

NET ZERO CITIES



EU MISSION PLATFORM

CLIMATE NEUTRAL AND SMART CITIES



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Climate Budgeting

A Joint Webinar by NetZeroCities, C40 Cities, and Climate-4-CAST

21.10.2025



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Which city are you representing?

Join at
slido.com
#7178 117



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Agenda of day:

Time	
14 :00	Welcome and Introductions <i>Anna Huttunen, NetZeroCities</i>
	How Oslo pioneered the Climate Budget – and how C40 is taking it global <i>Borge Håmsø, City of Oslo and Astrid Johanne Svensson, C40</i>
	Introduction to Climate-4-CAST and key challenges and takeaways after two years of implementation in six pilot cities <i>Donald Alimi, Climate-4-CAST Project</i>
14:20	City examples on climate budgeting Case 1 City of Uppsala, Maria Thomten Case 3 City of Paris, Mélanie Baudin and Tom Leclercle Case 2 City of Tampere, Hanna Meriläinen
15:10	Discussion and Q&A
15:25	Closing and next steps





How Oslo pioneered the Climate Budget – and how C40 is taking it global

Borge Håmsø, City of Oslo

Astrid Johanne Svensson, C40



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Oslo

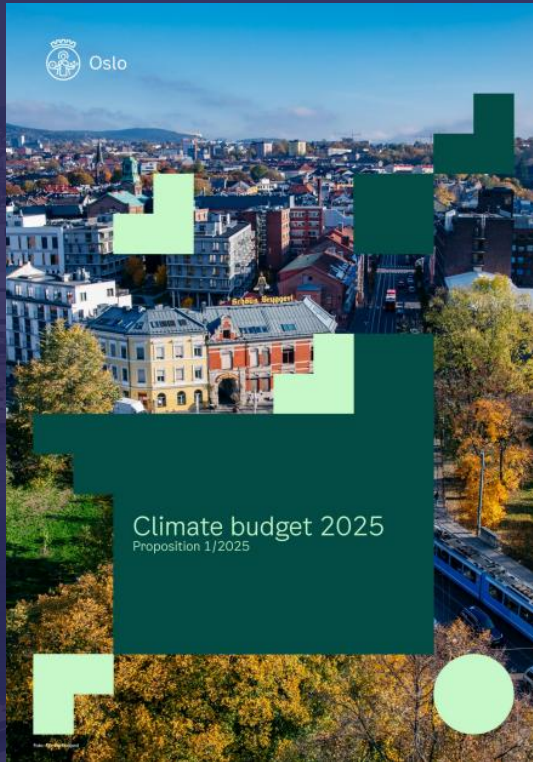
Oslo's Climate budget

Borge Hamso

Climate Agency, City of Oslo

The Challenge

- ▶ The necessary actions and changes weren't happening at the scale or speed required
- ▶ Fragmented division of responsibility across departments and agencies



Climate budget

A governance tool that structures and organizes how we get from policy targets and words, to actions and results

A tool for change

Adopting a climate budget was our way to mainstream the climate work and go beyond actions plans.

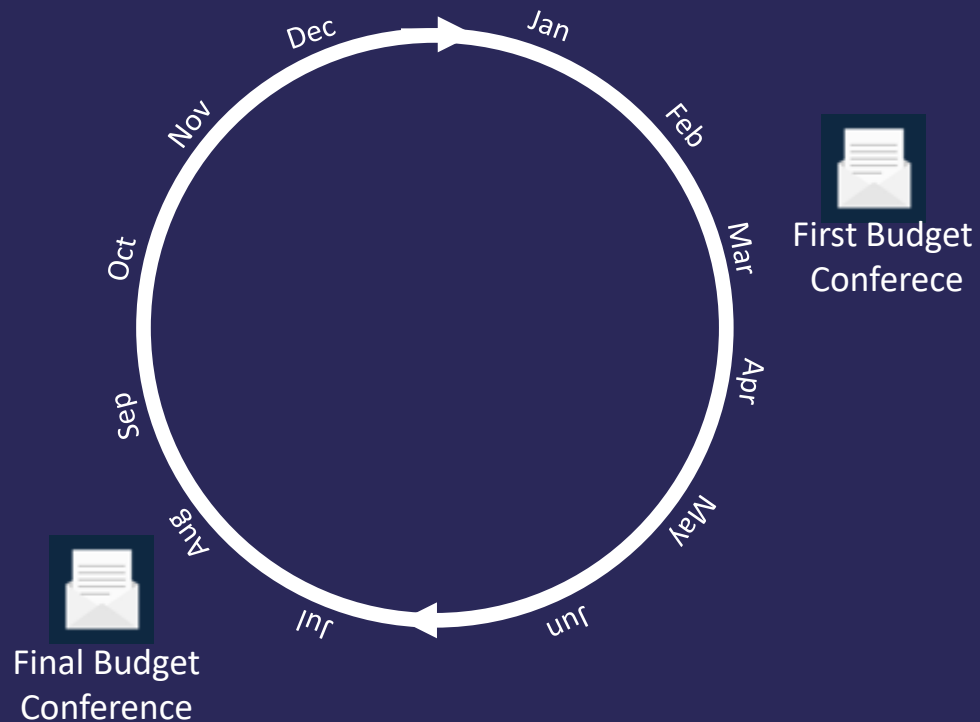
The climate budget doesn't reinvent the wheel, it simply It embeds climate into an existing decision-making process, the city budget

Perhaps the most important aspect of the climate budget process for Oslo is that every year, it provides an arena for ratcheting up efforts.



The climate budget

- a governance tool to reach our climate goals



- ▶ Integrated in the ordinary budget
- ▶ Shows measures for emission reductions
- ▶ Delegates responsibility
- ▶ Part of the ordinary reporting system

The climate budget

- a governance tool to reach our climate goals

Emission sector	Measures/instruments	Effect 2025	Effect 2028
Road traffic	Zero-emission (incl. biogas) and transport-efficient delivery of goods and services on behalf of the municipality	8 600 tons CO2eq.	9 000 tons CO2eq.

- ▶ Integrated in the ordinary budget
- ▶ Shows measures for emission reductions
- ▶ Delegates responsibility
- ▶ Part of the ordinary reporting system



The climate budget

- a governance tool to reach our climate goals

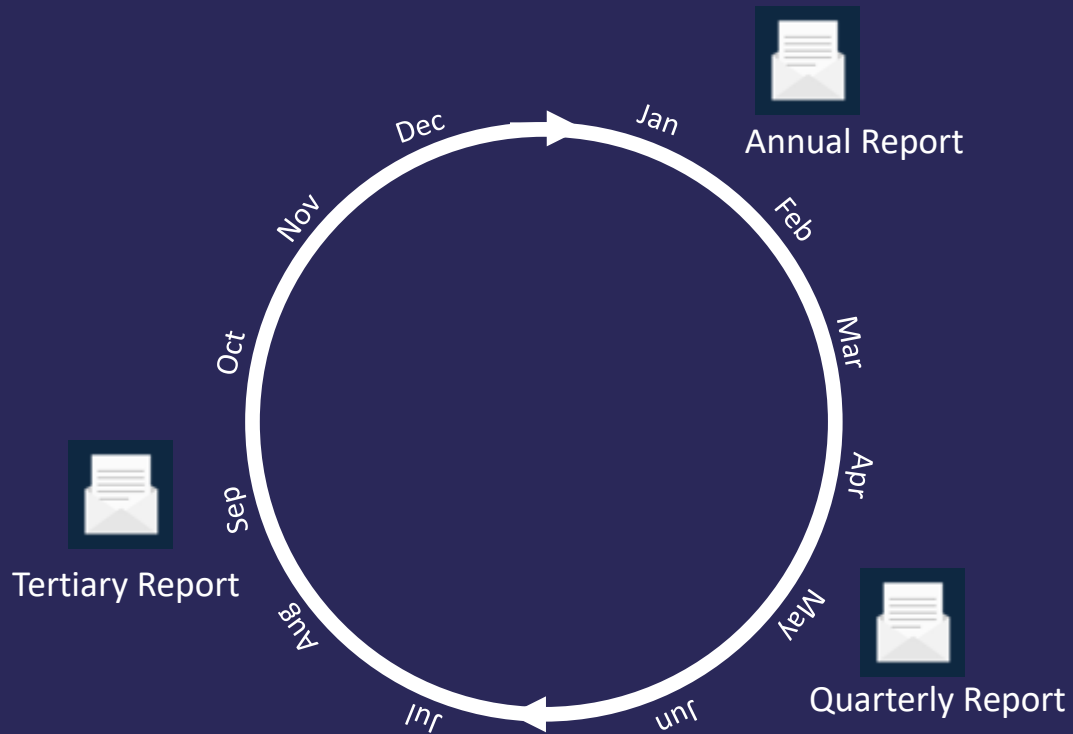
Emission sector	Measures/instruments	Effect 2025	Effect 2028	Responsible entity
Road traffic	Zero-emission (incl. biogas) and transport-efficient delivery of goods and services on behalf of the municipality	8 600 tons CO2eq.	9 000 tons CO2eq.	All*, Agency for Improvement and Development*, Climate Agency

- ▶ Integrated in the ordinary budget
- ▶ Shows measures for emission reductions
- ▶ Delegates responsibility
- ▶ Part of the ordinary reporting system



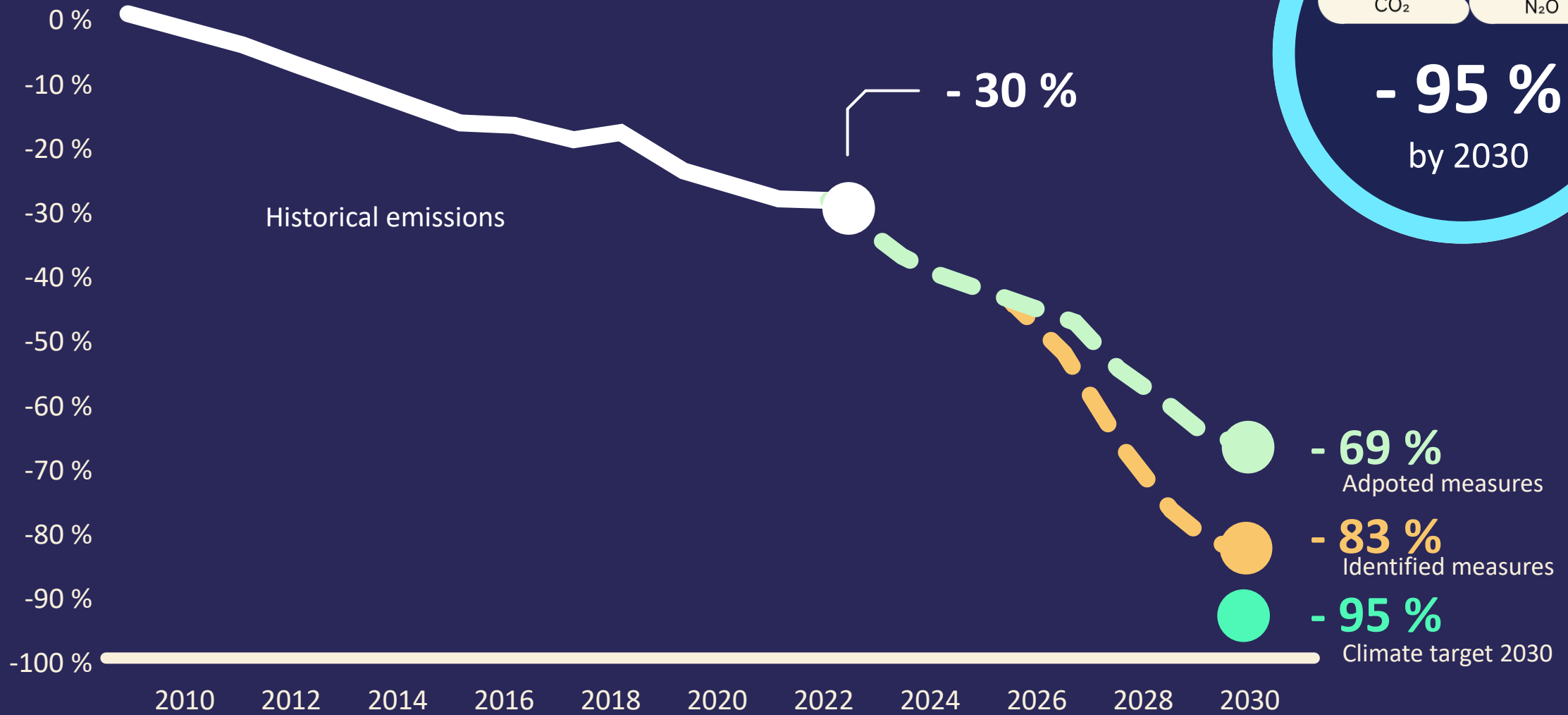
The climate budget

- a governance tool to reach our climate goals



- ▶ Integrated in the ordinary budget
- ▶ Shows measures for emission reductions
- ▶ Delegates responsibility
- ▶ Part of the ordinary reporting system

