Module 2.5: Setting a mitigation vision and sectoral targets
What you will learn in this module:

- Criteria for target setting
- Why are targets useful?
- What is a mitigation vision?
- What does a mitigation vision look like?
- What are mitigation sector targets?
- What do mitigation sector targets look like?
- Additional important considerations for target setting
The GCoM defines 8 criteria for target setting:

- Boundary
- Target type
- Target Year
- Base Year
- Ambition
- Units
- Transferable emissions units
- Conditional components
Boundary

• The emissions boundary shall be consistent with all emissions sources included in the GHG emissions inventory, with the possibility to exclude sources that are not controlled by the local government.

• In case that the target boundary does not align with the inventory boundary, any additions or exclusions shall be specified and justified.
Local governments shall use one of the following four target types:

- base year emissions target
- base year intensity target
- fixed level target
- baseline scenario target
Emissions target types: Base year emissions

Absolute reduction relative to base year

E.g. To reduce global GHG emissions by 72% below 2010 levels by 2050.

2010 is the base year
2050 is the target year

Emissions target types: Base year intensity

Emissions intensity is the average emissions per unit of another indicator, e.g. emissions/person, emissions/dollar spent in the year, emissions/kWh consumed. It tries to explain what the carbon footprint is for each resident in the city or for the occurrence of a particular activity in a given year. Reduction in emissions intensity (emissions per capita/unit GDP/energy consumption)

For example:

To reduce GHG emissions per capita by 30% by 2030 compared to 1990 levels
**Emissions target types: fixed-level**

Reduction to an absolute level

E.g. carbon neutrality: net zero carbon dioxide emissions. This is where emissions are reduced to a level where it no longer adds to the stock in the atmosphere.
Emissions target types: baseline scenario

Percentage reduction from an estimated “business-as-usual” scenario
Technically complex
Drivers of emissions: economic / population growth

Figure 11.4 Example of a baseline scenario goal
Emissions target types: baseline scenario

Source: City of Cape Town. Energy2040.
## Emissions target types: summary

<table>
<thead>
<tr>
<th>Goal type</th>
<th>Example</th>
<th>Minimum inventory need</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base year emissions goals</strong></td>
<td>London (UK): By 2050 60% GHG emissions reduction on 1990 levels</td>
<td>Inventory for 1990 and 2025</td>
</tr>
<tr>
<td><strong>Fixed level goals</strong></td>
<td>Carbon neutral is another type of fixed level goal type. Melbourne (Australia) set a target to achieve zero net carbon emissions by 2030, and plans to achieve the goal through internal reductions and purchasing offsets.</td>
<td>Inventory for 2020. In the case of Melbourne, current inventory required to determine quantity of offsets necessary to cover remainder of emissions, as well as GHG inventory in 2020.</td>
</tr>
<tr>
<td><strong>Base year intensity goals</strong></td>
<td>Belo Horizonte (Brazil): 20% GHG emissions reduction per capita until 2030 from 2007 levels</td>
<td>Inventory for 2007 and 2030</td>
</tr>
<tr>
<td></td>
<td>China is the major country adopting GHG emissions reduction per unit of GDP goal for cities. For example, Beijing: 17% reduction per unit of GDP in 2013 from 2010 levels.</td>
<td>Inventory for 2010 and 2015</td>
</tr>
<tr>
<td><strong>Baseline scenario goals</strong></td>
<td>Singapore pledged to reduce GHG emissions to 16% below business-as-usual (BAU) levels by 2020 if a legally binding global agreement on GHG reductions is made. In the meantime, Singapore started implementing measures to reduce emissions by 7% to 11% of 2020 BAU levels.</td>
<td>Inventory for 2020 and a projected BAU inventory for 2020</td>
</tr>
</tbody>
</table>

• The target year shall be the same as the target year adopted in the Nationally Determined Contribution (NDC).

• Cities that set a target year beyond 2030 shall include an interim target before 2030.
Base Year

- The base year shall be the same as the base year used in the NDC.
- Where the base year is different from the NDC (e.g. due to a lack of data availability), this shall be justified.
Ambition

- At a minimum, the target shall be as ambitious as the unconditional components of the NDC.

