Interreg Baltic Sea Region

Co-funded by the European Union

ENERGY TRANSITION Climate-4-CAST

Boosting Climate Work with CADS Tool in Tampere

1.10.2025 I Climate Budget Summit in Malmö

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 between two large lakes: Lake Näsi and Lake Pyhä.
- Attractive city with 260 000 residents.
- Growing fast: In 2024 +5130 residents. 2033: 291,000 residents.
- Intensive investments to public transportation (tramlines, bike laines), green investments in the city’s power plant, new housing areas, new sports arenas etc.

Ensuring sustainable growth is a challenge!

TAMPERE.
FINLAND

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

TAMPERE


Image: Visit Tampere / Laura Vanzo

Key strategies and governance tools

Key strategies:

- **Tampere City Strategy 2030.** *Is currently under development and will be published by end of 2025.*
- **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

Key tools for **climate governance and monitoring:**

- **Climate budget –** monitors the funding and resources directed to climate actions
- **Climate Watch -** monitors the progress of roadmap climate measures
- **Climate Action Decision Support tool** – visualizes the emission development and impacts of various climate measures

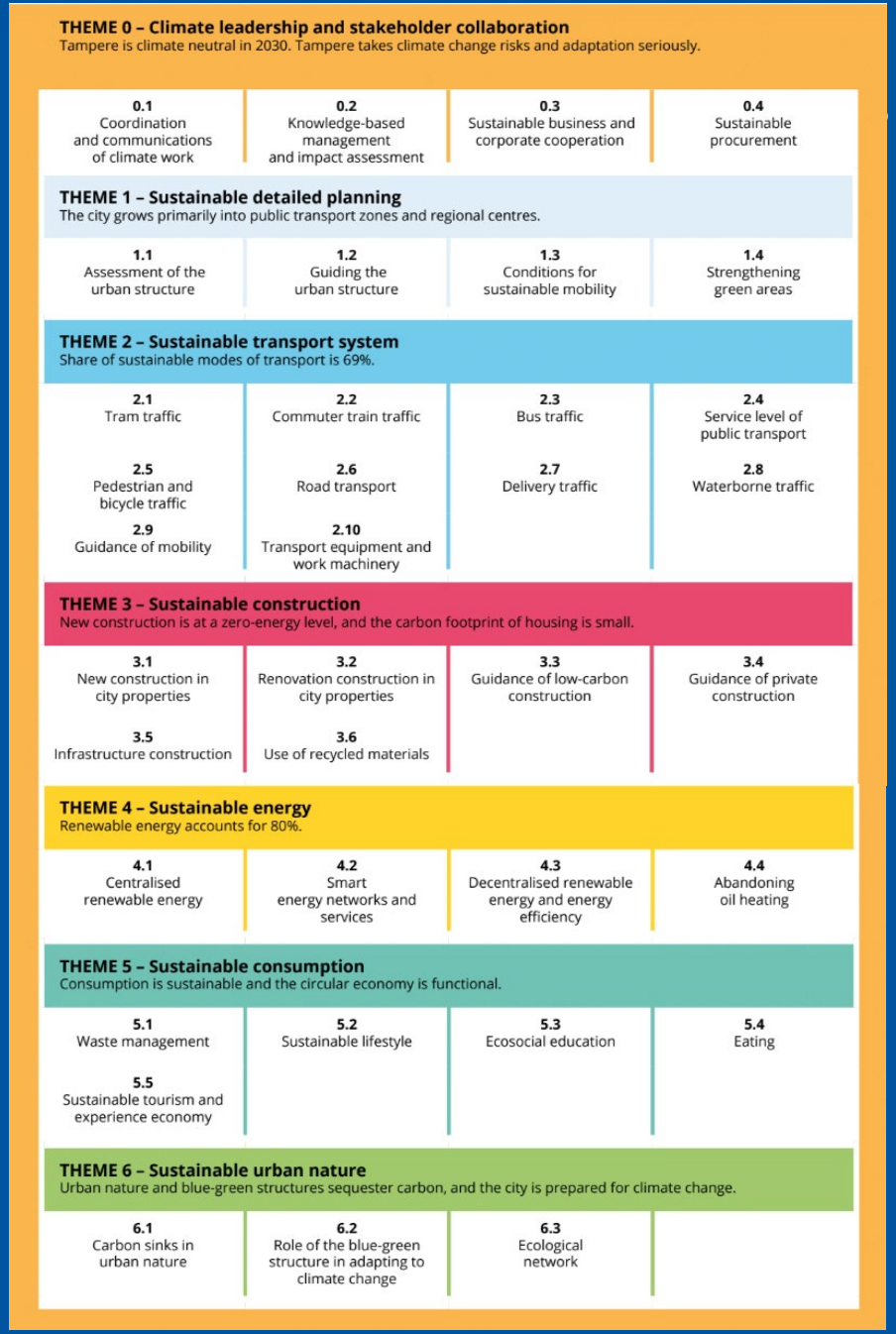
Climate Neutral Tampere 2030 roadmap

First roadmap in 2020. Update every two years.
Roadmap measures are divided into **7 themes**:

