Supplementary material

Annexes

Annex 1: Scoring system

Table A

Scoring system for Vulnerability Profile

Score	Status
0	CCAP does not mention any vulnerabilities that the city will face
1	CCAP suggests that a vulnerability profile has been completed but its data is not stated within the plan. **OR** CCAP mentions some vulnerability issues for the city but does not provide a concise overview.
2	CCAP contains a full vulnerability profile of the city.

Table B

Scoring system for Future Climate Projections

Score	Status
0	CCAP does not mention any future climate projections for the city.
1	CCAP provides future climate projections in the short term (up to 2020).
2	CCAP provides future climate projections in the long term (up to 2050).

Table C

Scoring system related to GHG emissions forecasts

Score	Status
0	CCAP does not contain a GHG emissions forecast
1	CCAP provides future GHG emissions forecasts in the short term (up to 2020).
2	CCAP provides future GHG emissions forecasts in the long term (up to 2050).

Table D

Scoring system related to GHG emissions reductions target

Score	Status

0	CCAP does not provide a GHG emissions reduction target
1	CCAP provides reductions target in the short term (up to 2020).
2	CCAP provides reductions target in the long term (up to 2050).

Table E

Scoring system related to Consideration of Ad/Mit interrelationships

Score	Status
0	CCAP does not include any consideration of Ad/Mit interrelationships
1	CCAP provides consideration of either conflicts or synergies of interrelationships
2	CCAP provides consideration of both conflict and synergies of interrelationships

Table F

Scoring system related to Mainstreaming of both Ad/Mit actions

Score	Status
0	CCAP does not include any consideration regarding mainstreaming climate actions
1	CCAP provides consideration of mainstreaming either Ad or Mit actions
2	CCAP provides consideration of mainstreaming both Ad and Mit actions

Annex 2: Table of selected CCAPs and their sources

City	Name of Plan	Type of Plan	Year	Source
Bangkok, Thailand	Bangkok Master Plan on Climate Change 2013-2023	Combined	2013	http://www.bangkok.go.th/main/
Chicago, USA	Chicago Climate Action Plan	Combined	2008	http://www.chicagoclimateaction.org/

Durban, South Africa	Durban Climate Change Strategy	Adaptation driven	2014	http://www.durban.gov.za
Mexico City, Mexico	Programa de Acción Climática de la Ciudad de México 2014-2020	Combined	2014	http://data.sedema.cdmx.gob.mx/sedema/index.php/temas-ambientales/cambio-climatico
Montevideo, Uruguay	Plan Climático de la Región Metropolitana de Uruguay	Combined	2012	http://www.montevideo.gub.uy/
Paris, France	Paris Climate and Energy Action Plan	Mitigation driven	2012	http://www.paris.fr/
Seoul, South Korea	Action Plans for Promise of Seoul: Taking Actions Against Climate Change	Combined	2015	https://www.compactofmayors.org/
Vancouver, Canada	Climate Change Adaptation Strategy	Adaptation driven	2012	http://vancouver.ca/
Wellington, New Zealand	Wellington City's 2013 Climate Change Action Plan	Combined	2013	http://wellington.govt.nz/

Annex 3: List of Identified interrelationships in CCAPs

Sector	Measures	Primary objectives(s)	Co-benefits in Ad/Mit	Co-benefits in other sector(s)	CCAP