Direct emissions

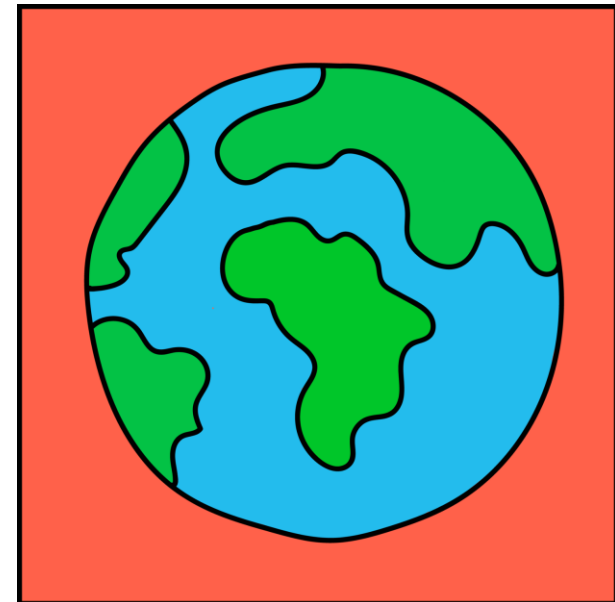
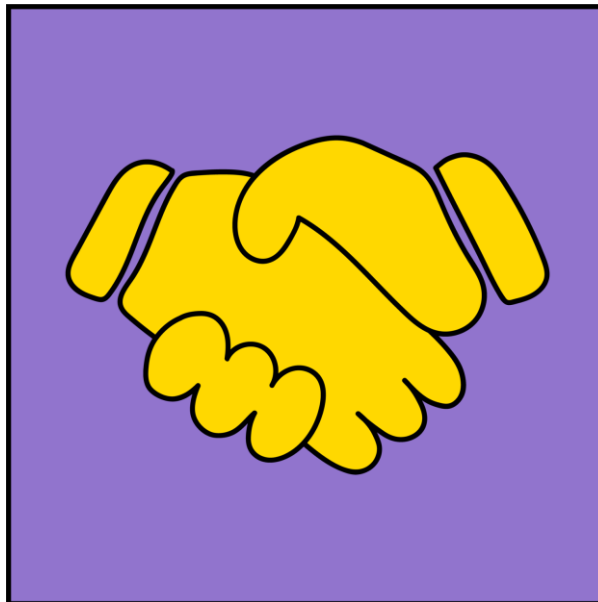
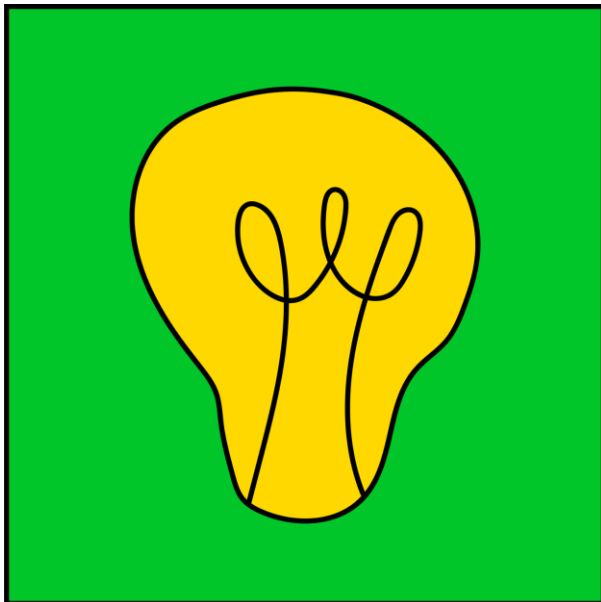


*Some reflections on climate budget and work with the
NZC climate contract*

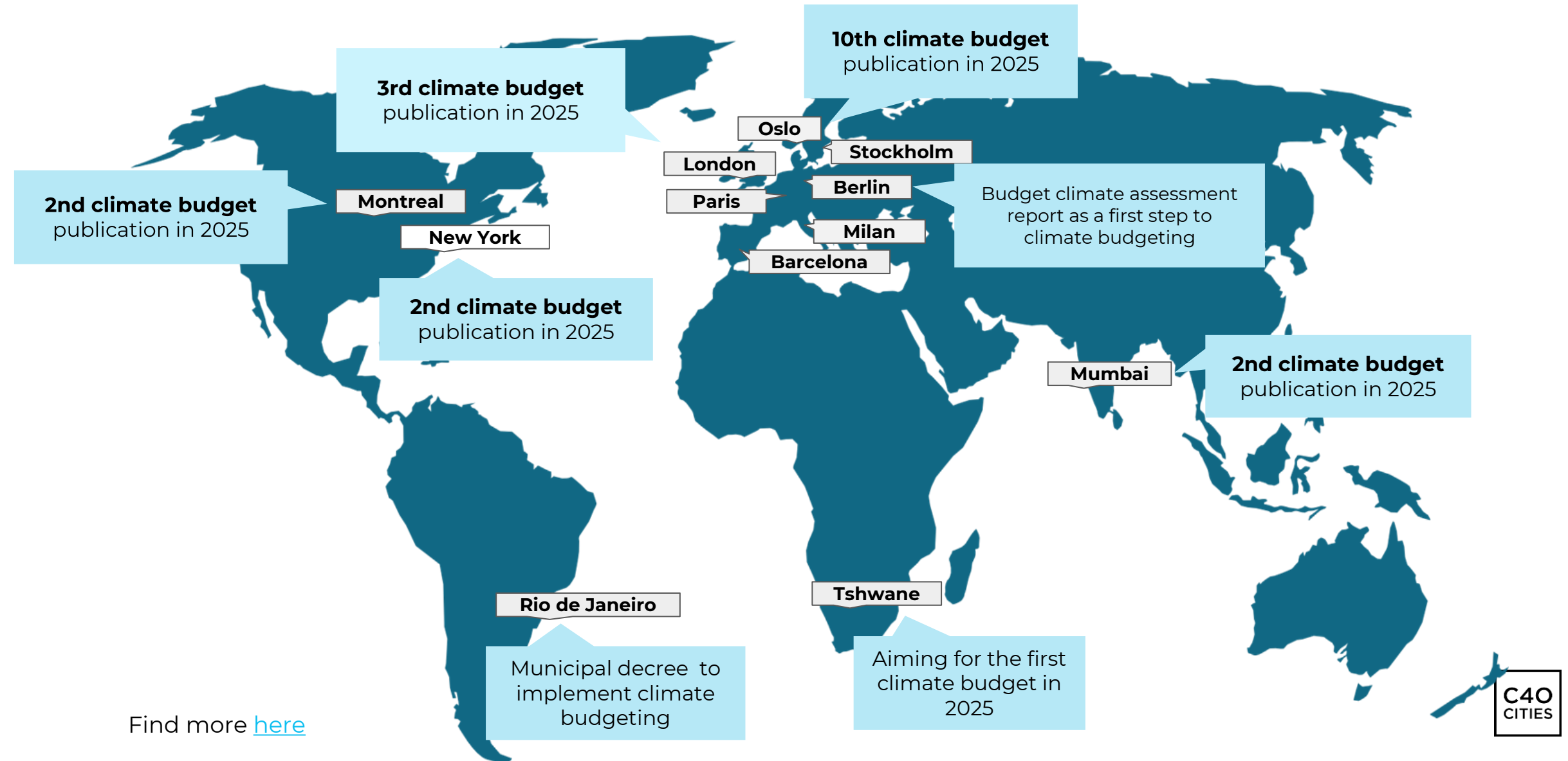


Climate budgeting defined

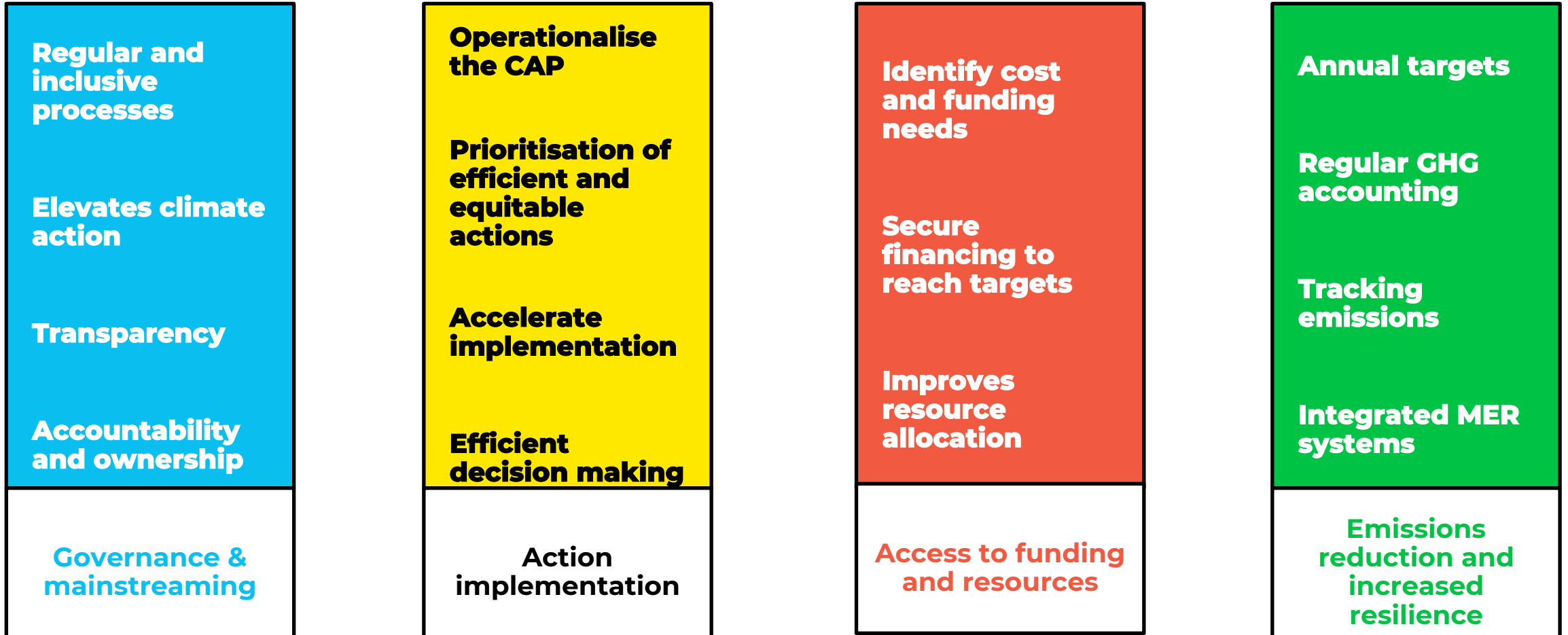
Climate budgeting is a **governance system** that mainstreams climate commitments and considerations into decision-making on policies, actions and budget through integrating climate goals and targets from the Climate Action Plan (CAP) in the financial budget process and assigning responsibility for implementation, monitoring, evaluation and reporting across city government.

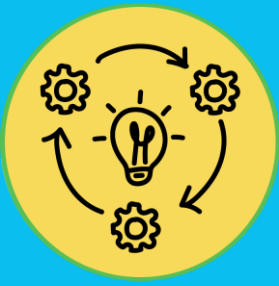


Climate mainstreaming in city budgets



What are the impacts of climate budgeting?





Leadership Standard B

By 2030 cities have established **comprehensive governance structures that ensure climate targets and considerations are integrated across decision-making, including introducing climate budgeting**

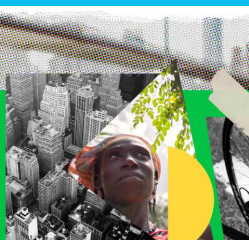
(c)

City Climate Budget adopted by 2030, compatible with the C40 Cities Climate Budgeting Framework, with annual progress reports demonstrating integration into existing governance and budget structures