- Local governments should set targets that are more ambitious than the NDC.
Units

- Targets shall be reported as a percentage (%) reduction from the base year or scenario year.

- The absolute emissions in the target year(s) in metric tonnes CO2-eq shall also be reported.
Transferable Emissions Units

- The use of transferable emissions units is only permissible when a city’s target ambition exceeds the NDC.

- Where this is the case, the local government shall report the target, with and without the transferable emissions units, as well as identify the source of the transferable emissions units.
Conditional Components

- Conditional components include where cities set a stretch target, or where actions are identified for other key stakeholders beyond that which they have committed to themselves (for example, where a local government assumes a more ambitious reduction in the carbon-intensity of the national electricity grid than that committed to in the NDC or official government policy), if possible.

- Any conditional components included in the target shall be identified. Where possible the conditional components should also be quantified.
Mitigation targets should follow ‘SMART’ target principles
Why are targets useful?

• Local contribution to global mitigation and national targets
• Leadership, political pragmatism, technical functions of sector-specific role in broader targets
• Identify specific sources and incentivise solutions
• Link long-term GHG emissions reduction targets and strategies to nearer-term reductions and action. This is also useful for communications and public perception because it is more concrete

Source: C40 Cities. Twitter feed.
Under the mitigation pillar, all local governments and cities are required to set and report city-wide emission reduction targets.

A mitigation vision is a long-term vision which indicates the direction that the city wishes to follow.
What is a mitigation vision?

Setting a longer-term vision is considered a key success factor of SEACAPs as it clearly shows the local authority’s political commitment and gives a strong message to citizens and stakeholders on how the local authority wants to develop in the future, paving the way for more substantial investment in sustainable infrastructure.
What does a mitigation vision look like?

Example:
“Bobo-Dioulasso intends to achieve a reduction off Business-As-Usual of 10% by the year 2030, through dedicated emissions reduction targets and actions for the energy, waste and transport sectors”.

This city-wide target is equivalent to a reduction of 161.12 ktCO2e off the BAU scenario by 2030.
In addition to setting a city-wide emissions reduction target or vision, cities can also set individual sector emissions reduction targets which collectively contribute to the overarching city vision.

What are sectoral targets?
What does a sectoral target look like?

Example from Bobo-Dioulasso

Energy: 17.36% or 148.33 ktCO2e off business-as-usual by 2030;

Transport: 0.63% or 4.038 ktCO2e off business-as-usual by 2030;

Waste: 4.45% or 8.756 ktCO2e off business-as-usual by 2030.

*Base year is set at 2020
Additional important considerations for target-setting

- Principles for setting and monitoring targets
- Scope of targets
- Key performance indicators (KPIs)
- Process of target setting
- Tools for mitigation target-setting
Principles for setting and monitoring targets from the Mitigation goal standard:

- **Relevance**: Targets meet the needs of the city and its decision makers.

- **Completeness**: The scope of the targets includes all GHG emissions in the inventory.

- **Consistency**: Methods, data and assumptions for measuring GHG emissions are consistent throughout the goal period, from baseline to target year.

- **Transparency**: Reporting on the target is clear and transparent throughout the target period so that progress can confidently be tracked.

- **Accuracy**: Data are sufficiently accurate to give stakeholders and decision makers reasonable confidence that the reported information is credible.
Defining the scope of targets

Scope of the target: Which GHGs are included?

