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CLIMATE-DILIGENT CITIES: setting the urban standard of mitigation

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On 15 December 2023, key representatives and experts from city networks, city governments, academia and specialist partners gathered in Barcelona for an international seminar on urban climate diligence. Organised by the Global Cities Programme of CIDOB (Barcelona Centre for International Affairs), in collaboration with C40 Cities and with the support of Barcelona City Council, the event discussed how the notion of climate diligence could boost cities' mitigation and adaptation efforts, exploring ideas to develop state-centric assessment instruments for city governments and to align their plans to the Paris Agreement.



Under currently implemented policies, global mean surface temperature (GMST) will increase by **3.2°C** by the end of the century. However, 300 years after the steam engine optimised fossil fuel burning, the consequences of global warming are already evident. Between March and September 2023, for instance, **Canada** experienced a record-breaking wildfire season: uncontrolled fires burned over 17m hectares, boosted by droughts and high temperatures. At the same time, in **Libya**, Storm Daniel claimed the lives of more than 9,000 people, with 25,000 citizens still missing. While scientists concur that global warming exacerbated these extreme events (Zachariah *et al.*, 2023: 2), it is important to note that current impacts are merely the result of a **1.07°C** climate anomaly. As greenhouse gas concentrations continue to rise and GMST increases, the gradual consequences of global warming are expected to become even more extreme.

These projections bring us to a critical question: how much can we emit to stay under the safe threshold? That is to say, what is the remaining carbon budget? According to the United Nations Intergovernmental Panel on Climate Change (IPCC), to avoid the most critical climate scenarios, from 2020 on, humanity can only emit **500 Gt of CO₂** net emissions. In order to put some perspective on such a gigantic amount, by 2019, the world released **56 Gt**

of **CO₂ equivalent**. Therefore, at the current level, we will have depleted the entire budget by 2030.

While science has successfully established a global carbon budget, how to distribute this budget is more controversial. It is widely acknowledged that historical and current emissions are unevenly distributed among and within countries. For one thing, the large gap between Northern and Southern emissions has been the cornerstone of the international climate regime. The Northern cumulative emissions were so significant that the international treaties have already legally recognised them. However, this CIDOB Briefing focuses on the intersection between the North-South gap and a second division worth mentioning: the differences between rural and urban areas. According to the IPCC, cities are responsible for **67-72%** of global emissions. Moreover, during the last decade, urban participation in the global emissions share has kept growing. So, city governments may also be failing future generations.

From climate-sensitive to climate-diligent cities

In line with this evidence, several cities have redirected their long-term strategies to incorporate climate-sensitive policies. The emergence of city networks whose primary

focus is climate action and environmental governance is the clearest instance of this trend (Leffel *et al.*, 2023: 2). Through these formal networking organisations, city governments boost their contribution to the governance of transnational challenges that, as in the case of climate change, have exceeded the capacity of individual nation-states (Martinez, 2023: 38). Through cooperation, local governments amplify their climate initiatives and try to align their strategies with the global objectives of the international climate regime. One example is the Global Covenant of Mayors for Climate & Energy (GCoM), the world's largest alliance with over 12,000 members. GCoM estimates that the climate mitigation targets pledged by its signatories will lead to a 4.1 GtCO₂eq emissions reduction by 2050 compared to a business-as-usual (BAU) trajectory. Accordingly, the members of this network have already pledged to go further and faster than their national governments' Nationally Determined Contributions (NDCs, which are commitments made by countries under the Paris Agreement). GCoM signatories are not a mere exception, since city governments are generally more ambitious than their national counterparts when defining their emission reduction goals (Martinez, 2022: 2).

citizens' capacity to exercise their democratic rights and hold their governments accountable. Moreover, since accountability and public participation have proved key to guaranteeing environmental protection (Tu *et al.*, 2019: 113), establishing these variables should be a priority to enforce the international climate regime.