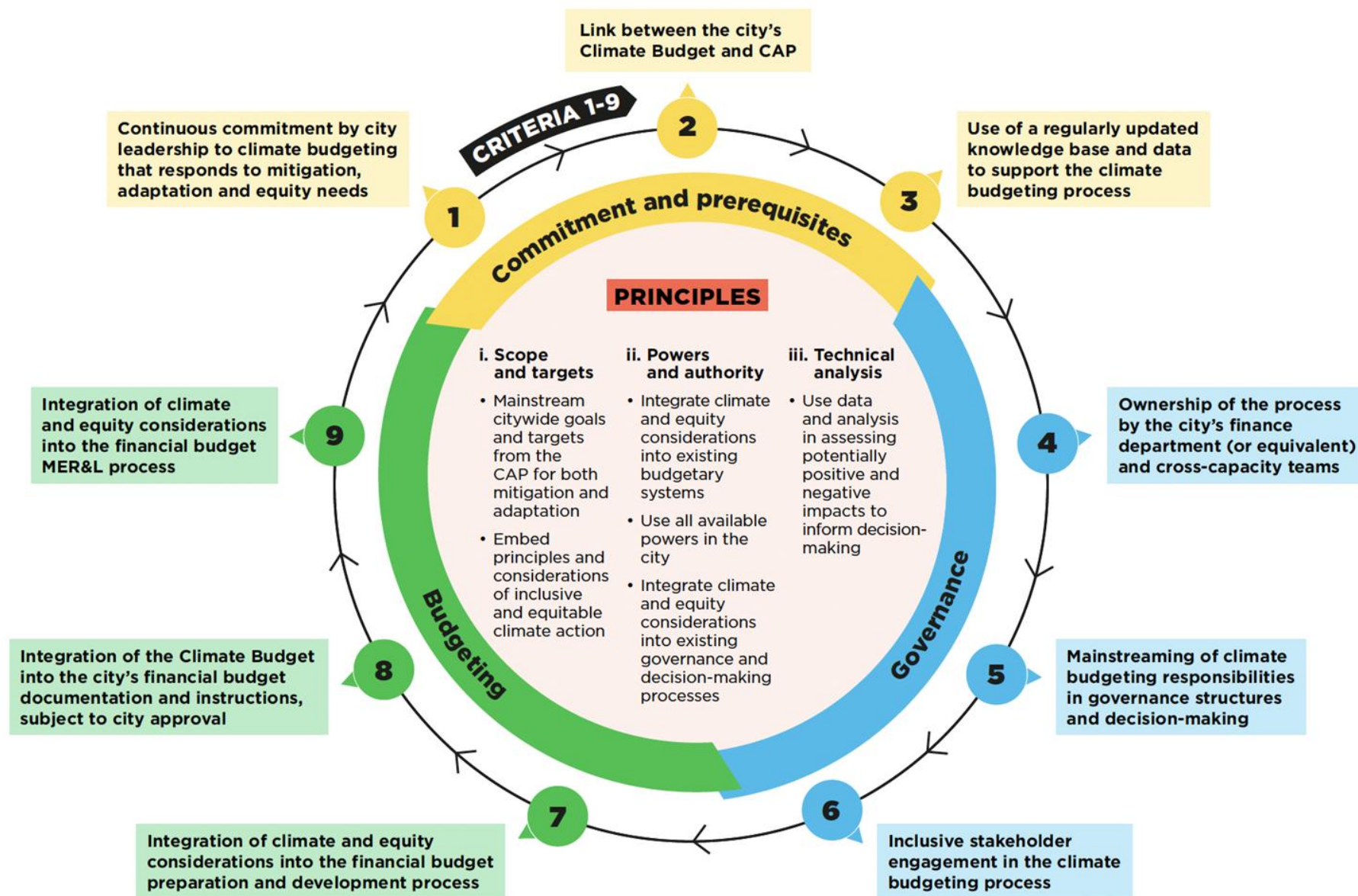
Climate Budgeting Framework

C4O CLIMATE BUDGETING FRAMEWORK

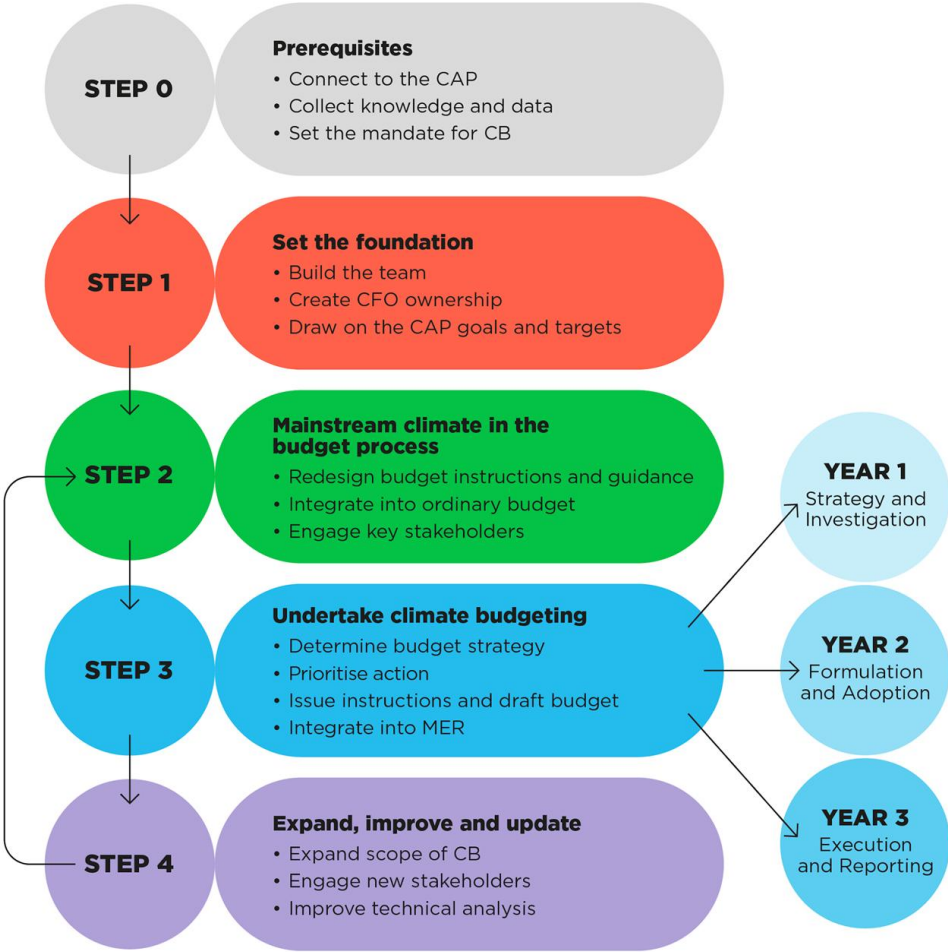
A new standard for
climate governance



C4O'S CLIMATE BUDGETING FRAMEWORK PRINCIPLES AND CRITERIA



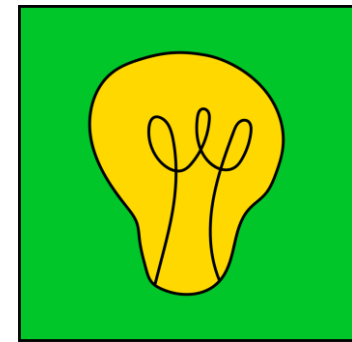
The step-by-step guide



QR code to the guide



Climate budgeting courses



The courses are:

- **self-paced**
- **Interactive** – filled with discussions and activities
- filled with **case studies**, so cities can learn from real challenges and problem-solving experiences
- both theoretical and practical: **allows cities to translate learnings to actionable steps**

	Leaders course	Practitioners course
Title	<u>From Vision to Impact: Climate Budgeting for Leaders</u>	<u>Climate Budgeting: Practical Approaches for Public Servants</u>
Objective	to understand the what and why in ~ 3.5 hours	to understand the what, why, and how in ~ 5 hours
Target audience	• Senior officials at the Mayor's office • CFO/city's finance department (or equivalent) • Environmental department leaders • Leaders from relevant departments	• Cross-departmental team members • Leaders wanting to build a further more in depth understanding of CB

Learn more through C40 knowledge resources

A STEP-BY-STEP GUIDE TO CLIMATE BUDGETING



[Step-by-Step Guide to Climate Budgeting](#)

C40 CLIMATE BUDGETING FRAMEWORK

A new standard for climate governance

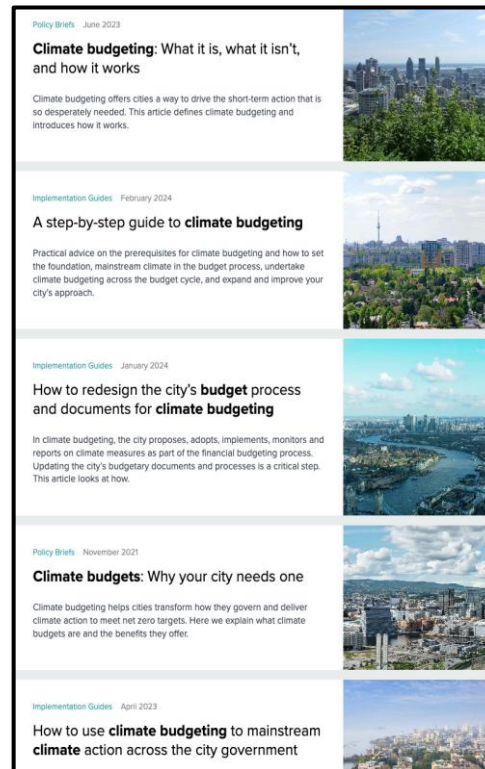


[C40 Climate Budgeting Framework](#)

HANDBOOK ON GHG EMISSIONS QUANTIFICATION FOR CLIMATE BUDGETING



[Handbook on GHG quantification](#)



[C40 Knowledge Hub](#)

C40
CITIES



Introduction to Climate-4-CAST and identified key challenges and takeaways on climate budgeting

Donald Alimi, Climate-4-CAST Project



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Introduction to Climate-4-CAST and key challenges and takeaways after two years of implementation in six pilot cities

Climate Budgeting: A Joint Webinar by NetZeroCities, C40 Cities, and Climate-4-CAST | Online | 21 October 2025

Donald Alimi, HafenCity University Hamburg



Interreg
Baltic Sea Region



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the European Union



ENERGY TRANSITION

Climate-4-CAST

About Climate-4-CAST

The project provides **local public authorities** with an open-source **Climate Action Decision Support (CADS) Tool for climate budgeting**. The tool helps cities to visualise and analyse various action scenarios for meeting climate goals to better plan public budgets with climate neutrality measures and monitor results of their implementation.

Duration

11/2023 – 10/2026

Budget

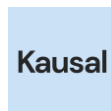
3.77 M €, including
EU funding 3.02 M €

hcu HafenCity
Universität
Hamburg

 **TAMPERE**

 CITY OF
AARHUS

 RIGA

 **Kausal**

 UPPSALA
UNIVERSITET

UBC UNION
OF THE BALTIC
CITIES
SUSTAINABLE CITIES
COMMISSION

 CITY OF
ÖSTERSUND
STAAREN TJIELTE

 **BYTOM**

 **NORDERSTEDT**
Zusammen. Zukunft. Leben.

The Challenge and Our Approach

- **Context:** Achieving EU's 2050 climate neutrality goal requires cities to embed climate action into everyday governance and budgeting processes.
- **Challenge:** Local authorities often struggle to turn climate commitments into action due to budget constraints, limited capacity, and siloed decision-making.
 - Climate budgeting offers a structured approach, but implementation remains a challenge.
- **Solution:** Climate-4-CAST develops the CADS Tool — an open-source, decision-support platform that helps cities to strengthen climate budgeting processes.

FINAL OUTPUT

- Open-source Decision-Support Tool for climate budgeting (*tool code package*)
- Guide on the Tool integration in local climate and fiscal governance processes (*operationalisation guidelines*)

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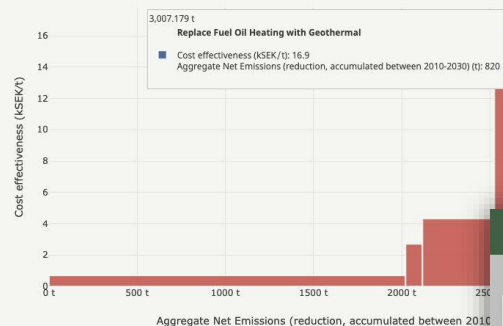
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ENERGY TRANSITION

Climate-4-CAST

How the CADS Tool Works



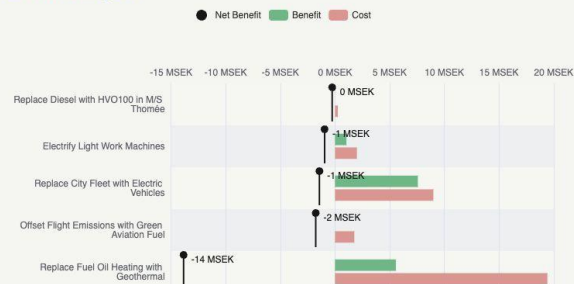
Stationary
Replace Fuel Oil Heating with Geothermal →

Aggregate Net Emissions (reduction, accumulated between 2010-2030)
820 t

Aggregate Net Price
13,900 KSEK

Cost effectiveness
16.9 KSEK/t

Cost-benefit analysis



Emissions forecast

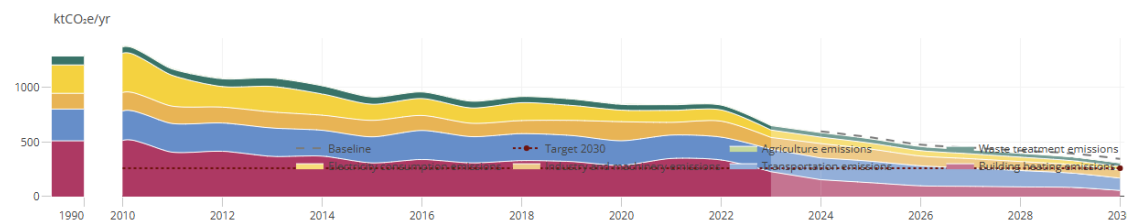
Net emissions

2010 - 2023: Measured 2024 - 2030: Scenario forecast (Custom)