Source: Green and Growing. What Are Greenhouse Gases, Main Sources and Climate Impact?
Key Performance Indicators (KPIs)

Examples of KPIs

<table>
<thead>
<tr>
<th>Tier 2: Outcome indicators related to emissions drivers</th>
<th>Economic</th>
<th>Energy</th>
<th>Spatial</th>
<th>Ecological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon emissions (tCO2-eq) per unit of Economic GVA (Gross Value Added)</td>
<td>None set</td>
<td>130.1 tCO2-eq per unit of GVA (2012)</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Indoor/Outdoor electricity for lighting (% of total)</td>
<td>Target: 100% (2025)</td>
<td>Baseline: 90.2% (2011)</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Municipal energy consumption (GJ)</td>
<td>None set</td>
<td>51 645 Giga Joules (GJ) (2012)</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>80% reduction (80% of total)</td>
<td>None set</td>
<td>2 247 378</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>LED streetlights (% of total)</td>
<td>None set</td>
<td>No data yet available*</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Proportion of renewables to total primary electricity supply (%)</td>
<td>None set</td>
<td>No data yet available*</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Community electricity consumption (GJ) (excluding municipal operations)</td>
<td>None set</td>
<td>2 247 378</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Change in modal split between private &amp; public transport use</td>
<td>None set</td>
<td>No data yet available*</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Change in average residential density per square kilometre, within &amp; without the urban edge (Dwelling units per hectare)</td>
<td>None set</td>
<td>No data yet available*</td>
<td>None set</td>
<td>None set</td>
</tr>
<tr>
<td>Change in hectares of ecological infrastructure under</td>
<td>None set</td>
<td>No data yet available*</td>
<td>None set</td>
<td>None set</td>
</tr>
</tbody>
</table>

Participatory processes

- Projections
- Forums, surveys
- Data accuracy and accountability


Consider the following approaches to increasing participation through the process:

- Town hall meetings
- Posters
- Role-playing
- Community mapping walks
- Focus group discussions
Tools to support mitigation target-setting

Tools

ClearPath

COMPACT of MAYORS

CURB Tool
Climate Action for Urban Sustainability

CLEAN ENERGY EMISSION REDUCTION TOOL
Other important considerations for target-setting

1. Changing baseline inventories may be necessary as data availability improves and new data emerge, to enable accurate monitoring of targets.

2. Robust data collection systems need to be established to monitor mitigation targets, and the availability of data and capacity for monitoring should be considered when developing these targets. For example, base year targets work better for under-capacitated cities.

3. Conditionalities: for cities with very few resources, developing targets that are conditional on external support is an option, where this is aligned with the relevant NDC.

4. Stakeholders need to be engaged on terms that are materially relevant to them, e.g. exposure to climate and transition risk.
Other important considerations for target-setting

5. Targets must be set based on the local context and availability of data.

6. Given the requirements for the above target types and their suitability for different baselines, cities will be able to determine which one is most useful, and realistic.

7. However, the target (in terms of proportional contribution to the national-scale) MUST be at least as ambitious as the Nationally Determined Contribution. The extent to which emissions are either reduced or limited needs to exceed that of the national emissions targets on a proportional basis.
Please note:
This module has been designed for local government officials and partners who are developing their SEACAP.

This module is one component of the SEACAP Toolbox. For the full Toolbox, please visit: https://comssa.org/
CoM SSA SEACAP Toolbox

Published by:
The Covenant of Mayors in Sub-Saharan Africa (CoM SSA)
c/o Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Author:
ICLEI Africa

For more information contact: helpdesk@comssa.org
Publication date: November 2020
The full SEACAP Toolbox is found here: https://comssa.org/

© 2020 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. All rights reserved. Licensed to the European Union, the German Federal Ministry for Economic Cooperation and Development. The SEACAP Toolbox has been produced with the financial support of the European Union and the German Federal Ministry of Economic Cooperation and Development (BMZ). Its content is the sole responsibility of the authors and does not necessarily reflect the views of the European Union and the German ministry.
CoM SSA programme is jointly implemented by:

CoM SSA programme is co-funded by:

The CoM SSA programme is co-implemented by [Name and abbreviation of the partner] and, in cooperation with other CoM SSA partners, Secretariat and, Technical Helpdesk. This publication was produced with the financial support of the European Union, [the German Federal Ministry for Economic Cooperation and Development, and the Spanish Agency for International Development Cooperation]. Its contents are the sole responsibility of the [MSO] and, do not necessarily reflect the views of the European Union [or the other co-funder].
Thank you

Find out more: http://comssa.org

Contact: helpdesk@comssa.org