0. Climate leadership and stakeholder work
1. Sustainable urban planning
2. Sustainable mobility
3. Sustainable construction
4. Sustainable energy
5. Sustainable consumption
6. Sustainable urban nature

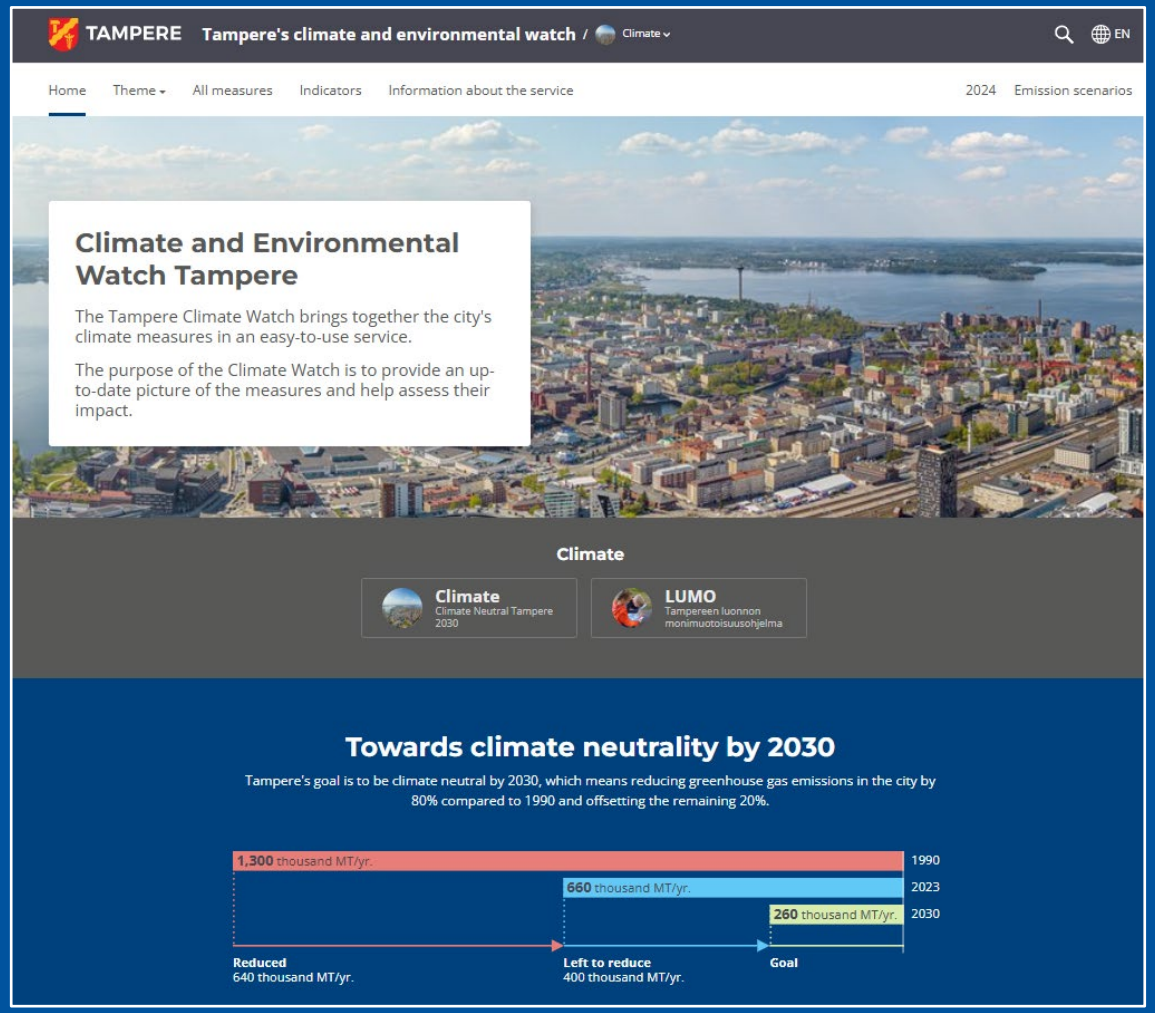
Total number of measures is 397.