Scenario forecast 2030
313 ktCO₂e/year

Change 2010 - 2030
-77 %

Timeseries Table Details



Subsectors

Building heating emissions

Scenario forecast 2030
55.7 ktCO₂e/yr

Change 2010 - 2030
-89%

Transportation emissions

Scenario forecast 2030
113 ktCO₂e/yr

Change 2010 - 2030
-58%

Industry and machinery emissions

Scenario forecast 2030
75.4 ktCO₂e/yr

Change 2010 - 2030
-55%

Electricity consumption emissions

Scenario forecast 2030
31.3 ktCO₂e/yr

Change 2010 - 2030
-91%

Waste treatment emissions

Scenario forecast 2030
31.6 ktCO₂e/yr

Change 2010 - 2030
-45%

Agriculture emissions

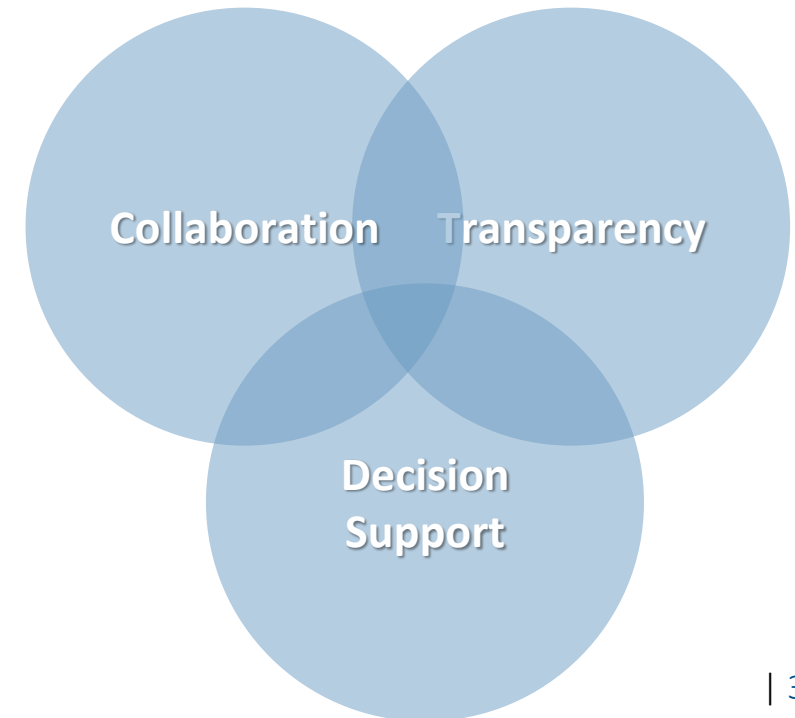
Scenario forecast 2030
6.2 ktCO₂e/yr

Change 2010 - 2030
-16%

What We've Learned So Far

Beyond Data Management: Three Key Functions

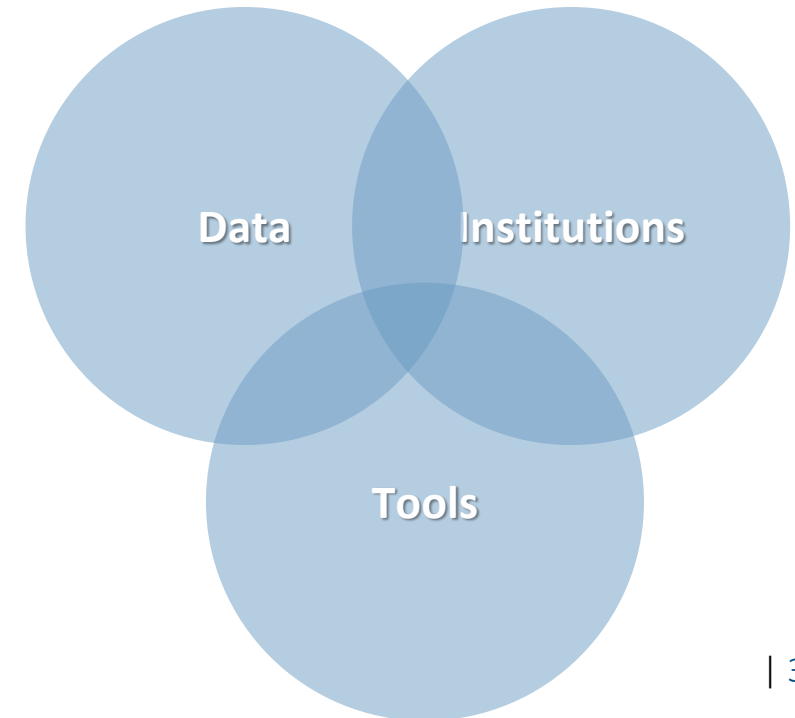
- **Breaks silos** – connects departments and data
- **Adds transparency** – links cost ↔ emissions
- **Supports decisions** – informs priorities and scenarios



Key Challenges

Practical Challenges Mirror Governance Realities

- Data gaps & capacity limits
- Political timing & competing priorities
- Need for user-friendly tools, integrated workflows





Emerging Success Factors

- ✓ Political and administrative commitment
- ✓ Joint ownership across departments
- ✓ Clear procedures within budget cycles
- ✓ A learning, iterative mindset

Leadership

Collaboration

Procedures

Learning

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ENERGY TRANSITION

Climate-4-CAST

What's Next

- CADS tool code & guidelines → final version in April 2026
- Climate Budget training for local authority professionals (online) → from Dec 2 (webinar)

UBC TALKS



**Climate budget concept
and tools**

2 December 2025
9.30–11.00 CET / 10.30–
12.00 EET



[ubc-sustainable.net/news/
climate-budget-training](https://ubc-sustainable.net/news/climate-budget-training)

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ENERGY TRANSITION

Climate-4-CAST

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REM Consult

Katharina Paetz (paetz@rem-consult.eu)

Thank you for your attention!



Climate-4-CAST is a co-funded project by the Interreg Baltic Sea Region Programme 2021-2027



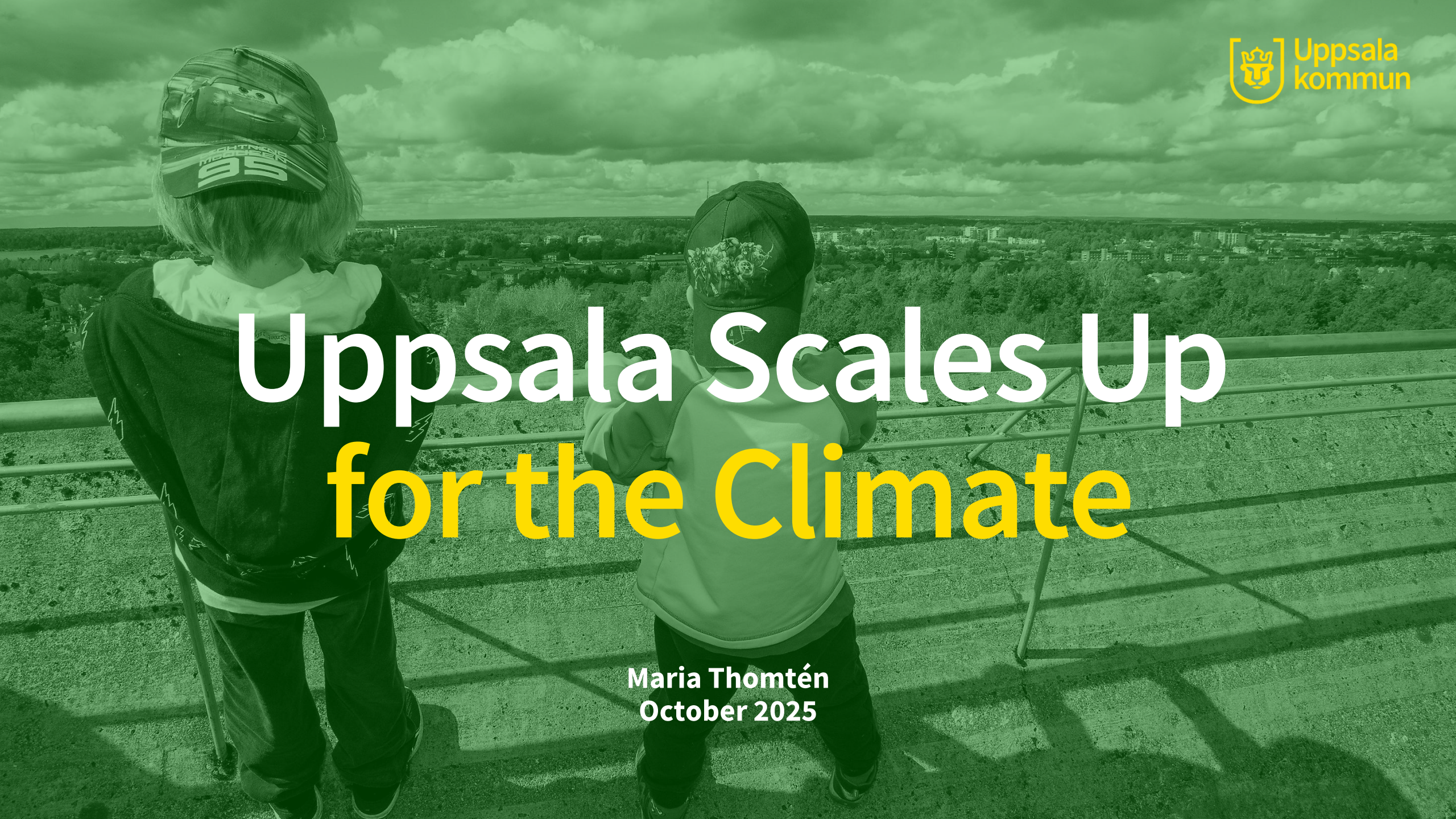


CASE

City of Uppsala



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A photograph of two children standing on a high vantage point, looking out over a city. The child on the left is wearing a dark hoodie and a cap with a Lightning McQueen design. The child on the right is wearing a light-colored hoodie and a cap with a cartoon design. They are standing behind a metal railing. The city below is densely packed with buildings and trees, and the sky is filled with clouds. The entire image has a green tint.

Uppsala Scales Up for the Climate

Maria Thomtén
October 2025

240 000 inhabitants
2 182 km²

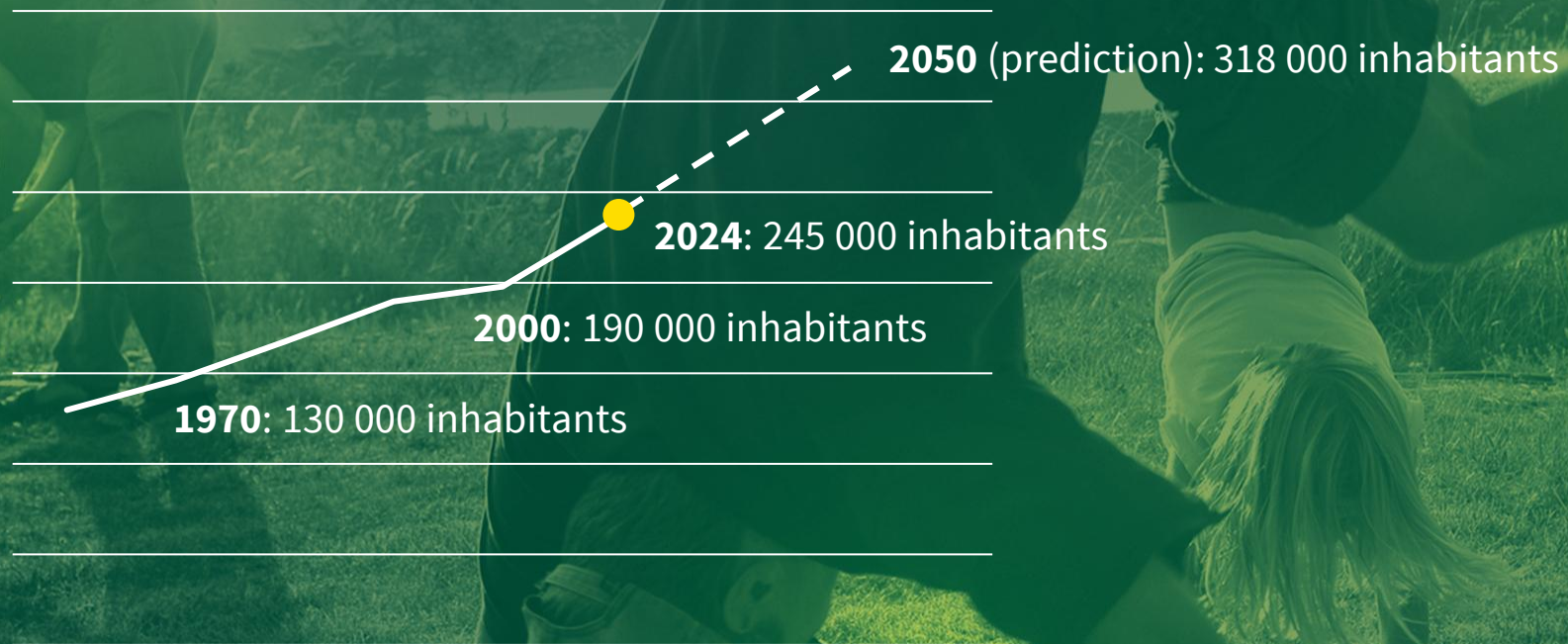
**Sweden's fourth
largest municipality
and city**

