Gas (LNG)	White spirit SBP
Liquefied Petroleum Gas	Wood or wood waste
Lubricants	Other

Appendix B

Appendix B: Fuel or Energy Type

Anthracite	Patent fuel
Asphalt / Bitumen	Peat
Aviation gasoline	Petroleum coke
Biodiesels Biogas	Pitch
Biogasoline	Propane
Bituminous coal	Refinery feedstocks
BXB	Refinery gas
Blast furnace gas	Refuse-derived fuel
Brown coal	Residual fuel oil
Brown coal briquettes	Semi-coke
Butane	Shale oil
Charcoal	Sludge gas
Coke breeze	Steam
Coke oven coke	Sub-bituminous coal
Coking coal	Sulphite lyes (Black liquor)
Cooling	Tar
Crude oil	Town gas or city gas
Distillate fuel oil No 1	Turpentine
Distillate fuel oil No 2	Vegetable oils
Distillate fuel oil No 3	Waste oil
Distillate fuel oil No 4	Waste plastics
Distillate fuel oil No 5	Waste-tire derived fuels
Distillate fuel oil No 6	Waxes
Electricity	White spirit SBP
Ethane	Wood or wood waste
Gas works gas	Other
Gas/diesel oil	
Heat	
Jet gasoline	
Jet kerosene	
Kerosene	
Landfill gas	
Lignite	
Lignite coke	
Liquefied Natural Gas (LNG)	
Liquefied Petroleum Gas	
Lubricants	
Metallurgical coke	
Methane	
Motor gasoline	
Municipal waste	
Naptha	
Natural gas	
Oil shale/tar sands	
Orimulsion	
Oxygen steel furnace gas	

Appendix C

Appendix C: Emissions reduction activities

Education > climate change-focused curriculum
Energy Demand in Buildings > Building codes and standards
Energy Demand in Buildings > Building performance rating and reporting
Energy Demand in Buildings > Energy efficiency/retrofit measures
Energy Demand in Buildings > Financing mechanisms for retrofit
Energy Demand in Buildings > Renewable on-Site energy generation
Energy Demand in Buildings > Switching to low-carbon fuels
Energy Supply > Clean energy procurement strategies
Energy Supply > Combined heat and power
Energy Supply > Low or zero carbon energy supply generation
Energy Supply > Smart grid
Energy Supply > Transmission and distribution loss reduction
Finance > Adaptation infrastructure finance
Finance > Carbon finance / markets
Finance > Carbon finance capacity building
Finance > Clean technology funds
Finance > ESCO financing
Food > Promotion of climate smart eating habits
Outdoor Lighting > LED / CFL / other luminaire technologies
Outdoor Lighting > Smart lighting
Outdoor Lighting > Solar powered lights
Public procurement > Encourage low carbon products
Public procurement > Encourage sustainable food production and consumption
Transport > Infrastructure for non-motorized transport
Transport > Improve fuel economy and reduce CO2 from motorized vehicles
Transport > Improve the accessibility to public transit systems
Transport > Improve fuel economy and reduce CO2 from bus and/or light rail operations
Transport > Improve bus transit times
Transport > Improve the efficiency of freight systems
Transport > Transportation demand management
Urban Land Use > Brownfield redevelopment programs
Urban Land Use > Limiting urban sprawl
Urban Land Use > Greenspace and/or bio-diversity preservation and expansion
Urban Land Use > Transit oriented development
Urban Land Use > Urban agriculture
Urban Land Use > Compact cities
Urban Land Use > Eco-district development strategy
Water > Methane recovery for reuse
Water > Wastewater to energy initiatives
Water > Water metering and billing
Water > Water recycling or reclamation
Waste > Improve the efficiency of long-haul transport
Waste > Improve the efficiency of waste collection
Waste > Integrated waste management
Waste > Landfill gas capture
Waste > Recycling or composting collections and/or facilities
Waste > Waste prevention policies or programs
Waste > Waste to energy
Other

Appendix D

Appendix D: Actions to reduce vulnerability

Air quality initiatives
Community engagement/education
Projects or policies targeted at those most vulnerable
Disease prevention measures
Economic diversification measures
Crisis management including warning and evacuation systems
Crisis planning and practice exercises
Storm water capture systems
Flood defences – development and operation & storage
Restrict development in flood risk areas
Protect land from development
Tree planting and/or creation of green space
Shading in public spaces, markets
Green roofs
White roofs
Cooling systems for critical infrastructure
Community solar projects
Increase share of renewable energy standards
Reduce power consumption
Retrofit of existing buildings
Building resilience and resistance measures
Additional reservoirs and wells for water storage
Awareness campaign/education to reduce water use
Diversification of water supply
Drought resistant crops
Promoting low flow technologies
Maintenance/repair – leaking infrastructure
Water butts/rainwater capture
Water use restrictions
Xeriscapes – low water landscaping design
Other