Close work with city departments and subsidiaries.

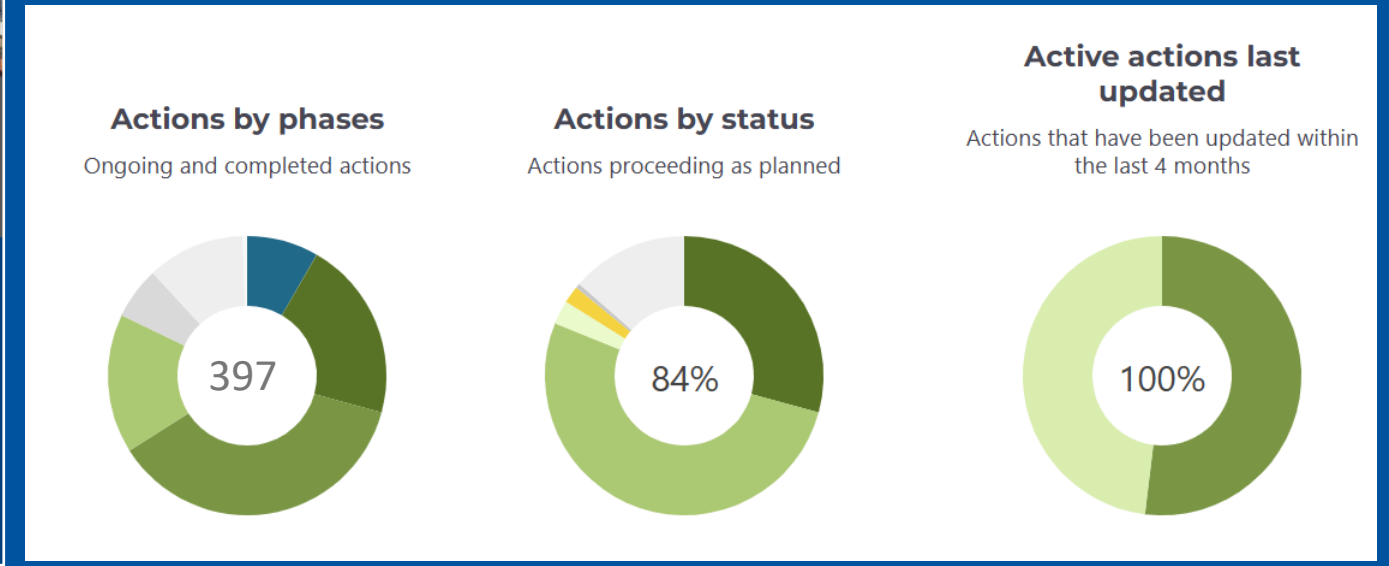


Monitoring through Climate Watch

TAMPERE. FINLAND



- An online platform that tracks the city's climate actions and progress.
- The status of the action is updated three times a year by the responsible department.
- CADS Tool will be integrated in the Climate Watch



EU MISSION LABEL
CLIMATE-NEUTRAL & SMART CITIES TAMPERE

https://ilmastovahti.tampere.fi/en

Climate budget in Tampere

- Part of the official **city budget** since 2020
  - 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 region (Scope 1 and 2).
  - **Financial plan**: Allocated financial resources to climate measures. Actions and their costs.
    - Scope: City organisation + subsidiaries

Monitors the progress towards carbon neutrality.
Evaluates the **sufficiency of funding.**