**Sweden's largest
rural municipality**

Two major universities

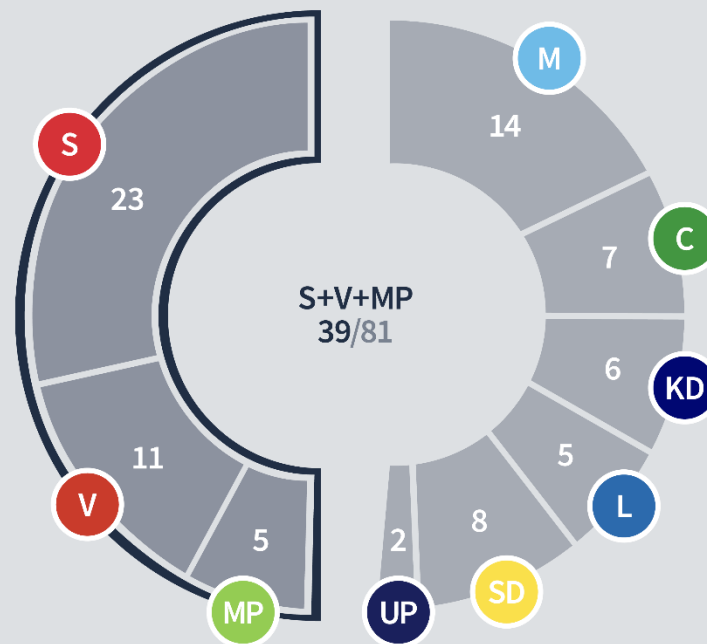
Life science hub

Uppsala's **demographic** development



The local government

Term of office 2022–2026



2010–2014
Majority rule
consisting of M, FP, KD, C
(41 of 81 seats)

2014–2018
Majority rule
consisting of S, MP, V
(42 of 81 seats)

2018–2022
Minority rule
consisting of S, L, MP
(35 of 81 seats)

Uppsala scales up for the climate

Climate ambition and targets

Economy

Uppsala will ensure a robust
economy and safeguard our welfare

Jobs

Uppsala will foster a thriving business
community and generate more jobs

Climate

Uppsala shall lead the climate transition

Safety

Uppsala shall become safer with
equal living conditions



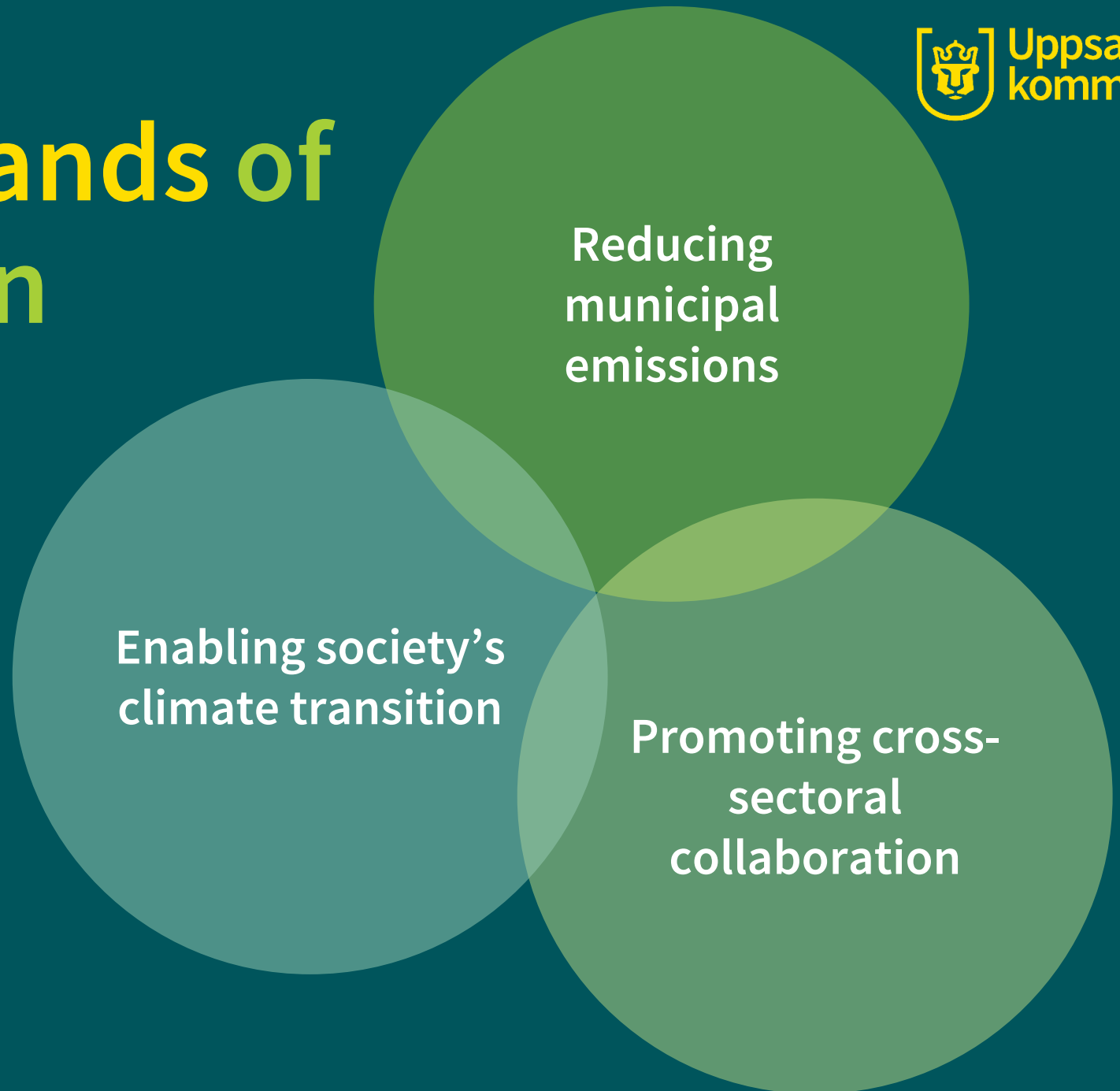
Overall goals of Uppsala's Environmental and Climate Programme

Toxin-free Environment 2050 and Sustainable Resource Flows

Climate-Neutral Uppsala by 2030 for
a Climate-Positive Uppsala by 2050 at the latest

A Climate- Adapted Uppsala 2040

The three strands of climate action



Embedding a Climate Budget in Municipal Governance

The Uppsala Approach

A political assignment

“The municipality shall activate a climate budget for the municipal organization and for the municipality as a geographic area, in order to continuously monitor and take measures that reduce the municipality’s climate impact.”

— Objectives & Budget 2023, Uppsala Municipality



Activate a climate budget
=
**Develop sufficient measures to
meet climate goals and
integrate into the municipal
governance processes**

Development of the climate budget governance model

- Identify priority climate measures
 - Mapping existing and proposed actions for municipal organization across sectors
- Collaboration within the municipality
 - Shared ownership between departments and municipal companies
- Draw inspiration from leading cities
 - Benchmarking against Oslo's Climate Budget and Stockholm's Climate Action Plan
- Integrate climate measures into political governance documents
 - Climate Budget embedded in Objectives & Budget (decision in city council November 2025)

Climate budget – integrated with the municipal Objectives & Budget process

- Gathers and strengthens climate action
- Sets near-term priorities
- Updates every year
- Connects climate measures to financing – provides opportunity to highlight needs
- Follow-up on climate measures

Mål och budget 2026

med plan för 2027–2028

Yttrandeversion

Innehåller klimatbudget

med åtgärder för att nå målen om klimatneutralt Uppsala år 2030 och klimatpositivt Uppsala senast år 2050.



Emission categories

- Transport
- Energy
- Building and construction
- Agriculture and forestry
- Consumption

Emission categories and examples

**Transport, energy,
building and
construction**
– many existing
measures and ongoing
work

**Agriculture and
forestry**
– new area to be
explored

Consumption
– focus on the municipal
consumption as a first
step

Emission categories and examples

**Transport, energy,
building and
construction**
– many existing
measures and ongoing
work

**Agriculture and
forestry**
– new area to be
explored

Consumption
– focus on the municipal
consumption as a first
step

Transport
Example: Develop the municipality's governance
towards more sustainable travel patterns and
reduced car traffic

Emission categories and examples

**Transport, energy,
building and
construction**
– many existing
measures and ongoing
work

**Agriculture and
forestry**
– new area to be
explored

Consumption
– focus on the municipal
consumption as a first
step

Energy
Example: Reduce energy use in municipal
properties and processes through changes in
technology and behavior

Lessons learnt

- Success factors:
 - Strong political climate ambition
 - Collaboration within the municipality
 - Inspiration from leading cities
- Impact assessments to estimate effects of climate measures are complex but need to be addressed
- Breakdown of carbon budget on different parts of the organization not feasible
- First year of implementation – the model needs to be developed and refined over time







CASE

City of Paris



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What is an environmental budget assessment?



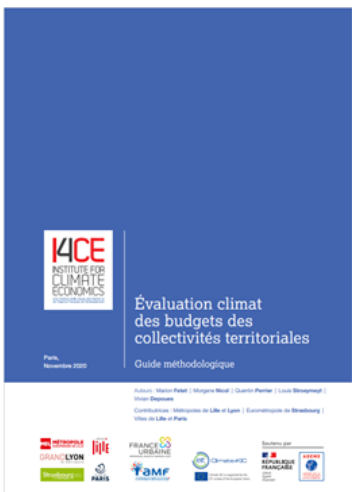
Innovative approach, first collective discussion started in 2019

Objective: developing a common framework to assess the climate impact of local authority budgets

Analyzing the extrabudgetary impacts of the budget

Identifying precisely the amounts spent that are detrimental to climate change mitigation

Aligning budgetary choices with environmental objectives

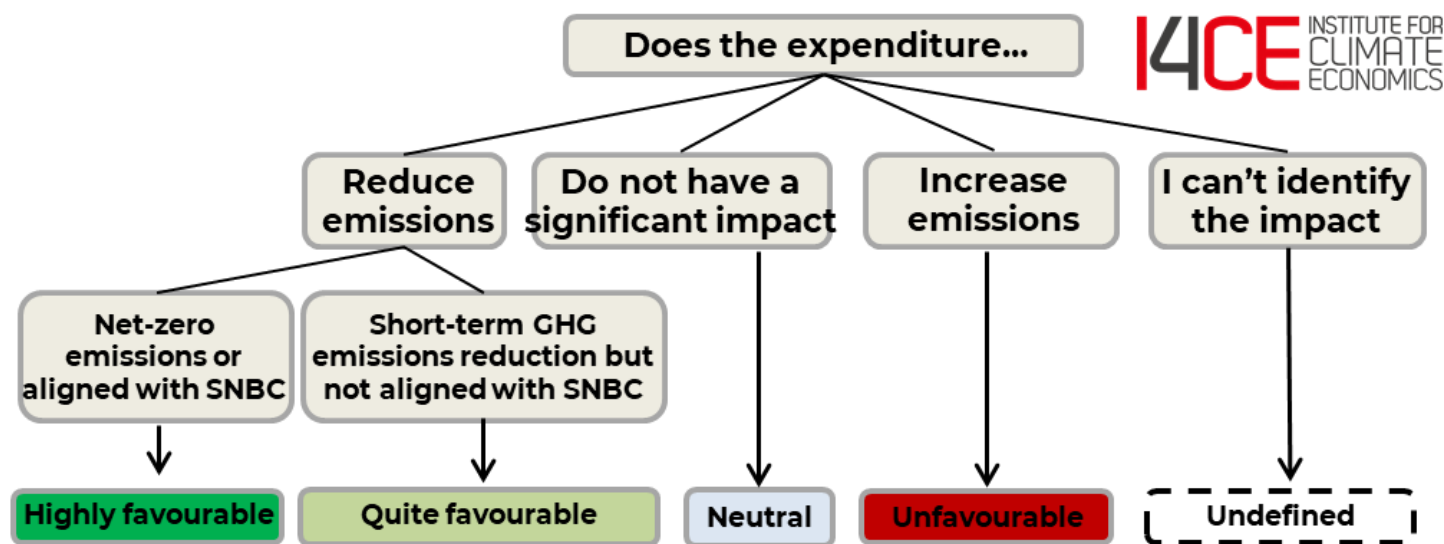


Overall approach ≠ project impact analysis

Extensive approach: I4CE method 2019, government green budget since 2020, 2024 finance law

Methodology

Decision tree



Sectorial hypothesis



With a new way of looking at **municipal expenditure through the prism of climate**, the city adopted a framework to:

- **Align** budgetary policy with climate objectives;
- **Drive** its strategic choices;
- **Address** the challenges of ecological transition.