Urban greening	Ecosystem restoration: design and manage the built environment to contribute positively to the supply of ecosystem functioning and connectivity	Ad: restore and manage degraded urban natural capital, focusing on the linkages between open spaces that allow poleward and altitudinal movement of plant and animal populations, hence improving resilience of ecosystems to climate change impacts.	Mit: prioritise the restoration, protection and management of ecosystems that contribute towards mitigating climate change through carbon sequestration and storage.	Biodiversity, quality of life	Durban, Montevideo, Bangkok
Urban greening	Forestry: expand forest networks on public and private land through natural regeneration of reserves and rural land, plantation forestry, planting in road reserves and tree planting along main streets	Ad/Mit: promote urban reforestation that offers cooling effect and water retention to reduce climate change impacts while expanded forestry helps reducing carbon dioxide from the atmosphere.		Biodiversity, storm water management, air quality and health	Chicago, Vancouver, Wellington
Urban greening	Natural water retention measures: regulate and smooth storm water runoff by applying green infrastructure such as green roofs, rain gardens	Ad: rain gardens and permeable pavements help reduce peak flood discharges by capturing storm water on-site, allowing resilience to heavier and more frequent storm events. Moreover, green roofs provide insulation for the buildings to adapt to climate change impacts.	Mit: enhanced storm water management requires less energy to pump the flooding water, hence reducing GHG emissions while building insulation systems can also help increasing energy efficiency.	Energy efficiency, biodiversity, real estate value	Chicago, Vancouver, Wellington
Waste and pollution	Air quality management: intensify efforts to reduce air pollution emissions from power plants and transportation.	Mit: adopt and enforce air quality management targeting at power plants and transportation to reduce air pollution emissions by upgrading technologies towards clean energy.	Ad: improve air quality that is affected by climate change impacts, for example, high level of ground-level ozone is enhanced by increased temperatures.	Air quality and health	Durban, Chicago

Waste and pollution	Waste management: reduce waste at source and view waste as a valuable resource for reuse and recycling	Mit: minimize waste at source to reduce the GHG emissions associated with the supply chain, including extraction, production, and transportation.	Ad: waste infrastructure is designed appropriately to adapt to climate change impacts, for example, rainwater recycling systems are able to capture storm water onsite to reduce peak discharges in the city.	Waste management	Durban, Chicago
Urban agriculture	Sustainable farming and livestock: advance farming practices as well as pasture, fodder and grazing management	Mit/Ad: improve agriculture practices and livestock management to reduce GHG emissions while enabling food production to be more climate-resilient, e.g. drought-resistant crops		Farming, livestock and grazing management	Montevideo
Urban agriculture	Sufficient food distribution: promote the decentralisation of food distribution and marketing network	Ad: ensure the provision of adequate food during climate related disasters or events.	Mit: localize food distribution to reduce the need in long-distance transportation, hence reducing the carbon footprint of food transport system.	Transportation	Durban
Buildings	Energy efficient buildings: retrofit building insulation systems to improve energy efficiency	Mit: insulate residential and commercial buildings to reduce energy consumption and thereby reduce GHG emissions.	Ad: improve insulation systems to regulate building temperature, reducing climate impacts on human health	Energy efficiency, health	Chicago, Wellington
Energy	Distrubuted reneawble power generation: balance electricity supply and demand by promoting distributed on-site renewable power plants	Mit: promote power generated on-site using clean and renewable energy to avoid the efficiency loss that occurs in the conventional single source energy generation, hence reducing GHG emissions.	Ad: replace fossil fuel plants with renewable energy to improve air quality that is expected to decline as a result of climate change impacts while ensuring energy security by reducing dependence on single source energy	Air quality and health, economic development	Chicago, Wellington

			generation.		
Transport	Climate smart transport options: improve and promote carbon efficient, climate resilient transport options, including public transit-systems, walking, biking, and car share and pooling	Mit: encourage the use of public transit as well as walking, biking, and car sharing to reduce GHG emissions	Ad: high quality of transport infrastructure holds a strong capacity to withstand climate change impacts while an increase in air quality can be achieved by the increasing use of public transport, walking, biking, and car sharing.	Economic development, air quality and health	Durban, Wellington, Chicago
Cross sectoral	Council operations: strengthen partnerships with stakeholders (research institutes, business, civil society) to gain support in decision-making in areas relevant to climate mitigation and adaptation	Mit/Ad: optimize development of mitigation and adaptation actions through strengthening partnerships that provide various supports, including information exchange, knowledge generation, and financial aids, etc.		Cross-sectoral	Wellington, Durban
Cross sectoral	Council operations: reduce organizational or institutional difficulties in terms of climate actions	Mit/Ad: transversal support to adaptation and mitigation to decrease organizational weaknesses for climate change actions		Cross-sectoral	Montevideo