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

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

Image: Visit Tampere / Laura Vanzo

TAMPERE

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

Regional **emissions budget** **Financial plan** for city organisation

Image: Visit Tampere / Laura Vanzo

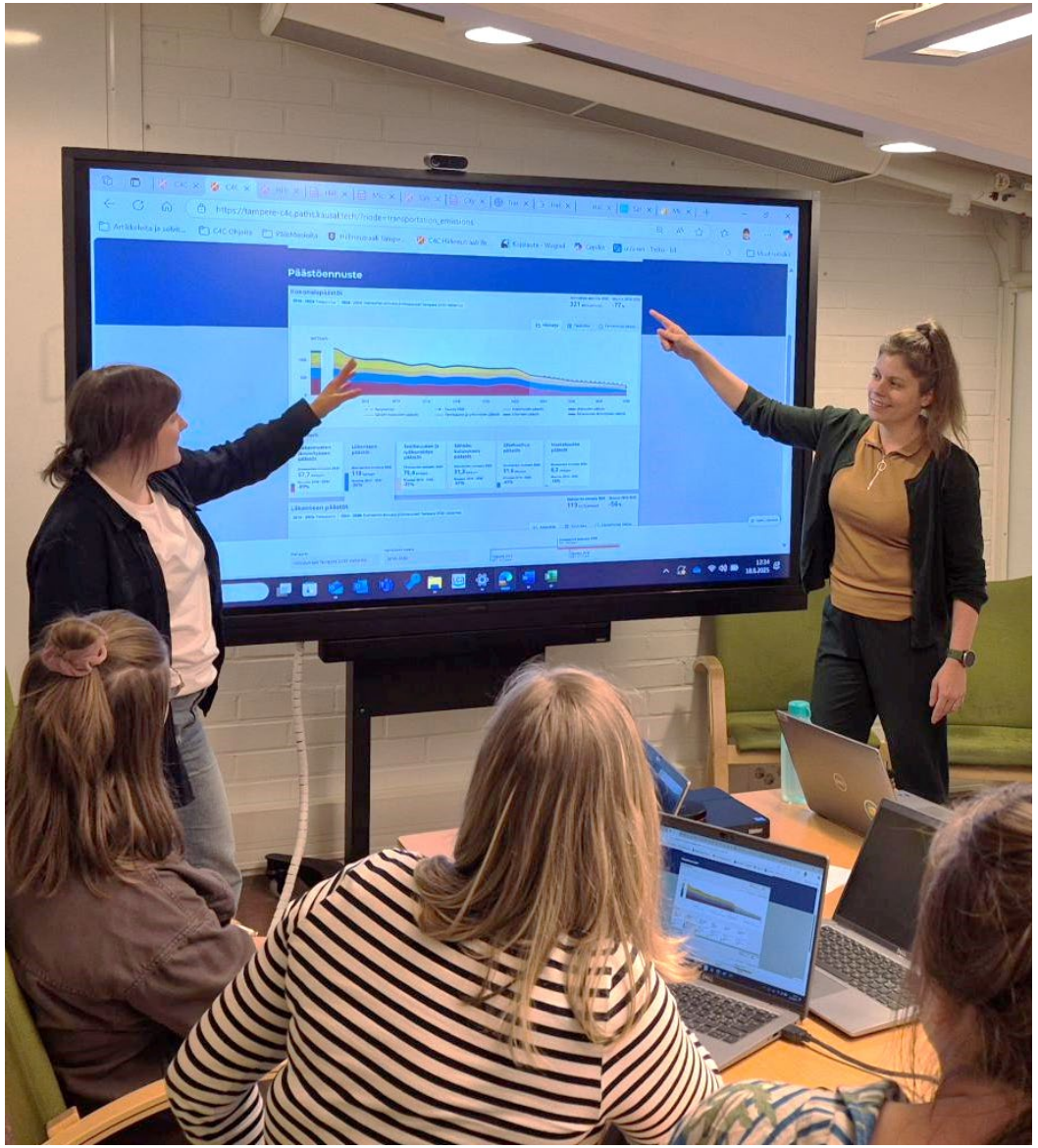
Climate Action Decision Support Tool

Key functionalities for Tampere

1. **Visualisation of emission development** in the city. *How are we achieving our climate neutrality target.*
2. **Visualisation of the various impacts of climate measures** (emissions, costs and benefits, ROI, cost-effectiveness).
3. **Scenario building and adjustability:** Preparing different emission reduction paths towards climate neutrality.

Key users

- **The climate experts at the Climate and Environmental Policy Unit,** who provide information for decision-making and planning processes and prepare different scenarios.
- **Citizens, politicians, decision-makers** etc. interested in Tampere's climate work. (Easily understandable data.)
- **Other cities' climate experts** interested in Tampere's climate work. (Both Finnish and English.)