Example

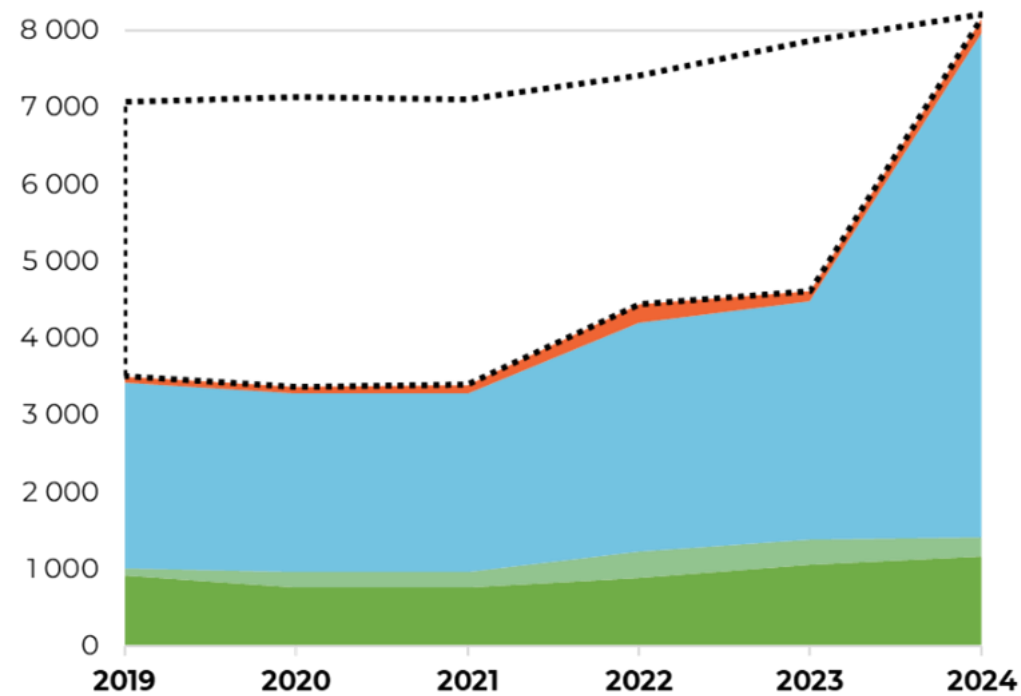
Financial records N-1 analysis: crossing accounting and budgetary classification for every budget line



Accounting reference	Budgetary chapter	Budgetary function		Department	2020 Expenditure (€)	Highly favourable	Quite favourable	Neutral	Unfavourable	Undefined	Comment
Procurement of services	Environment	72120070	Household waste	DPE	61 394 978	21%	73%		6%		I4CE methodology : wastes recycled is highly favourable, incinerated is quite favourable (as reused in the heating network) and buried is unfavourable. Data 2020 for Paris territory (source: RPQS 2020) : - recycling : 21% - incineration : 73% - burying : 6%

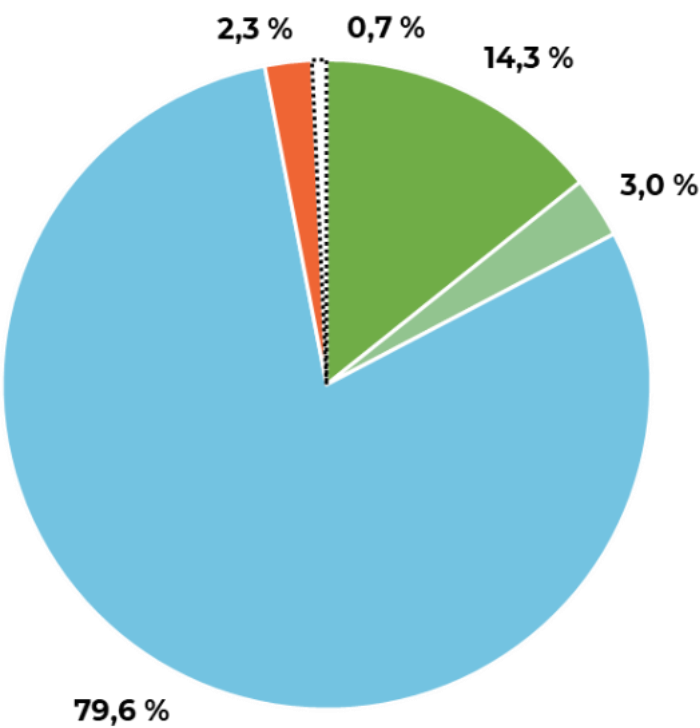
Budget climate assessment results

Mitigation 2020-2024



- Undefined**
Lack of information
- Unfavourable**
Ring road operation
Fossil fuels
- Neutral**
Accessibility
Sub. Museum
- Quite favourable**
Green spaces
Waste-to-energy
- Very favourable**
Pedestrianization
Tram extension
Sub. Transport

OPEX+CAPEX = 10,8 billion €
Total analysed = 8,2 billion €



2024 Financial records results

New legal requirements

Mandatory appendix to the financial report entitled **“Impact of the budget on the ecological transition”** from the 2025 financial year (2024 financial statements)

Trajectory defined by the **decree of July 16, 2024**, with a **threefold** expansion of the mandatory scope:

- in terms of **expenditure**
- in terms of **budgets**
- in terms of **environmental areas**

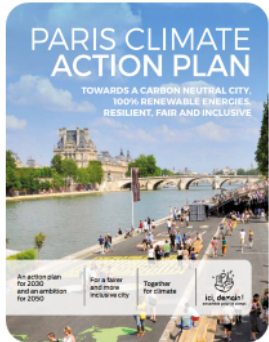
Calendrier de mise en œuvre

		2025 (CA 2024)	2026 (CA 2025)	2027 (CA 2026)	2028 (CA 2027)
Natures	17 'accounting natures'	✓	✓	✓	✓
	All investments		✓	✓	✓
Budgets	Main budget	✓	✓	✓	✓
	Annex budget M57	✓	✓	✓	✓
	Annex budget M4		✓	✓	✓
European Taxonomy	Mitigation	✓	✓	✓	✓
	Biodiversity		✓	✓	✓
	Adaptation				✓
	Water management				✓
	Circular economy				✓
	Pollutions				✓

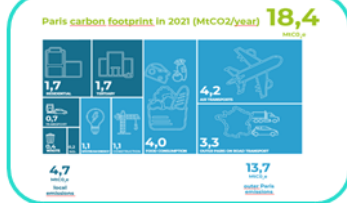
Source : France urbaine

Climate budgeting

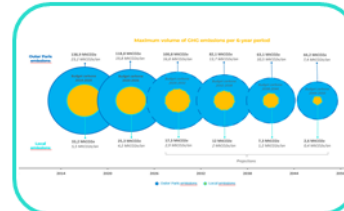
Outlining targets and strategic vision



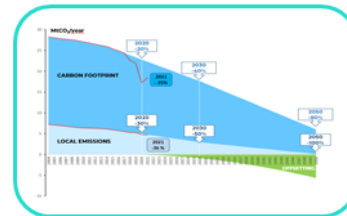
GHG inventory



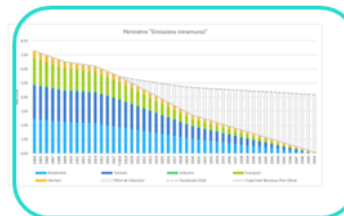
Carbon budget



Net-zero trajectory



Carbon budget by sectors



Building a baseline for reducing and monitoring emissions

Distributing efforts among stakeholders

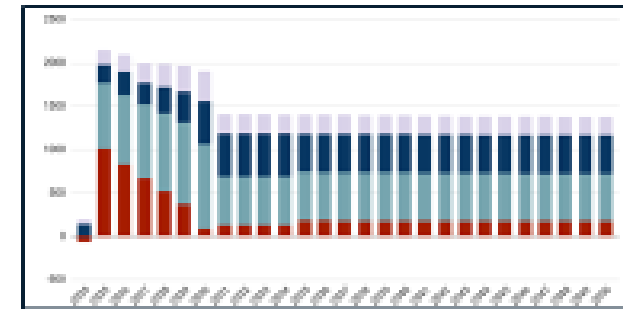
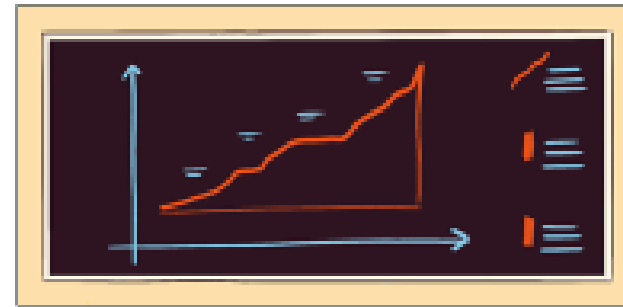
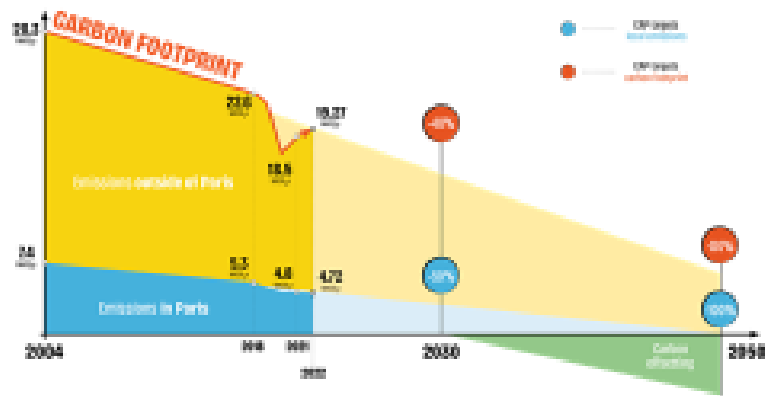


Developing a climate budget

=> short-term budgeting, monitoring and GHG assessment of concrete projects and measures

Climate budgeting

Progress report



Establishing a finance + ecological transition junction / team : **ok**

Articulating GHG & adaptation targets into sectorial targets : **ok + in progress**

Tracking finely CAP spending within City budget : **ok + in progress**

Tracking third party spending : **to initiate**

Mitigation cost pathway (local emissions) : **in progress (OFCE study)**

Mitigation cost pathway (carbon footprint) : **in progress**

Adaptation solutions (infrastructure investments) : **in progress**

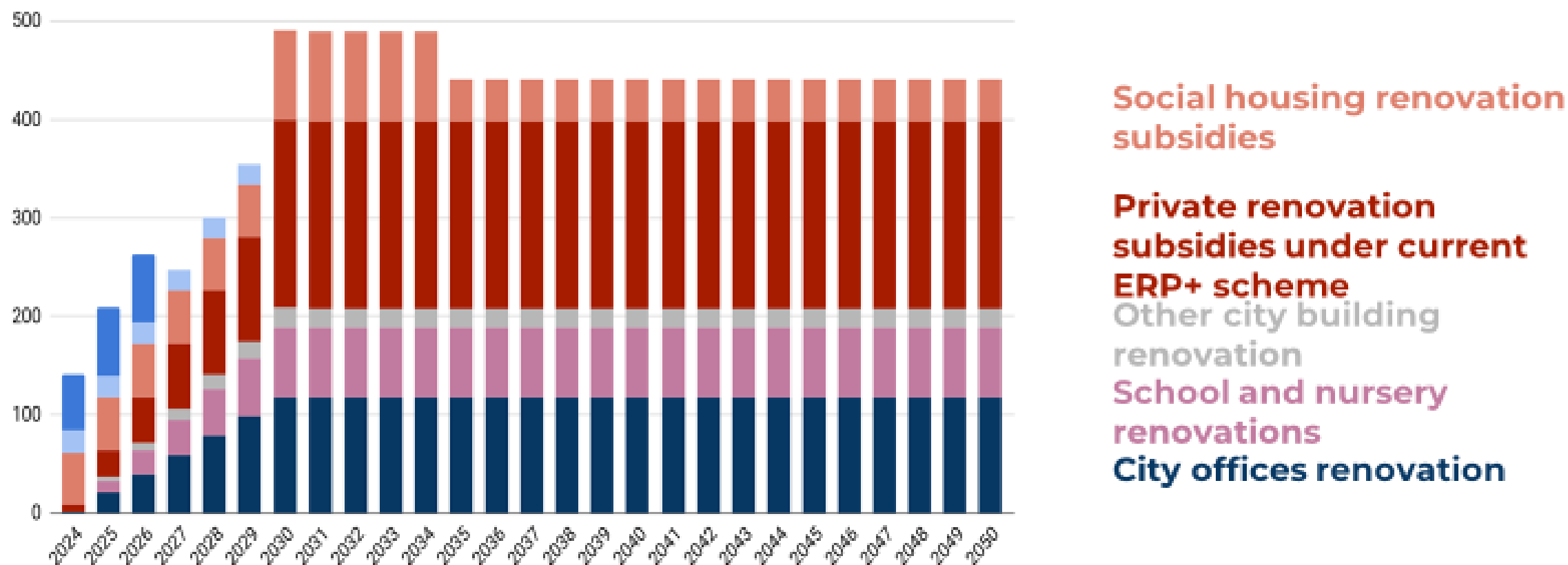
Adaptation solutions (emergency measures) : **to initiate**

