

Climate Finance for Cities – update from some European initiatives

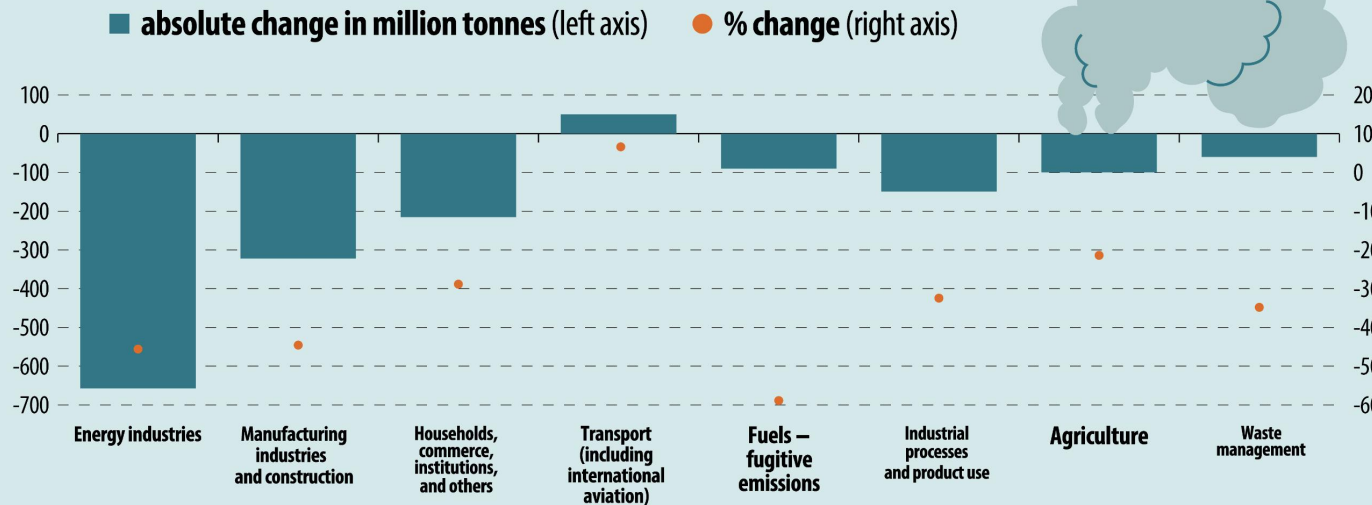
Thematic Session 2B: Boost financing for climate action at the
local level

16 December 2022

Climate change has cost the EU €145 billion in a decade

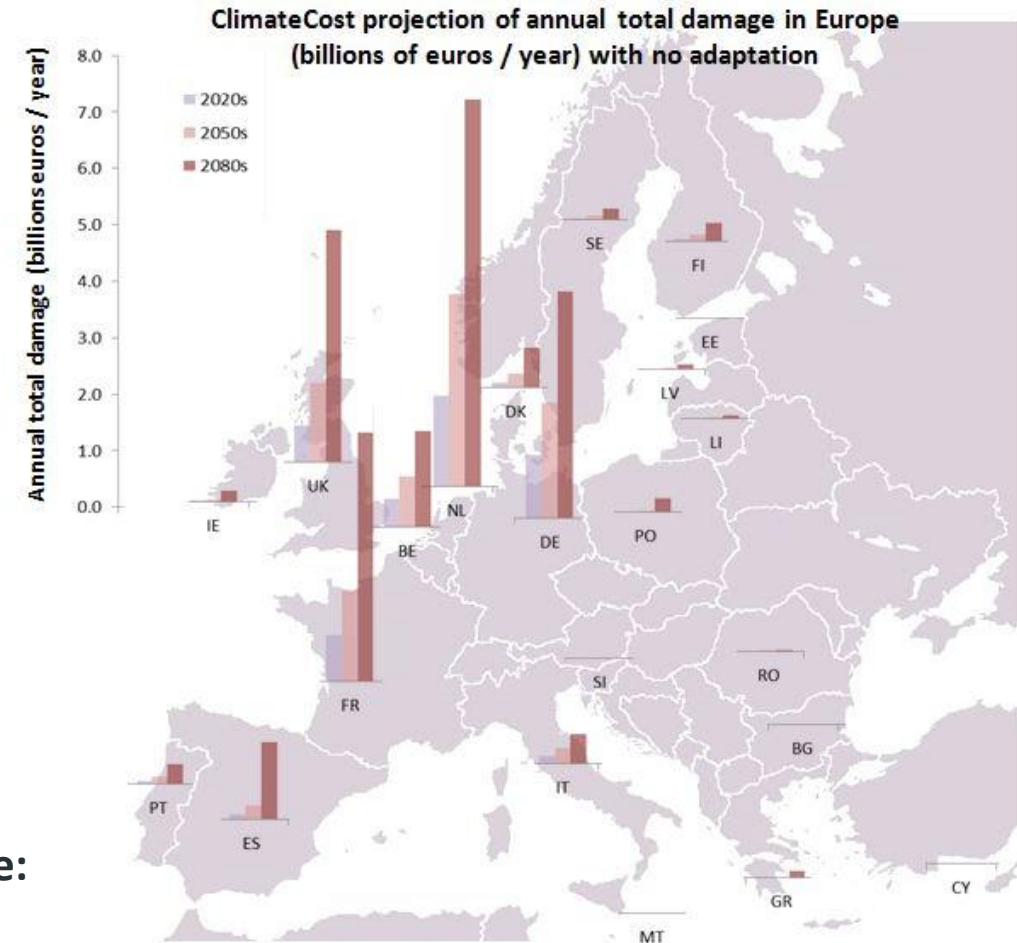
Greenhouse gas emissions by source sector, EU, change from 1990 to 2020