Essi Lehtinen / City of Tampere

Emission forecast

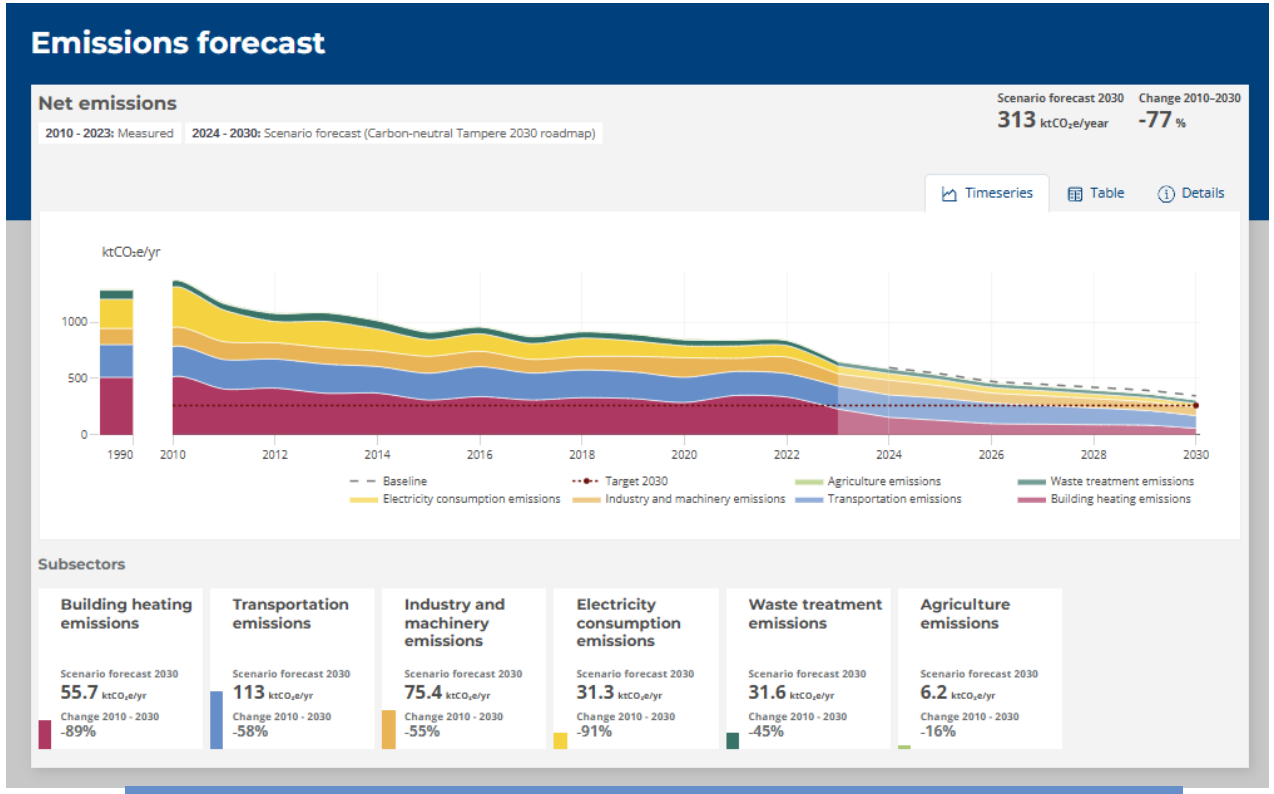
Setting in current CADS-tool:

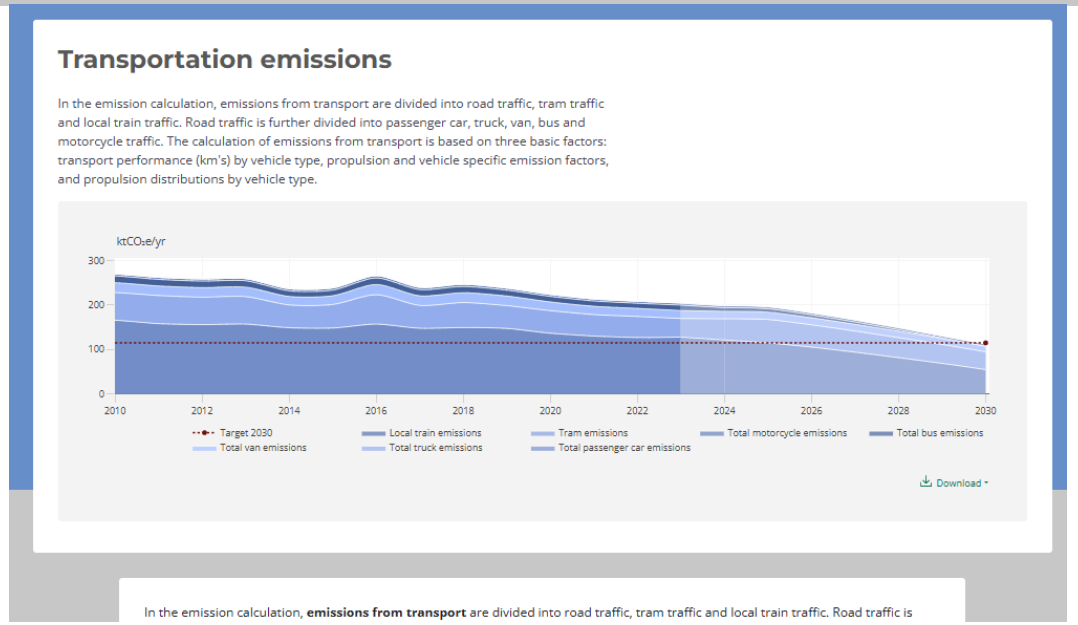
- **Baseline inventory:** 2010-2023
- **Baseline forecast:** 2024-2030
- **Actions ON scenario:** Carbon Neutral Tampere 2030 Roadmap Scenario

Key takeouts:

- **Provide visualisations** that show the development of city level emissions and how we are (or NOT) achieving our climate neutrality target.

