



CO₂ ACCOUNTING & MONITORING - A LONG STANDING PILLAR OF CLIMATE ALLIANCE'S WORK

GUIDING PRINCIPLES & POSITIONS/RECOMMENDATIONS

The present report briefly presents Climate Alliance's CO₂ monitoring approach and outlines a set of guiding principles for its members when tracking greenhouse gas emissions at local level (It also formulates a few positions – build upon long-standing experience + understanding of the local authorities' challenges)

INTRODUCTION

A large community with ambitious targets

Climate Alliance is the world's largest city network dedicated to climate action and the only one to set **tangible targets**. Its members have committed themselves to the continuous reduction of their greenhouse gas emissions, pledging to cut emissions by 10 percent every 5 years, equivalent to a halving of per capita emissions by 2030 from 1990 levels. Each member has also signed up to the long term goal of levelling off at 2.5 tonnes CO₂ per person and year. Such ambitious targets imply a wide array of measures, mostly targeting improved energy efficiency and greater use of renewable energies.

KEY FIGURES

- ✓ More than 2000 municipalities , regions, provinces and counties in 6 different countries are using Climate Alliances methodologies and tools for the calculation of CO₂ inventories

Various tools designed & a solid experience gained over the years

The need to monitor progress arises naturally from these targets to which all Climate Alliance member municipalities ascribe. It is for this reason that Climate Alliance has viewed CO₂ monitoring as its top priority for many years. Since the early 1990s, Climate Alliance has designed rules, tools and methods¹ to facilitate municipal efforts in the field.

¹ Climate Protection Planner (Germany), ECORegion (Germany, Luxembourg, Switzerland, Italy), KomKlima (Austria), Carbon Calculator (Ukraine, Georgia)



Besides, Climate Alliance has played a major role in developing and consolidating the Covenant of Mayors reporting framework, now used by thousands municipalities across Europe and beyond.

Climate Alliance continuously supports member

municipalities in the use of these tools and methods via dedicated workshops and trainings.

IN THE SPOTLIGHT

Climate Alliance's CO₂ monitoring tools and methods are:

- ✓ the result of a **broad participatory process**
- ✓ built upon the practical experience of its members & national coordinators
- ✓ **flexible and adjustable** to local circumstances (e.g. data availability and reliability)
- ✓ **continuously fine-tuned** to best meet local authorities' needs
- ✓ **aligned with national requirements** and **conformed with international standards**

Main drivers for monitoring CO₂ emissions

Evidence-informed policy making – informing local energy policies, laying the groundwork for the local energy and climate plans, allowing the identification of priority areas, monitoring the results of the planned and implemented measures.

Tracking progress - The monitoring of CO₂ emissions forms the basis for the planning, development and implementation of local climate protection policies, and periodic follow up of the CO₂ inventory provides municipalities with the opportunity to verify, confirm or correct the direction of travel arising as a result of these policies.

Higher visibility – making local achievements visible (i.e. actions implemented, progress made in terms of CO₂ emissions reduction), showing the diversity of commitments and actions taken by sub-national authorities on the ground.

Greater recognition – demonstrating local authorities' contributions to the national and even international climate efforts (NDCs, Paris Agreement) by capturing "Locally Determined Contributions".

Improved transparency, accountability & comparability – encouraging transparent and trackable commitments and actions, thus allowing comparison between local governments.

Reinforced multi-level governance – fostering dialogue and cooperation between local authorities and other levels of government.

Unlocked and sustained investment – providing an accurate picture of the situation and therefore supporting the preparation of viable projects, allowing financial planning to support measures.



PROPOSED PROCESS & GUIDING PRINCIPLES

Thanks to its experience gained over the years, Climate Alliance has defined a set of methods guide its members through the CO₂ accounting and monitoring process, summarised below:

Set boundaries & define clear scope – We recommend estimating the emissions associated to the **final energy consumption** within the **administrative boundaries** of the municipality. Emission inventories can focus on CO₂ emissions or CO₂ equivalent.

Choose accounting approach – CO₂ emissions can be calculated by applying a conversion factor to energy consumption data. Climate Alliance promotes the **Life Cycle Assessment (LCA) approach**², which includes emissions from the entire supply chain (e.g. from energy extraction to production, transport, use and recycling), thus offering a more accurate picture of the emissions related to both energy production and use³.

Identify key target sectors – Emission inventories shall focus on **energy-related sectors** (e.g. municipal buildings and infrastructure, street lighting, public and private transport, services) for which local authorities have greater influence, even though the scope could be enlarged to other sectors in which they take specific actions (e.g. waste management, agriculture). Emissions in sectors over which they have no control should be excluded, such as those associated to large scale power plants (>20 MW capacity), energy intensive industry and aviation, regulated under the European Emissions Trading System (ETS) and thus falling under national rather than local responsibility.

POSITIONS & RECOMMENDATIONS

Common guiding principles, allowing diverse approach

The CO₂ monitoring approach proposed by Climate Alliance is flexible enough to fit with the diversity seen on the ground: its member municipalities and their available data in the different countries are not uniform, just as their conditions and resources to contribute aren't. This is why Climate Alliance strongly believes that there is no "one instrument fits all", and has focused its efforts over the years

² Note: The LCA approach has been evolving over the last decades and is now supported by international initiatives (e.g. UNEP and SETAC) and is consistent with internationally agreed standards (e.g. UNFCCC, ISO).

³ Where LCA factors are not available, Climate Alliance members have also used IPCC factors.



on the elaboration of national tools adapted to the in the different countries most reliable available data. These tools come with comprehensive and up-to-date national conversion factors and other key figures, thus reducing data collection needs. Still, they are flexible enough to allow for the input of more precise local data should this be available, and adjustable to the diversity of member municipalities (size, economic specificities etc.). This “common, but differentiated” aspect is to be preserved and further supported (...)

Taking into account the data situation and the fact that CO₂ calculations don't reflect all of the work undertaken by municipalities concerning climate protection, it is also necessary to develop qualitative indicators that can provide non-numerical complementary information about the development of climate protection activities at the local level.

Stronger vertical integration and greater recognition of the local contributions

Climate Alliance stresses the importance of a greater recognition of cities' contributions in the international climate agreements. Local authorities are key players in achieving both national and international emission reduction goals.

→ What? - demonstrate local governments' contributions to the Paris Agreement by capturing further what could be called the “Locally Determined Contributions” in the Nationally Determined Contributions (NDCs)

→ How? - define a set of common key data (to be defined) that could be collected/estimated by local authorities, delivered by MS (as part of their NDCs) and published on an independent, centralised – and possibly UNFCCC-endorsed – platform (NAZCA or similar) – defining a specific chapter in the UNFCCC national reports presenting the yearly contribution the subnational entities and municipalities to the NDCs

→ What support needed?

- National, European and international decision makers to provide enabling frameworks to empower local players, thus accelerating and scaling up local (and therefore global) emission reduction
- Coordination between the different levels of government to be improved
- An official recognition the methods and tools used at the local level
- Collection and supervision of the yearly local results
- Acceptation and inclusion this results and its contribution to the national NDCs in the national UNFCCC reports