(million tonnes of CO₂ equivalent and % change)



Note: Source sectors as defined in greenhouse gas emission inventories
Source: European Environment Agency (EEA) republished by Eurostat

ec.europa.eu/eurostat



Annual investment needs through 2030 to decarbonize economies in Europe: between 400 and 800 billion USD

Sources: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20220823-1>; <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/cost-climate-change-europe-could-reach-4-gdp>; <https://europeansting.com/2022/12/05/climate-change-has-cost-the-eu-e145-billion-in-a-decade/>; <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-a-decade-of-data/>

The EU missions

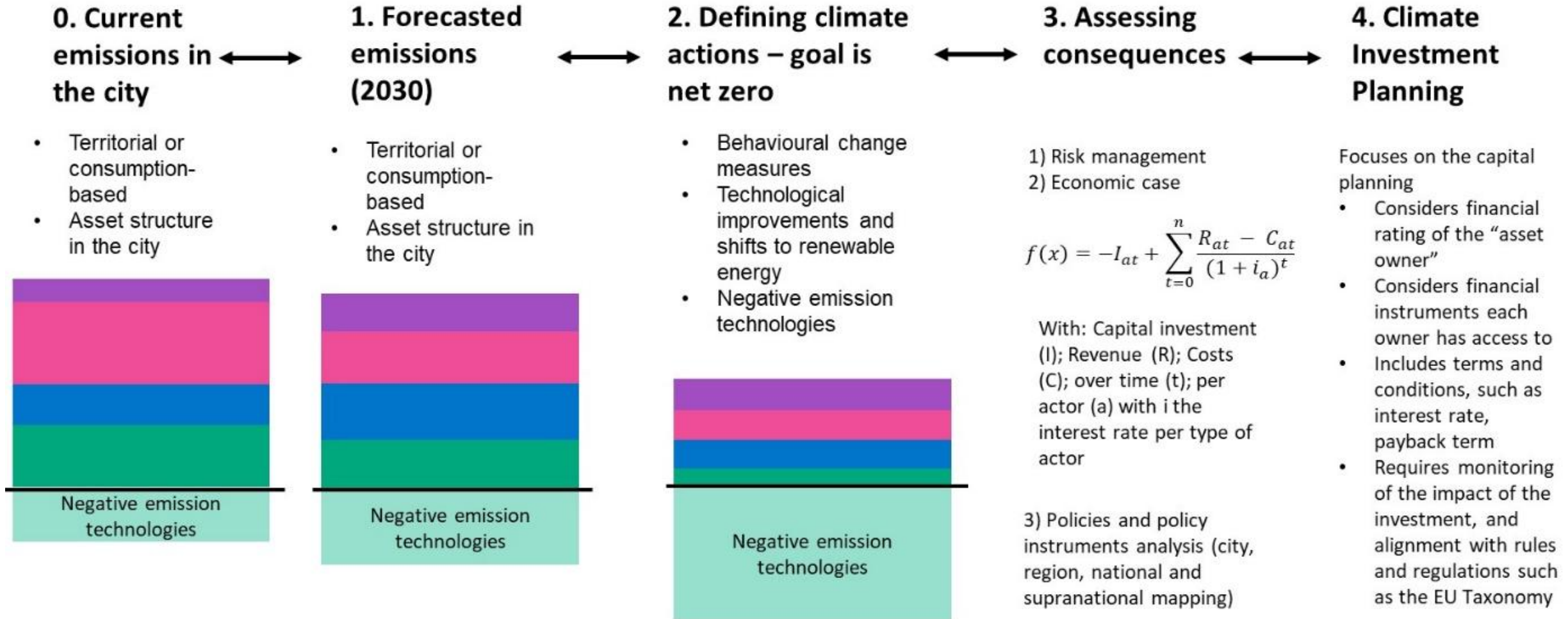
- The EU Mission for Climate-Neutral and Smart Cities – 100 EU cities and 12 cities from countries associated to Horizon Europe (2021-2027).
- The EU Mission on Adaptation - 202 EU regions and local authorities from 24 EU Member States; and 13 regions and local authorities from countries associated to Horizon Europe (2021-2027)