- **Open data:** Provide detailed information about how we prepare the baseline forecasts or to what data sources the inventory data is based on.





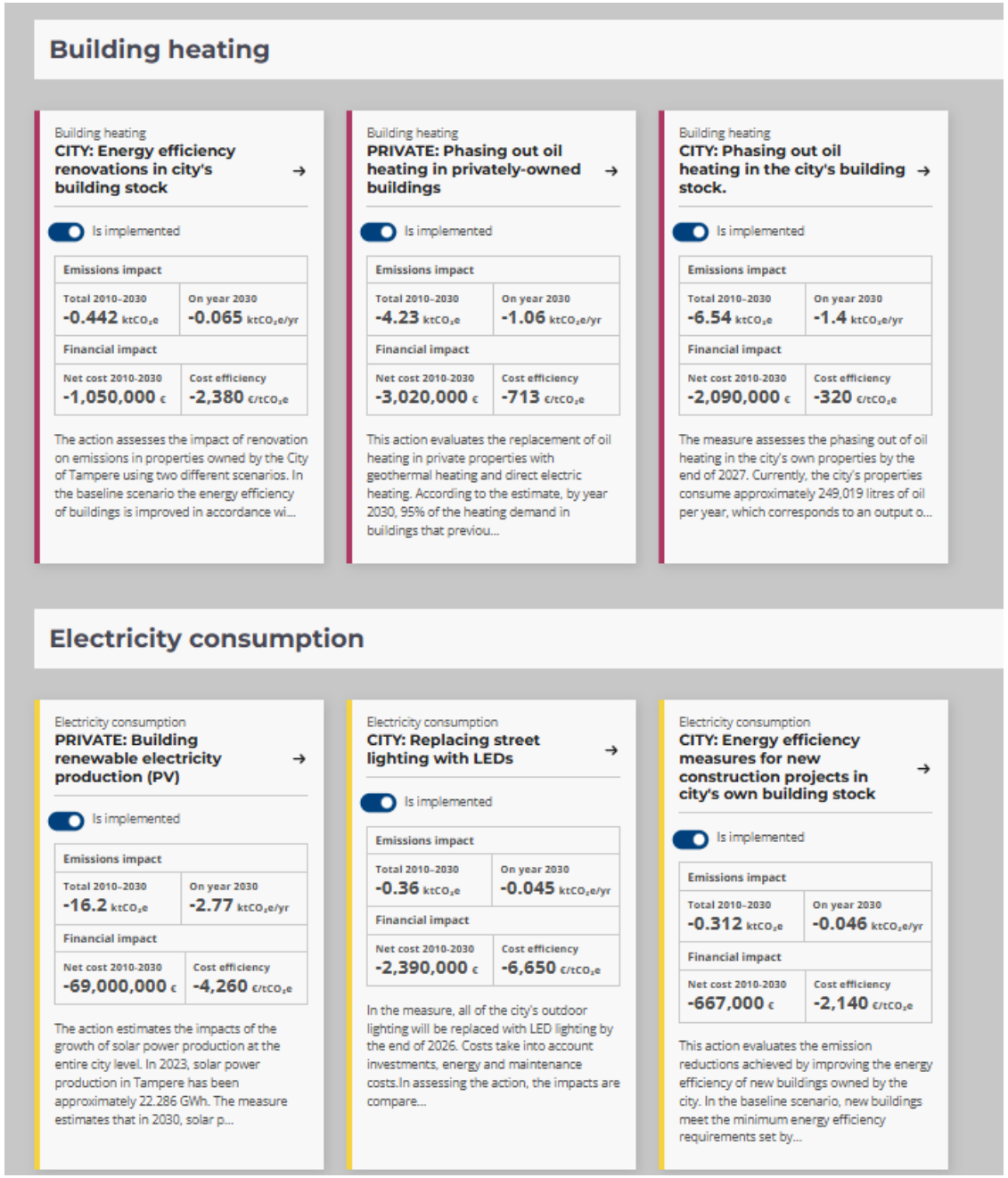
Visualisation of Climate Action Impacts

What kind of actions?

- Currently there are around 15 actions.
- Most actions are carried out by **the city** and **city owned companies**, but also actions in the **private sector** (households, citizens, companies etc.)
- Including also actions without cost impacts.