In this context, we advocate for the notion of *climate-diligent cities*. According to this concept, a diligent city deploys the adequate means and best feasible efforts to mitigate global warming and adapt to its consequences (Amat & Martinez 2023: 2). Thus, a local government that aims to meet such a standard does not only design and implement policies to reduce its emissions. By the expectations that the Paris Agreement sets on countries, diligent cities are those whose net emission reductions reflect their highest possible ambition and their fair share to contribute to the 1.5°C goal. This is the logic underpinning the decision by C40 Cities to hold its members accountable through **mandatory membership criteria** geared towards raising climate ambition. This dovetails with the work of the city network in supporting its members in developing Paris Agreement-compatible climate action plans and

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With countries, both individually and collectively, unable to confront the climate challenge, local mitigation pledges will play a critical role in the much-needed comprehensive response to the climate emergency. For instance, **Manchester** has committed to limit its 2023-2027 carbon budget to 3.6m tonnes. Similarly, **Johannesburg** has pledged to reduce its BAU emissions by 43% by 2030. There is no doubt about the potential of these pledges to foster local climate action. However, is this enough to align the cities' climate plans with the international 1.5°C goal? Is Manchester taking on its fair share when emitting 3.6m tonnes? Is a 43% reduction too ambitious for Johannesburg?

Indeed, nowadays, it is hard to answer such questions. We have several tools to determine a state's fair share and monitor its mitigation and adaptation strategies. The **Climate Action Tracker**, for instance, analyses the pledges from 41 states and the EU, determining whether they match their fair shares. However, when it comes to the local level, we lack the necessary data and methodologies to assess whether a city is doing its part to tackle climate change. Indeed, while many cities are pledging climate action, most of them do not even have updated GHG inventories. In the context of a devilish and complex problem, this gap in data and resources hinders

adhering to the ten recommendations of the UN report **Integrity Matters**. This report establishes clear criteria for subnational governments, businesses and financial institutions, defining what it means to be net zero and how to ensure integrity, transparency and accountability along this pledge.

In defence of urban climate diligence

Climate diligence has four defining characteristics. Firstly, in line with the C40 work on urban **1.5°C compatible action** planning, *urban climate diligence* establishes a framework to facilitate accountability. So far, in many parts of the world, we have enough data to determine when a city is making a fair contribution to climate change mitigation. Thus, by setting a standard of diligence, we are establishing a yardstick with which we can compare and evaluate cities' climate strategies. Accordingly, diligence provides policymakers, researchers, private entities and citizens with a tool to monitor, assess and adjust their climate efforts.

Secondly, urban climate diligence assumes the necessary interdependence that characterises climate action. As Mayer (2022: 185) puts it, a classic example of how diligence

works is the medical obligation to cure a patient. Generally, modern societies do not evaluate health professionals based on whether the patient ultimately survives or not. By contrast, we assume that the doctor's participation plays a critical role but is not the only component. If the patients finally die, we must also consider their weight, age or whether they have other pathologies. Many factors, some beyond the doctor's control, will determine their chances of survival. Thus, we normally analyse whether the doctor has done their utmost by prescribing adequate means to each concrete case, irrespective of the patient's outcome.

Urban climate diligence operates in a similar manner. Mitigating global warming will depend on several factors. Many of these factors are far beyond a local government's sphere of control. Indeed, it is evident that no city, no matter how big and developed, can effectively relieve climate change. Accordingly, climate diligence does not evaluate whether a city has achieved the Paris Agreement's goal but whether, within its powers, a local government has done its utmost to contribute fairly to that pathway.

A diligent city deploys the adequate means and best feasible efforts to mitigate global warming and adapt to its consequences.

Thirdly, as we will explain below, diligence also embraces the dynamism inherent in urban societies. When implementing an urban climate strategy, several factors may alter the relative position of a city in terms of mitigation and adaptation efforts. A pandemic, a natural catastrophe, or an unexpected technological disruption may impact a local government's capacity for ambitious action. In this context, the notions of diligence and *best feasible efforts* perfectly accommodate these changes. If the relative position of a city improves or worsens, so will their potential efforts and ambition.

Finally, the notion of diligence encompasses the multiple variables that have been central to international climate governance debates. As previously discussed, cities must deploy *adequate* means. Thus, climate-diligent strategies should not rely on just *any* means but rather those suitable for achieving the goal of 1.5°C mitigation. Similarly, climate diligence revolves around the notion of *best feasible* efforts. Accordingly, cities do not need to reduce emissions regardless of social, economic and political cost. They only need to do their utmost within their capacities.