Some national level initiatives

- The Swedish Strategic Innovation Programme Viable Cities, aimed at supporting Climate Neutral Cities 2030 with a good life for all within planetary boundaries. Currently 23 cities, representing 40% of the Swedish population
 - Average territorial emissions in Sweden: about 4,4 tonnes of CO₂-e per capita (2020)
 - Average consumption-based emissions in Sweden: about 7,65 tonnes of CO₂-e per capita (2020)
- The Spanish CitiES2030, supporting 8 Spanish cities with climate neutrality by 2030

The approach for financing climate-neutral cities



Reflections

- NOVEL: whole-of-city approach
 - Many actors in the city and around the city
 - Many assets that need to be “converted”
 - > buy-in from all actors in the city – everyone needs to change
 - > to avoid stranded assets and white elephants
- Risk management essential – both with the climate action and the investment plan
- Ability and willingness of different actors to support the climate action and investment plan
 - Credit rating of different actors and financial instruments available
 - Citizen: equity and equality challenge
 - Institutional investors: systems thinking – EU Taxonomy on Sustainable Finance – redirecting fossil-fuel support
 - Public actors: redirecting public funding (including fossil-fuel support)
- Iterative – the climate action and investment plan change continuously

For the 291 cities in Sweden – a dashboard that combines climate action and economic costing (beta-version – open access and free of use)

The screenshot shows the Viable Cities Finance Dashboard interface. At the top left is the Viable Cities logo. The main header contains the text "Viable Cities Finance Dashboard" and "Emissions Reduction Cost Assessment – Beta". On the right side of the header are three orange buttons: "Learn More", "Glossary", and "Methodology". The main content area has a blue background with a "Welcome!" heading. Below the heading is a paragraph of text explaining the dashboard's purpose and goals. A list of three steps is provided: 1. Please select a municipality, 2. Design your own climate action strategy, looking at territorial or consumption based emissions, and 3. Assess the consequences of the climate action strategy mix, in terms of future emissions and costs. Below the text are two input fields: "Select a region" and "Uppsala". The bottom section is divided into two main areas: "Consumption-based emissions (households only)" and "Territorial emissions". On the left side of the bottom section, there are three stacked buttons: "Food", "Clothing", and "Housing". In the center of the bottom section, the word "Emissions" is displayed. To the right of "Emissions" is the text "Please select a scenario:" followed by a dropdown menu showing "BAU Scenario".

Viable Cities Viable Cities Finance Dashboard
Emissions Reduction Cost Assessment – Beta

[Learn More](#) [Glossary](#) [Methodology](#)

Welcome!

Sweden aims to achieve net zero emissions by 2045, which equals to less than 1 tonne of greenhouse gas emissions per person (Swedish Climate Policy Framework, 2017). The purpose of this dashboard is to support Swedish municipalities with their climate action and investment planning. It provides 1) insight into the current emissions in the cities, from a territorial emissions perspective and a consumption-based perspective (household level data only); 2) some forecasts to 2030 using population growth and other socio-economic data; 3) a tool to see the effects of different climate actions, and their associated costs. The necessary investments are computed for different types of stakeholders, and emission profiles broken under different categories. Please note that the consumption-based emissions do not incorporate emissions from the government sector.

1. Please select a municipality
2. Design your own climate action strategy, looking at territorial or consumption based emissions
3. Assess the consequences of the climate action strategy mix, in terms of future emissions and costs

Select a region

Consumption-based emissions (households only) Territorial emissions

Emissions Please select a scenario:

Food
Clothing
Housing

<https://seivcf.eu.pythonanywhere.com/>

Vanhuyse, F., and Piseddu, T. (2021). Climate-neutral cities – estimating the financial investments needed. Smart city Expo. Barcelona, 15–18 November 2021.

Piseddu, T., and Vanhuyse, F. (forthcoming). Viable Cities' Finance dashboard: user guide. Viable Cities, Stockholm.

In 2023

- Further elaboration of the dashboard; highlighting also measures that work for adaptation – for more countries across Europe as part of the Net Zero Cities consortium
- Portfolio approach – within a city and across cities (e.g., what to procure together)
- Redirecting public funding and attracting private investments – how to?

Further reflections

- Supporting nations outside the EU and LMIC - see. e.g., consumption-based emissions, through the provision of:
 - Concessional funding
 - Blended finance
 - Loss and damages

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