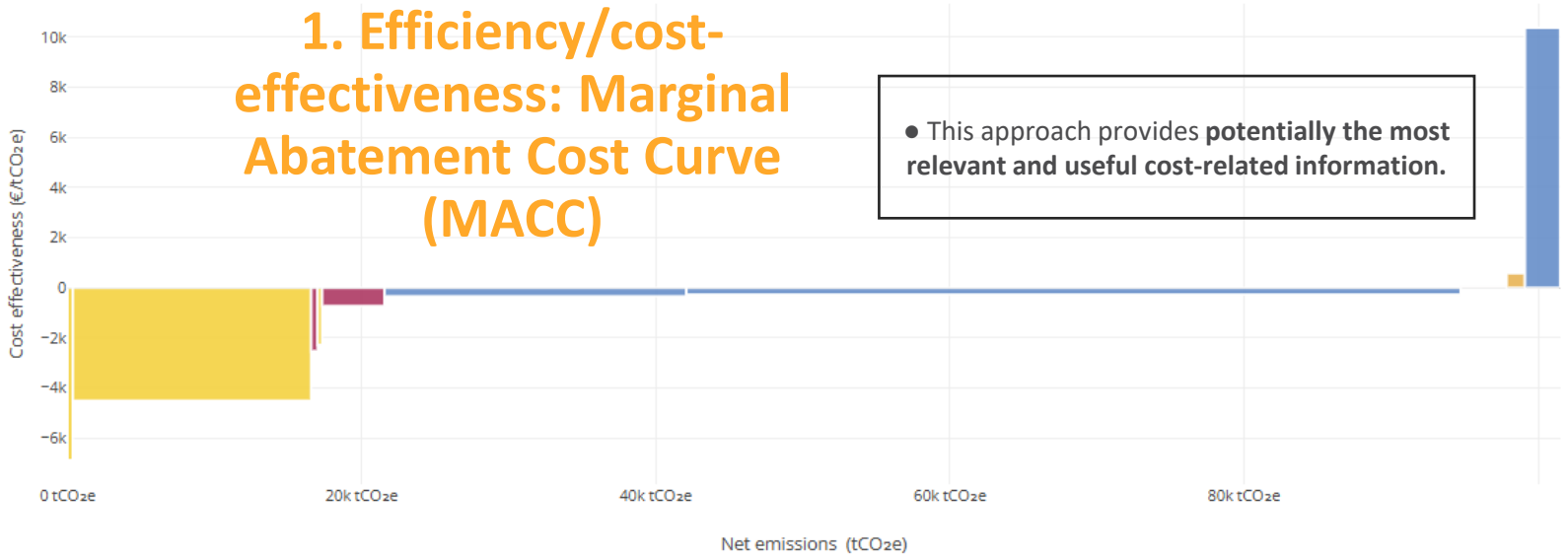
Action card information:

- Emission impacts (CO2e)
- Net costs (€) (operating and investment costs)
- Cost-efficiency (€/tCO2e)



Visualisation of Climate Action Impacts

1. Efficiency/cost-effectiveness: Marginal Abatement Cost Curve (MACC)

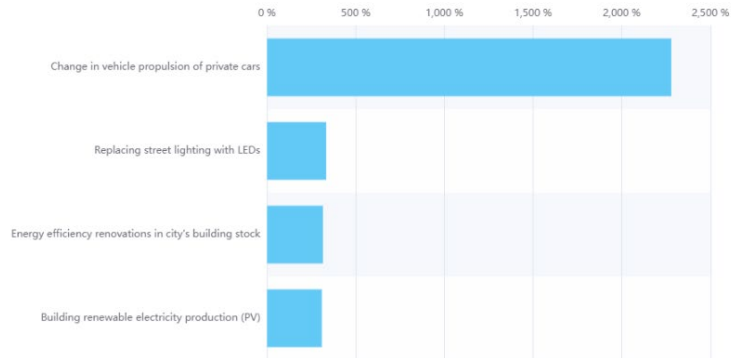


- This approach provides **potentially the most relevant and useful cost-related information.**

2. Visualisation of costs and benefits

- This **enables to show other impacts** in monetary terms in addition to direct costs/cost savings, e.g. health benefits or regional economic impacts.