Climate budgeting

The City financed 2025 OFCE study : the costs of **local** decarbonation

An average **+400 to +500 M€** of yearly decarbonation investments for the city

Representing **25% of the local effort of a 2 billion € estimation**



Climate budgeting

Developing a cross analysis of city expenditure

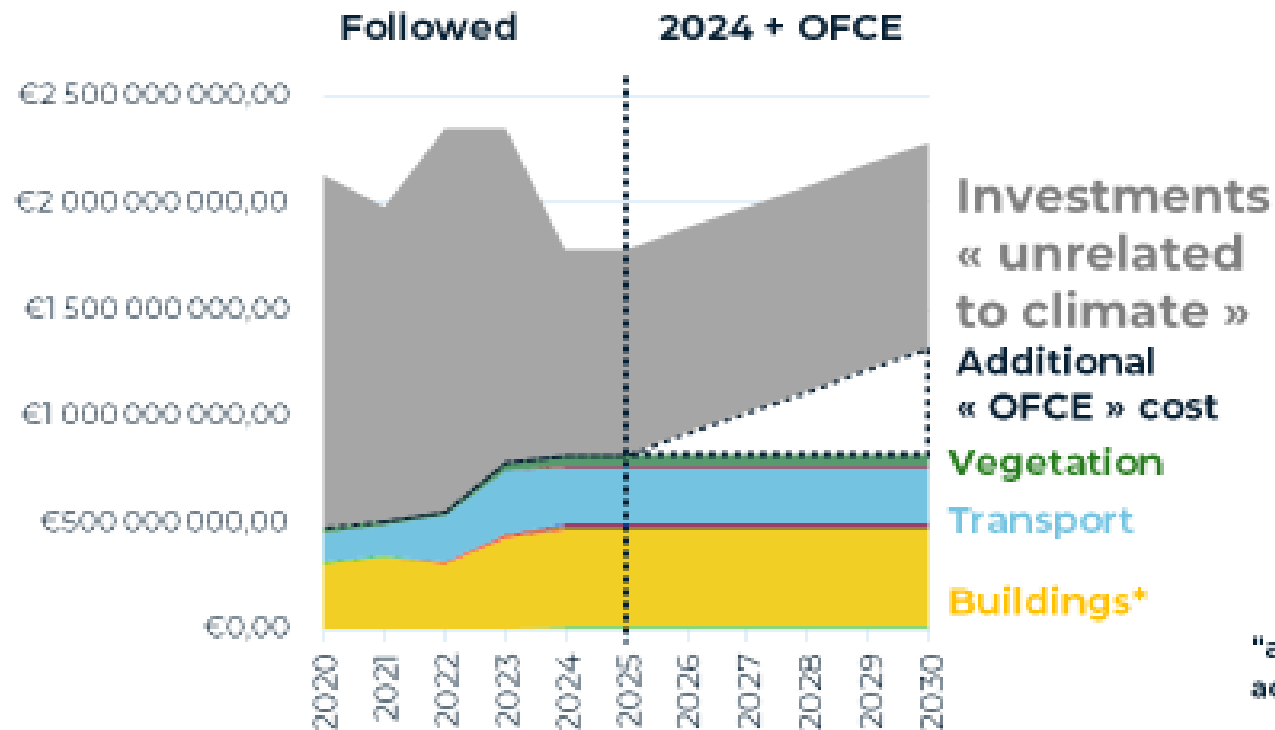
Tracking of climate investments since 2020

860 M€ in 2024 meaning **+70%** since 2020

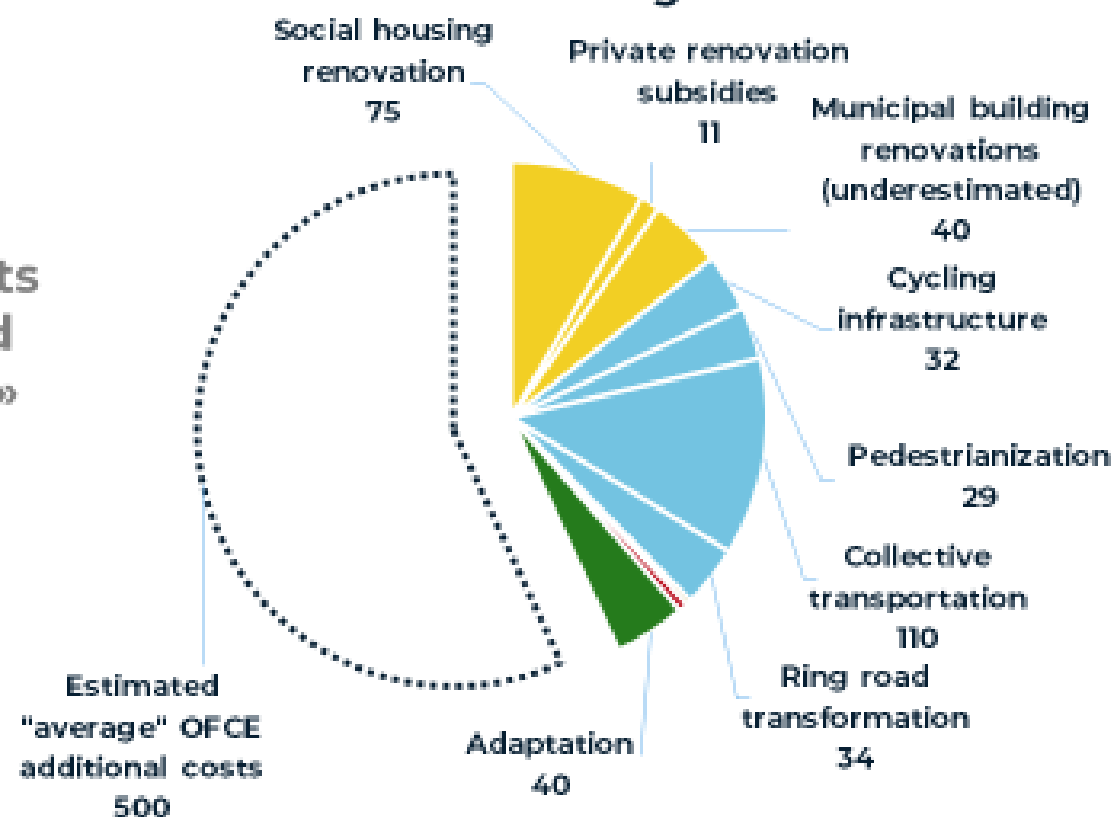
*Data being consolidated,
please do not publish*

Staying on track = More than doubling
existing climate investment tendencies

Historical and projected investment needs



Climate investing tendencies



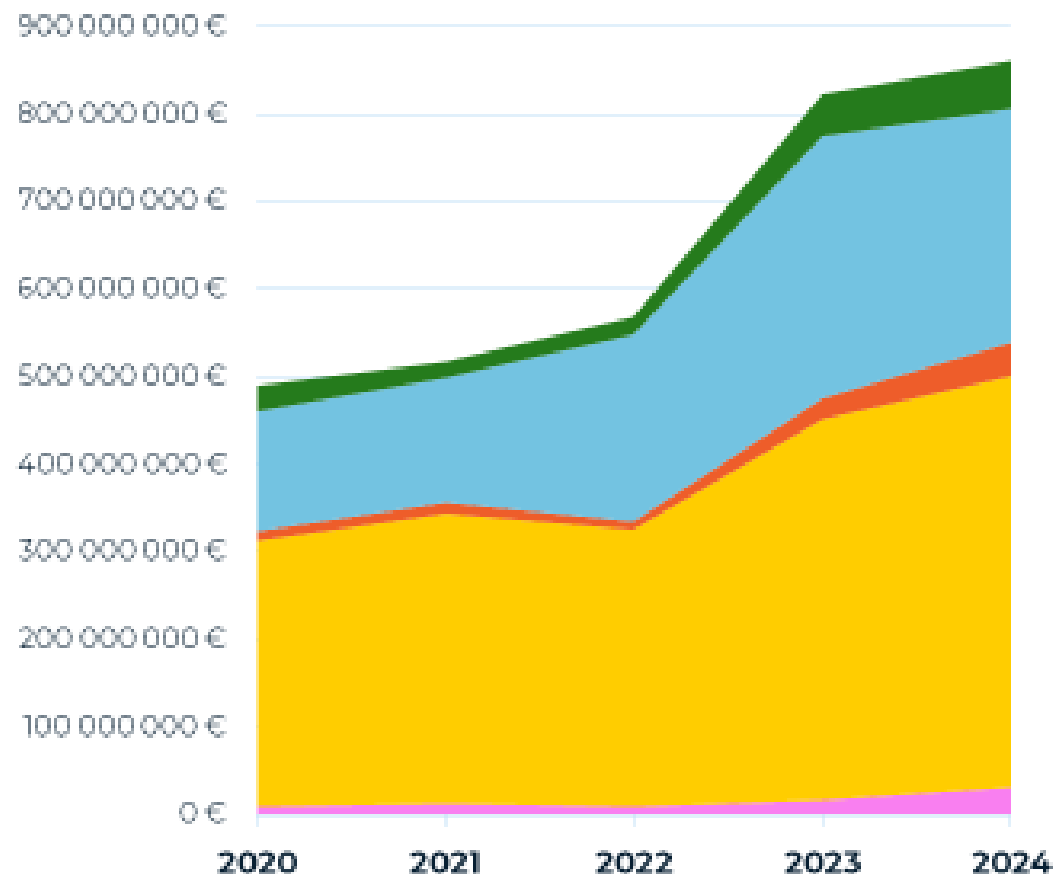
*Buildings include new social housing in this graph (Climate Action Plan)

+ Unknown additional adaptation & mitigation costs

Climate budgeting

Where do we go from here ?

How to further our vision on prospective cost estimations ?



Vegetation

Adaptation trajectory study

Pathways to reach 40% permeable (40 ha/y), +300 ha of green space and 500 garden streets

Transport

OFCE study bike plan 2026 (50 M€/y) and City vehicle transition at 2030 (20 M€/an)

No set prospective vision on roads and CT investments

Energy

Energy directing scheme

Modelize and renew our long term energy vision, to better anticipate and estimate energy source shifts

Buildings

OFCE study : A steady and massive increase to reach projected pace +400M€/y by 2030

With a State subsidy « steady » ambitions

Other

Adaptation trajectory study

Which need for water sobriety, grey solutions, emergency budgets, and waste ?



Merci !

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CASE

City of Tampere



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ENERGY TRANSITION

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Climate Budgeting in Tampere

21.10.2025 | City Climate Budgeting: A Joint Webinar by NetZeroCities, C40, and Climate-4-CAST

Hanna Meriläinen, Project Manager

Climate and Environmental Policy Unit, City of Tampere

interreg-baltic.eu/project/climate-4-cast/





Some facts about Tampere

- Located in Western Finland, surrounded by two lakes and beautiful nature.
- Third largest city in Finland. Growing fast.
 - **2024:** 260 000 residents
 - **2033:** 290 000 residents
- Investments to public transportation (tramlines), city's power plant, new housing areas etc.

Ensuring sustainable growth is a challenge!

City strategy: CLIMATE NEUTRAL TAMPERE 2030

Tampere aims to be internationally known for impactful action for climate and biodiversity.

Climate neutrality:
80 % emission reduction
from 1990 level.
The rest will be
compensated.

The 100 Climate-Neutral
and Smart Cities by 2030



EU MISSION LABEL

CLIMATE-NEUTRAL & SMART CITIES

TAMPERE



Key strategies and monitoring tools

Key strategies:

- **Tampere City Strategy 2030.** *Climate neutral Tampere 2030.*
- **Mayoral program 2025-2029.** *"Tampere is committed to achieve carbon neutrality by 2030 and actions from the Climate Neutral Tampere 2030 roadmap will be implemented."*
- **Climate Neutral Tampere 2030 Roadmap.** *Summarizes the actions towards climate neutrality (since 2020, updated every-2-years, 397 actions).*

Key tools for monitoring climate work:

- **Climate budget** – monitors the funding and resources directed to climate actions (Basic climate work + Climate Roadmap).
- **Climate Watch** - online platform to monitor the progress of roadmap climate measures. [Tampere's climate watch](#)
- **Climate Action Decision Support tool** – visualizes the emission development and impacts of various climate measures (emissions and economy). [C4C Carbon-neutral Tampere 2030](#)

Why climate budget?

Monitors annually the progress towards carbon neutrality.

Evaluates sufficiency of funding to climate measures.



Provides **information for decision making** and improves **transparency**.

Combines climate work with the **official city budget and financial statements**.

Climate budget in Tampere

- Oslo's climate budget was the starting point.
 - Tampere was the first Finnish city to introduce a climate budget in 2019.
- Part of the official city budget.
 - Reporting of the realisation in the financial statements.
 - More detailed reporting in Microsoft Power BI.
- In Tampere, the climate budget has two parts:
 - **Emissions budget:** Maximum target for CO2 emissions.
Scope: City level (Scope 1 and 2 emissions).
 - **Financial plan:** Allocated financial resources to climate measures.
Scope: City organisation + subsidiaries



Climate Budget

TAMPERE'S CLIMATE BUDGET = EMISSIONS BUDGET + FINANCIAL PLAN

Developed step by step; now established practice.

- Budget for 2020:

EMISSIONS

- Budget for 2021:

EMISSIONS

ACTIONS

COSTS

- Budgets for 2022-2025:

EMISSIONS

ACTIONS

COSTS

EMISSIONS
IMPACT

- Budget for 2026:

EMISSIONS

ACTIONS

COSTS

EMISSIONS
IMPACT

SUFFICIENCY OF
FUNDING

City level emissions budget

Financial plan for city organisation + subsidiaries

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ENERGY TRANSITION

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Improving Climate
Budget as part of
C4C City Pilot.