As a result, while the global carbon budget will play a significant role in defining the urban standard of diligence, it will not be the sole factor. Climate diligence accommodates several variables advocated by different

stakeholders. For instance, the standard can also consider the Human Development Index, cumulative per capita emissions or GDP. Thus, climate diligence allows for much more complete indicators to assess a city's climate plan, incorporating the great plurality inherent in climate discussions (Amat & Bargués, 2022: 2).

However, defining what variables make up the indicator and the weight attributed to each one will require close cooperation among cities. Once again, networking collaborations can play a critical function in this process. The current pace of global urbanisation provides a window of opportunity to radically reduce urban emissions by switching to net zero carbon production and consumption (Seto *et al.*, 2021: 379). The United Nations Framework Convention on Climate Change (UNFCCC)-backed **Cities Race to Zero** campaign, through which over 1,100 city governments from across the world have committed to reach climate neutrality by mid-century at the latest, in line with the 1.5°C goal, is an example of the collaborative networking environment in which indicators can deploy their full potential.

Indeed, indicators are crucial for diligence to provide all its potential benefits. Without them, we cannot determine a common methodology to set the urban standard of climate diligence. However, so far, the international community has not reached an agreement on what elements to consider when evaluating an actor's climate ambition (Amat & Bargués, 2022: 7). Thus, in the following section, we will lay out a conceptual framework as the first step in a broader effort towards defining such a standard. We will first analyse which principles should inspire the selection of variables. Secondly, we will explore the indicators used to set the state-level standards of climate diligence and examine whether we can apply them in the urban context.

From state to local level: the principles inspiring climate diligence

Over the past 30 years, most of the discussions on global climate governance have focused on states. The dynamics of international law, **the categorisation of climate change** as a common concern of humankind, and the difficulties in dealing with an interdependent problem made it necessary to prioritise cooperation among states rather than among cities. However, three decades of debate can provide valuable insights into what principles should inspire urban carbon budget allocation.

Indeed, how to allocate emissions has been at the centre of the mitigation debates since the adoption of the UNFCCC in 1992. Initially, the international community adopted a binary approach based on the historical responsibility of developed countries. Accordingly, the first allocation model imposed all emission reductions on Northern states. However, the failure of the Kyoto Protocol led to a crisis of the model. From 2009 onward, the international climate regime gradually transitioned to a more comprehensive perspective where all parties, irrespective of their socio-economic situation, should self-determine their emission commitments (Bodansky *et al.*, 2017). In the context of this new model, the principles of the international climate regime play a critical role in inspiring states' self-determined commitments – formally known as Nationally Determined Contributions.

The international climate regime has several principles. It is true that strictly speaking, none of them will have any direct legal effects on local climate strategies. However, two of these principles may be particularly inspiring when exploring the urban standard of climate diligence.

To prevent irreversible consequences, the design of the urban standard of diligence must ensure that, overall, the combined pledges of all cities do not exceed 500 Gt of CO₂.

First, we have the principle of prevention. Second, we must explore the principle of *Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC)* in the light of national circumstances.

Firstly, the principle of prevention requires managing transnational environmental risks in advance. Based on science, the principle understands that environmental threats can provoke irreversible harm. Under some circumstances, they may even imply the disruption of ecological balances. Accordingly, a climate-diligent state must deploy mechanisms of vigilance and prevention based on the latest scientific knowledge. Legal and political systems worldwide have incorporated this perspective over the last few decades. Indeed, it is so widely accepted that the **International Court of Justice** has already recognised its customary nature.

But how can this principle inspire the urban standard of climate diligence? As is well-known, the **IPCC** has repeatedly warned of the irreversible consequences of exceeding the remaining carbon budget. As previously discussed, the panel has also recognised the critical share of cities in global emissions. Thus, to prevent irreversible consequences, the design of the urban standard of diligence must ensure that, overall, the combined pledges of all cities do not exceed 500 Gt of CO₂.

The second principle worth mentioning is the CBDR-RC. Both the **UNFCCC** and the **Paris Agreement** emphasise that states must address climate change while considering their *common but differentiated responsibilities and respective capabilities, in the light of national circumstances*. Historically, such a principle justified the binary approach mentioned above. As long as Northern actors accounted for most of the historical emissions and had more resources, they had to assume the costs of initial mitigation.

