ADAPTATION PLANNING IN CITIES

STEPs, TOOLS AND RESOURCES

Chantal Oudkerk Pool
Head of Adaptation Planning, C40
01. C40’S CLIMATE ACTION PLANNING (CAP) FRAMEWORK

02. AVAILABLE TOOLS AND RESOURCES

03. Q&A
01. C40’s CAP FRAMEWORK
What does a Climate Action Plan (CAP) in line with the Paris Agreement look like?
<table>
<thead>
<tr>
<th>Format</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single document including all mitigation and adaptation initiatives</td>
<td>eg. Mexico City</td>
</tr>
<tr>
<td>Annex to existing CCAP</td>
<td>eg. NYC</td>
</tr>
<tr>
<td>Separate documents for mitigation and adaptation</td>
<td>eg. Boston</td>
</tr>
<tr>
<td>Higher tier of government sets the framework, city transposes to local level</td>
<td>eg. Japanese Cities</td>
</tr>
<tr>
<td>Climate commitments distributed across other city documents, with overarching summary document. Sub-documents may be city-owned by other city actors (energy utility, transport operator)</td>
<td>eg. London</td>
</tr>
</tbody>
</table>

**Range of possible formats for CAPs**
Climate Action Plan Pilot Cities

- NEW YORK
- LONDON
- LOS ANGELES
- BOSTON
- PARIS
- MEXICO CITY
- ETHEKWINI (DURBAN)
- MELBOURNE
A climate action plan (or series of plans) will

1. Develop a pathway to deliver an emissions neutral city by 2050 at the latest, and set an ambitious interim target and/or carbon budget.

2. Demonstrate how the city will adapt and improve its resilience to climate hazards that may impact the city now and in future climate change scenarios.

3. Outline the social, environmental and economic benefits expected from implementing the plan, and improve the accessibility of these benefits by the city’s population.

4. Detail the city’s governance, powers and the partners who need to be engaged to accelerate the delivery of the city’s mitigation targets and resilience goals.
The plan (or series of plans) will do this by:

a) Considering adaptation and mitigation in an integrated way, identifying interdependencies to maximise efficiencies and minimise investment risk.

b) Setting an evidence-based, inclusive and deliverable plan for achieving transformational mitigation and adaptation centred on an understanding of the city’s powers, influence and wider context.

c) Establishing a transparent process to monitor delivery, communicate progress, and update climate action planning in line with governance and reporting systems.
CLIMATE ACTION PLANNING PROCESS

GET STARTED
BUILD THE EVIDENCE BASE

STAKEHOLDER & COMMUNITY ENGAGEMENT
GOVERNANCE

ACTION & PLAN DEVELOPMENT

Mayoral commitment
Establish core team
Strategic appraisal

Data collection
Climate risk assessment
GHG emissions inventory
ICA needs assessment

Vision setting
Scenario planning
Draft mitigation targets
Adaptation goal setting
Adaptation target setting

Action identification
Screening
Action prioritization and selection

Action definition
Implementation planning for top priority actions
Final mitigation scenario and targets
Final adaptation targets

Plan drafting
Monitoring plan
Climate action governance

CAP REVIEW

Review
Report
CLIMATE ACTION PLANNING

GET STARTED

BUILD THE EVIDENCE BASE

ACTION & PLAN DEVELOPMENT

Mayoral commitment
Establish core team
Strategic appraisal

Data collection
Climate risk assessment
GHG emissions inventory
ICA needs assessment

Strategy identification
Action selection
Action definition
Plan compilation

IMPLEMENTATION & MAINSTREAMING

ACCELERATING IMPLEMENTATION

MONITORING & EVALUATION

Implementation
Mainstreaming & integration
Financing

Monitoring
Evaluation
Reporting

STAKEHOLDER & COMMUNITY ENGAGEMENT

GOVERNANCE
02.

TOOLS & RESOURCES
## Climate Change Risk Assessment

<table>
<thead>
<tr>
<th>Title of Assessment</th>
<th>Comments / Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analisis de Riesgos Climaticos para Buenos Aires</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institution</th>
<th>IDOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2020</td>
</tr>
</tbody>
</table>

### Scope

<table>
<thead>
<tr>
<th>C40 CHECKLIST</th>
<th>Has the criteria been met?</th>
<th>REVIEWED BY: MARTINA (CITY ADVISER) AT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INTRODUCTION AND GENERAL CONTENT</td>
<td>NO</td>
<td>LIMITED</td>
</tr>
<tr>
<td>#Essential</td>
<td>Boundary of assessment is equal or greater than the city boundary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data sources are robust and clearly indicated</td>
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<tr>
<td></td>
<td>Stakeholders / relevant actors to input into the assessment are defined</td>
<td></td>
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<tr>
<td></td>
<td>Glossary is included</td>
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<tr>
<td></td>
<td>Leading/Coordinating team in the city clearly defined</td>
<td></td>
</tr>
<tr>
<td>#Best Practice</td>
<td>Goals and objectives of the assessment clearly defined in Introduction</td>
<td></td>
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<tr>
<td></td>
<td>Summary setting out the main findings included</td>
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### Context, Past Climatic Events and Trends

#### 8.1. Demographic and socio-economic context and key future trends

| #Essential | Overview of the city's contextual social & economic data, trends, projections provided | |
| #Best Practice | Population/demographics (e.g. age profiles, life expectancy, immigration) included | |
| | Socio-economic development (e.g. housing affordability, energy demand/ access, water demand/access, undernourishment, poverty, Social Progress Index etc.) status and trends presented | |
| | Future trends (e.g. emerging technologies, innovations and disruptors enabling transformational action) are explained | |

#### 8.2. Environmental context and projected trends

| #Essential | Description of administrative and physical geography as relevant to climate | |

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Interdependencies

Extreme precipitation
- Crop failure
- Damage to facilities and/or service disruption from flooding
- Data center flooding
- Water supply contamination
- Stormwater system overload
- Damage to facilities and/or service disruption from flooding

Food
Energy
Transportation
Telecommunication
Water
Wastewater
Solid waste
Commuters and freight disruption
Public health consequences
Economic consequences
Environmental contamination
Rapid Risk assessment

1. Determine the relevant climate hazards in a city
2. Select relevant climate indicators that provides evidence of how these hazards express themselves
3. Analyse historical trends and events for these hazards
4. Analyse future projections for these hazards, for different scenarios & time horizons

2.1. Determine the relevant city sectors
2.2. Analyse non-climatic trends, e.g. demographic and socio-economic
2.3. Assess the different (spatial) impacts related to the hazards, positive or negative
2.4. Prioritise the identified impacts with city stakeholders

3.1. Assess risk, looking at severity and probability of impacts, with the city stakeholders
3.2. Summarise and communicate the key risks
3.3. Assess the Adaptive capacity
**Synergies**: Actions that reduce both carbon emissions and climate risk

**Piggybacking**: Actions that are complimentary when designed and/or implemented together.

**Mal-investment**: Actions that can be undone or rendered less effective by the effects of climate change if they are not sufficiently resilient

**Trade-offs**: Actions with contrary effects on mitigation and adaptation

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**Adaptation and Mitigation Interaction Assessment Tool**
Monitoring & evaluation
The C40 Knowledge Hub

Cutting-edge insights and practical resources from leading climate cities.

https://www.c40knowledgehub.org