Emissions budget in city budget

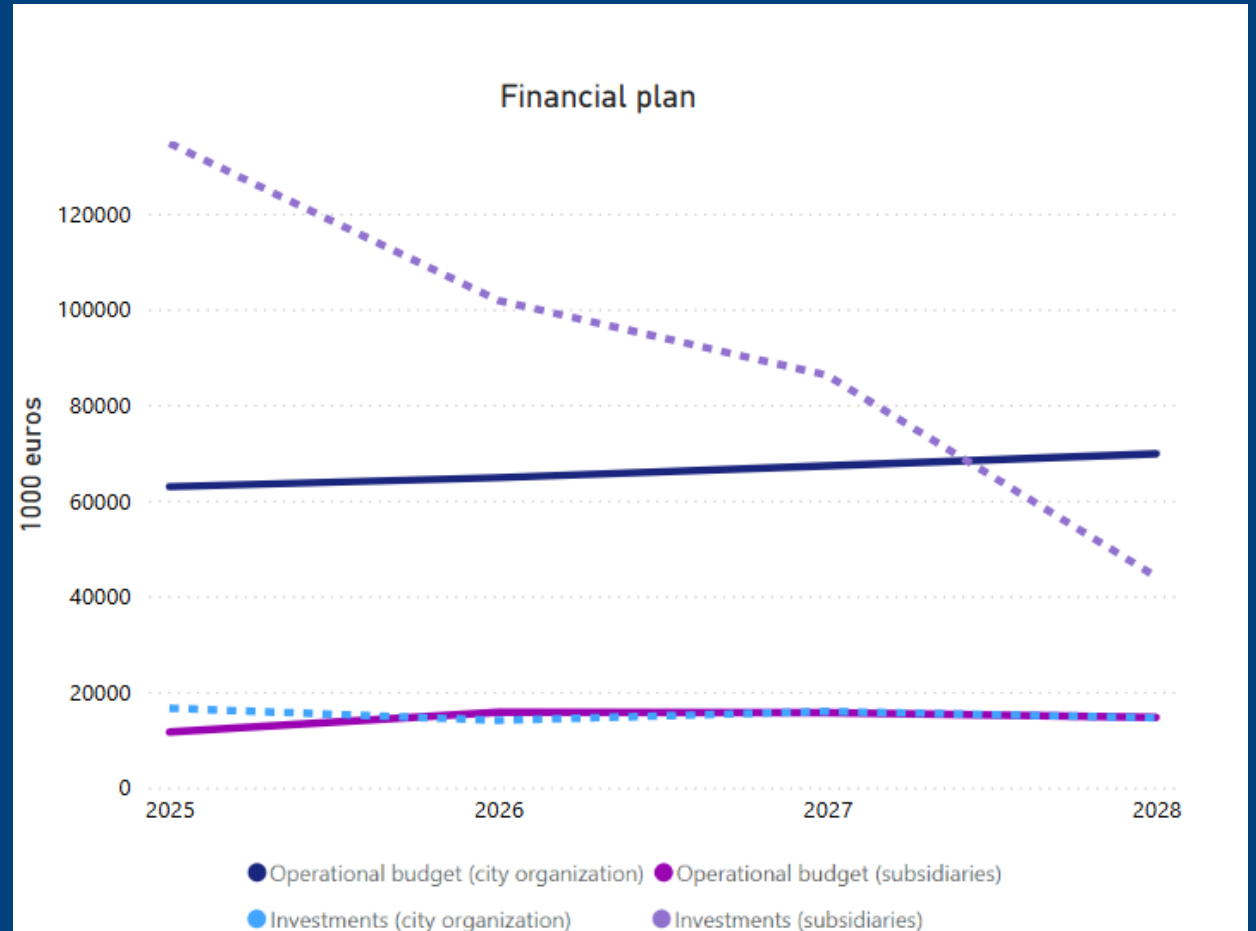
- Presents an annual maximum limit for direct emissions.
- Allows an assessment of where the targets can be achieved and which emission sectors might have problems.
- Should be reassessed and updated when new data becomes available.

Emission sector	2022	Reduction from 1990	2025	2027	2030	Hits the target by 2030
Agriculture	6 700	-23 %	5 000	6 500	5 000	✓
District heating	285 500	-18 %	105 000	66 000	40 000	✓
Electric heating	19 400	-58 %	14 000	9 000	5 000	✓
Industry and work machines	146 100	-2 %	109 000	98 000	25 000	!
Industry electricity consumption	17 600	-86 %	13 000	10 000	9 000	✓
Other electricity consumption	85 200	-36 %	44 000	37 000	25 000	✓
Other heating	32 400	-74 %	22 000	12 000	4 000	!
Traffic	208 200	-28 %	175 000	164 000	115 000	✗
Waste and waste water	44 200	-50 %	39 000	36 000	32 000	✓
Total	845 300		526 000	438 500	260 000	

Official emissions budget for 2025 and estimated budgets for 2027 and 2030 in carbon dioxide equivalent tons (tCO₂e). In addition, actual climate emissions of Tampere in 2022 (the latest confirmed emissions) are presented along with a reduction from the year 1990. The expert assessment of staying within the emissions budget by sector is based on the need for change, the emission scenario of the Carbon Neutral Tampere 2030 Roadmap and known measures. Emissions are calculated according to the Finnish CO₂-report methodology with the difference that the sector "Consumers' electric consumption" has been renamed to "Other electricity consumption" and the the sector "Electric heating" includes "Ground source heat pumps".

Financial plan in Climate Budget

- Separates the money allocated to climate action from the city's official budget.
- Includes actions related to climate change mitigation, adaptation, sustainable mobility and circular economy.
- Considers the operating budget and investments over the 4-year financial planning period. (Current: 2026-2029)
- Includes actions planned by the city organisation and its companies.
- **New in 2025:** Basic Climate Work + Climate Neutrality Roadmap measures



Realised budget in city's official financial statements

Climate investments by the Tampere City Group's subsidiaries in 2024 (1000 euros)

Responsibility	Measure	Financial statements 2024	Budget 2024	Difference
Finnpark Ltd	LED lighting in parking carages	-33	-80	47
Finnpark Ltd	Promoting the travel chain (Green Parking)	0	-335	335
Palvelukiinteistöt Ltd	Solar panels	0	-100	100
Pirkan Opiskelija-asunnot Ltd	Renovation of heating systems	0	-500	500
Pirkan Opiskelija-asunnot Ltd	Window renovations	0	-142	142
Tampere Energy Ltd	Additional investment in Naistenlahti 3 power plant	-25 600	-32 000	6 400
Tampere Energy Ltd	Electric boiler and district heating battery	-8 000	-12 000	4 000
Tampere Exhibition and Sports Centre Ltd	LED replacements for outdoor and indoor lighting	0	-337	337
Tampere Regional Solid Waste Management Ltd	Biogas filling station in Tarastenjärvi	-7	-360	353
Tampere Regional Solid Waste Management Ltd	Piloting local waste collecting system in the Ojala-Lamminrahka area	-6	-118	112
Tampere Tramway Ltd	Construction of the second section of the tramway	-24 690	-35 271	10 581
Tampere Tramway Ltd	Tram infrastructure and procurement of fleet (Pirkkala-Linnainmaa)	-22 728	-10 300	-12 428
Tampere Water Ltd	Closure of the Viinikanlahti and Rahola waste water treatment plants	-1 206	-1 000	-206
Tampere Water Ltd	Network renovations	-6 387	-10 000	3 613
Tampere Water Ltd	Optimising water production and distribution	0	-100	100
Tampereen Särkänniemi Ltd	Geothermal heating in new buildings	-38	-60	22
Tampereen Särkänniemi Ltd	Improving walking and cycling accessibility	0	-500	500
Tampereen Virastotalo Ltd	Low carbon construction, environmental classification for the building, circular economy consulting	-350	-350	0
Tampereen Vuokra-asunnot Ltd	Exhaust air heat pumps, solar panels, energy saving measures	-261	-240	-21
TREDU-kiinteistöt Ltd	Lighting renovations, heat pump and solar panels	-675	-950	275
Total		-89 982	-104 743	14 761

Emission category	2021	2022	2023	Difference to budget	Budget 2023	Estimate 2024	Budget 2024	Target 2030
▼								
District heating	300 200	285 500	186 300	-71 300	115 000	142 900	110 000	28 000
Individual heating	29 700	32 400	28 100	16 900	45 000	27 000	39 000	4 000
Heating electricity	21 200	19 400	13 700	3 300	17 000	9 900	15 500	7 000
Transport	213 300	208 200	204 400	-27 400	177 000	200 500	168 000	115 000
Other electricity cons.	91 800	85 200	57 600	27 400	85 000	43 700	79 000	40 000
Industry electricity cons.	18 200	17 600	10 500	7 500	18 000		15 500	7 000
Industry and work machines	116 600	146 100	108 400	-22 400	86 000		80 500	39 000
Agriculture	6 700	6 700	7 000	-1 000	6 000	7 100	5 500	5 000
Waste and waste water	51 300	44 200	40 400	21 600	62 000	40 400	56 000	15 000
Total	849 000	845 400	656 400	-45 400	611 000		569 000	260 000

Confirmed greenhouse gas emissions generated in the Tampere area by sector for the years 2021–2023 and preliminary information for 2024, emission budgets for 2023 and 2024, and the target for 2030. Emission calculation and sector division follow the calculation method of the CO2 report, with the difference that the sector "consumer electricity consumption" is titled "other electricity consumption" and "ground source heat" is included in "heating electricity". Unit: carbon dioxide equivalent ton (t CO2e)

Challenge: Emission inventory data from the previous year is not available for the financial statements. (Only a rough estimation.)

CLIMATE BUDGET IN PRACTICE

Who?

- **Financial Unit** is responsible of requesting and collecting the data into the City's Budget and Financial Statements.
- **Climate and Environmental Policy Unit** supports Financial Unit with data related to emission impacts and the emission budget. Prepares of materials (templates, guidelines etc.). Support for city units and subsidiaries with reporting.
- **All city units and subsidiaries** provide key information about their climate measures.

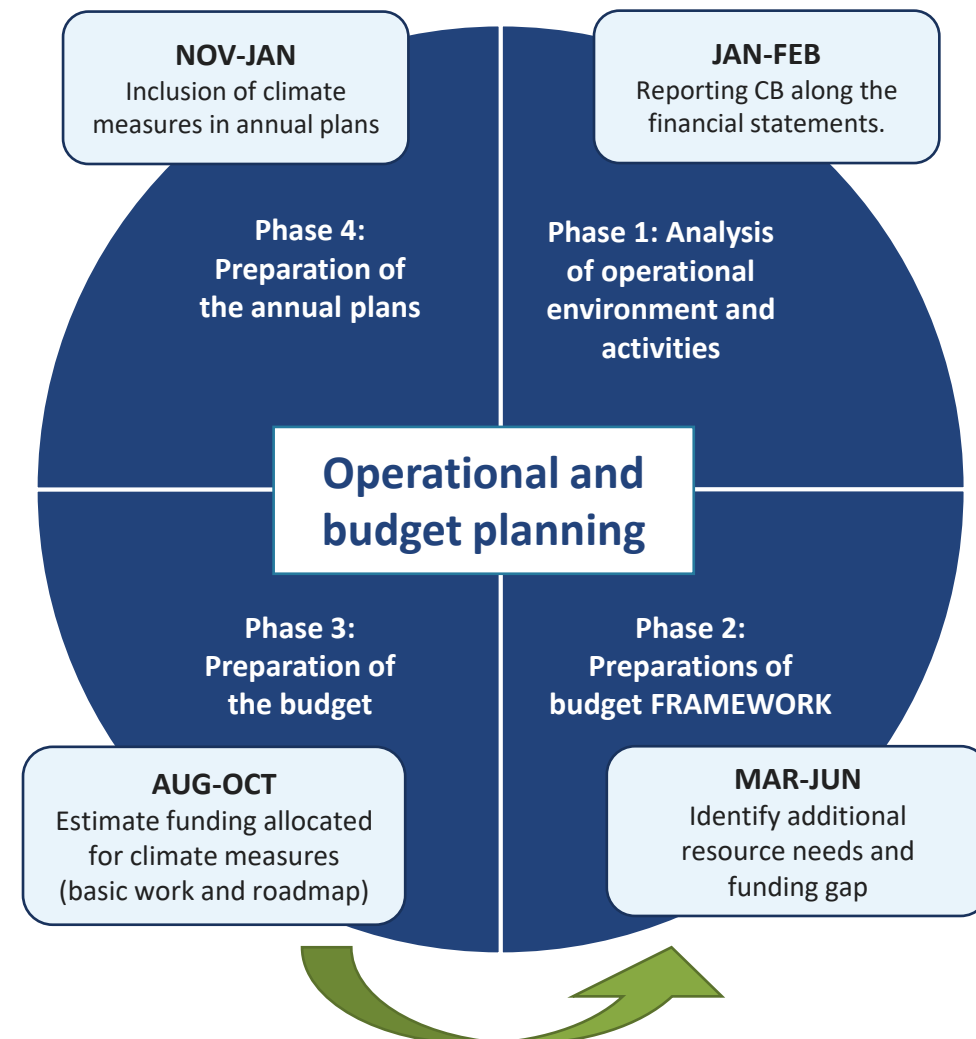
How?

- **Data collection:** still with Excel-sheets. (Looking for possibilities of automation.)
- Key information as 1-3 pagers in the Official City Budget and Financial Statements. More detailed information in Microsoft Power BI.

When?

- **Previously:** Preparation of the Budget (Aug-Oct). Financial Statements (JAN-FEB.)
- **New approach:** (From monitoring to a planning tool)
 - **Spring - Budget Framework Negotiations** – Identification of additional resource needs, identification of potential funding gap to implement climate roadmap activities
 - **Fall - Finalisation of climate budget** - estimating all the resources allocated to climate measures (basic work + climate roadmap measures)

PLANNING CYCLE FOR THE CITY ORGANISATION



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Kiitos! Thank you! Tack!

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Emmi Nieminen, Development Specialist, emmi.nieminen@tampere.fi

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Resources and follow up

- C40 and Climate4-Cast materials and courses in Climate Budgeting (see chat for links)
- NetZeroCities deep dives and P2P
- FAQ on Climate Budgeting for Mission Cities





Share your preferences for follow up

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