3. Return on investment



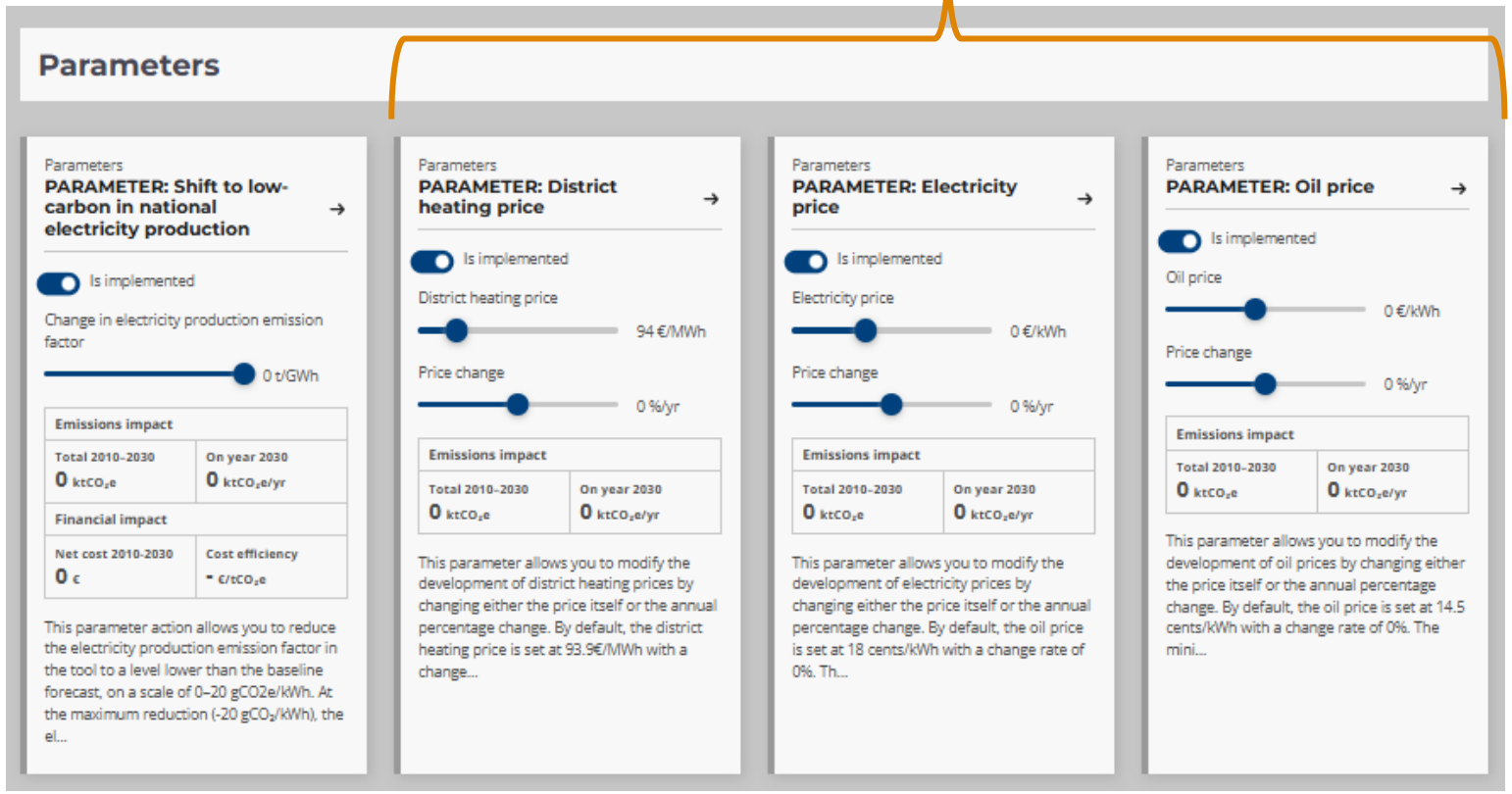
- **Potentially interesting information**, especially from the perspective of political and economic experts.

Preparing different scenarios

Custom scenarios & Parameters

- **Custom-scenarios:** Actions ON/OFF
- **Parameter actions:** changes emission factors or prices values.
    - Electricity production emission factor
    - District heating price
    - Electricity price
    - Oil price
- We are considering adding more parameters later.

Price parameters:
Each card's sliders allow the user to set both the initial value of the parameter or the annual change in price (%).



Wrap up

- **CADS Tool** has many possibilities. Every city needs to choose what they want to do and focus on.
- For **Tampere** the main goals are:
    - Visualise the **emission development in the city**.
    - Visualise the **different impacts of climate measures**
    - **Identify cost-effective actions to reduce emissions**.
    - Share our climate work, data and methods openly to everyone who is interested!

See tool: C4C Carbon-neutral Tampere 2030 | Emission Scenarios

Interreg Baltic Sea Region

Co-funded by the European Union

ENERGY TRANSITION
Climate-4-CAST

Kiitos! Thank you! Tack!

Contacts:
Hanna Meriläinen, Project Manager, hanna.m.merilainen@tampere.fi

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