However, over the last few years the CBDR-RC encompassed more elements. Indeed, nowadays, the principle rests on three key elements. Firstly, addressing climate change is a shared responsibility. Therefore, despite contextual factors modulating each city's individual contribution, all local governments must deploy adequate mitigation means and their most ambitious efforts. Thus, the urban standard of climate diligence must express this collective effort.

Secondly, the CBDR-RC principle modulates this shared responsibility by introducing historical factors. As mentioned in the paragraph above, most historical

emissions come from Northern cities. Therefore, they should continue to take the lead, and their climate ambition should be higher. Accordingly, humanity should invest most of the remaining urban carbon budget in Southern cities. This premise brings us to a second conclusion: the urban standard should incorporate the cumulative emissions of cities.

Finally, the third proposition links each city's ambition level to its assets, capabilities, and circumstances. While historical emissions serve as our primary benchmark, it is essential to adjust the standard of diligence based on each city's current and unique capacities. In so doing, the CBDR-RC not only distributes the urban carbon budget between Northern and Southern cities, it also determines different levels of climate ambition within each of these groups. Accordingly, the urban standard of climate diligence should also incorporate variables expressing these differences. For instance, the Human Development Index, GDP per capita or some variables used to measure the Sustainable Development Goals could perform this function.

As previously discussed, flexibility and dynamism are crucial factors in defining a city's standard of climate diligence. As each city's resources, capabilities and circumstances are unique and dynamic, so are its levels

of climate ambition. Therefore, we must consider those elements that may rapidly change these resources, capabilities and circumstances. International transfers are the prime example of these changing circumstances. They can strengthen the mitigation commitments of cities without resources. The C40 Cities promise to spend two-thirds of its budget supporting climate action in **Global South cities**, for example, enables Southern local governments to adopt more ambitious reductions. Accordingly, the urban standard of diligence could incorporate it as a variable.

From principles to indicators

Up to this point, we have examined the concept of urban climate diligence and the guiding principles for establishing its standards. Nevertheless, even at the state level, the global community has encountered challenges in reaching a consensus on the specific variables that should comprise this standard. In this context, various stakeholders, including the IPCC, scholars and legal jurisprudence, have made efforts to propose different indicators. For instance, Rajamani *et al.* (2021: 996) generate such a standard by considering indicators like emissions per capita, cumulative emissions or the Human Development Index. Similarly,

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Holz *et al.* (2017: 121-123) developed a responsibility-capacity indicator based on cumulative emissions and a function of each country's GDP. In the practical arena, the emergence of climate litigation has also analysed which indicators to consider. In the **Urgenda** leading case, for instance, the Netherlands Supreme Court considered that based on its GDP, the country's commitment to reduce its emissions by 20% by 2020 was beyond its fair contribution.

In line with these perspectives, the Climate Action Tracker (CAT) is probably the best tool to inspire the urban climate diligence indicator. This tracker, which gathered more than 40 published studies to develop its own standard, considers seven variables to determine each country's fair share: (1) responsibility (measured in historical emissions), (2) capability (GDP or Human Development Index), (3) equality (emissions per capita convergence), (4) equal cumulative per capita emissions, (5) the responsibility/capability variable, (6) the capability/cost variable (equal costs or welfare loss per GDP), and (7) the staged differentiation. Once all the data are collected, each category is given the same weight, and the fair range of the country is the space between the intervals 5 and 95 of **the distribution**.

Hence, the CAT's methodology serves as an accountability tool with two advantages. Firstly, it integrates various perspectives within the international community. Secondly, it encompasses many of the requirements outlined by the two principles discussed earlier: it is grounded in scientific targets, acknowledges the presence of shared but distinct responsibilities, and recognises the diverse capacities of the different actors. Moreover, and conscious of the disparity of opinions within the international community, the tracker also offers other methodologies to calculate the effort-sharing components. Consequently, as city networks and their partners explore the seminal idea of a standard for urban climate action and its possible avenues for action, CAT may be well-suited to fulfil this role.

To conclude, in 2023 the consequences of climate change are undeniable. It is equally irrefutable that most of today's global emissions come from urban areas. Accordingly, cities are critical to limiting global warming to 1.5°C. In this context, climate-sensitive cities are no longer enough. Only *climate-diligent cities*, those deploying adequate means and their best possible efforts while reflecting their greatest possible ambition, will be part of the solution. The time has come to set the urban standard of climate diligence.

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