



EDITORIAL

Editorial

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Climate Change and Chilean Urban-territorial Planning

At an international level, the first document to recognize climate change (CC) was the 1992 United Nations Framework Convention on Climate Change (UNFCCC). Its objective was to stabilize greenhouse gas (GHG) concentrations at a level that would prevent dangerous anthropogenic interference in the climate system. This implied preventing food production from being threatened and ensuring sustainable economic development. The Kyoto Protocol (1997) activated the UNFCCC by committing industrialized countries to limiting and keeping greenhouse gas emissions below committed individual targets. The imposed targets assumed an average reduction of 5% in emissions compared to 1990 levels over the 2008-2012 five-year period. Today, the international community is governed by the legally binding Paris Agreement (2015), which aims to limit global warming to 1.5°C above pre-industrial levels. In 2020, all the signatory countries, including Chile, presented their climate action plans, known as Nationally Determined Contributions (NDCs).

Before the presentation of the NDC, from the environmental sphere, the Chilean Ministry of Environment and, more specifically, its Climate Change Division had already promoted and deployed several strategic and regulatory instruments framed in the CC international agreements. In the 2000s, Chile launched its first National CC Strategy (2006-2010) and its respective National CC Action Plan (2008-2012) to address GHG mitigation. In 2015, in parallel with the ratification of the Paris Agreement, Chile approved the National Adaptation Plan to CC, an update of the previous decade's plans. This plan incorporates adaptation and mitigation criteria specified in the National CC Action Plan (2017-2022). Several sectoral plans emerged from the National Plan, and one of particular interest for urban planning is the Climate Change Adaptation Plan for Cities, prepared by the Ministry of Housing and Urbanism and the Ministry of Environment (2018). This document identifies cities at a global level as part of the problem behind GHG emissions and as part of the solution, where they needed to strengthen both adaptation and mitigation capacities.

Institutional governance related to climate change is very structured at a national level. There is an Interministerial Technical Team on Climate Change (ETICC), comprising the CC focal points of several ministries, which reports to the Council of Ministers for Sustainability and Climate Change. In 2022, the Framework Law on Climate Change was approved. Its objective was to standardize and organize regulatory actions and instruments related to Climate Change. This law recognized and outlined the general regulatory and governance structure established over the previous seven years.

The documents related to Climate Change from this environmental sphere propose rolling out its guidelines and proposals on a regional scale through Regional Climate Change Action Plans (PARCC, in Spanish) that must be adapted to regional realities. Their principles must also be incorporated across the board for Regional Development Strategies (RDS), Regional Spatial Planning Plans (RTPS), and regional development and planning instruments. At this scale, the creation of a Regional Climate Change Council (CORECC) was also proposed as a governance space for climate action. Today, all regions have active CORECCs, four have a Regional Climate Change Plan, and eight others are in the preparation stage.

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Figure 1, 2 Rampa Cuauhtémoc. Fotógrafa @maidaleon_photos

At a communal level, the proposal is to introduce the guidelines of the Regional Climate Change Plan into the Communal Development Plans (PLADECO, in Spanish), leaving out the local planning instruments such as the Communal Regulatory Plan (PRC, in Spanish). It also proposes explicitly developing Community Climate Change Action Plans (PACCC) that address local problems and face regional and national challenges. However, the top-down rolling out of these instruments to the local scale has been slow due to the time required by the plans. Despite this drawback, some municipalities have already developed plans between 2015 and 2020 with the support of the Adapt Chile Network and the Chilean Network of Municipalities for Climate Change, in coordination with several European Union projects. Today, more than 100 Chilean municipalities have joined the Global Covenant of Mayors for Climate and Energy and are seeking urgent measures to counter the effects of Climate Change. Meanwhile, the Chilean Association of Municipalities is in charge of developing Chile's National Local Climate Action Strategy, which includes measures to support the member cities of the Pact in implementing concrete climate actions to comply with the Paris Agreement.

For urban planning, the 2016 National Urban Development Policy (PNDU, in Spanish) is still in force. Despite aiming to comply with SDG 11 on inclusive, safe, resilient, and sustainable cities, it does not incorporate specific CC mitigation or adaptation criteria. The first national urban planning instrument that included them was the 2019 National Urban Development Plan (PNOT, in Spanish). This raises the need to develop resilience and adaptation capacities for human settlements and strategic infrastructure to handle disaster risk and climate change adaptation. It also incorporates natural systems as a tool for threat mitigation, CC adaptation, and RDN reduction. The PNOT guides national policies and instruments, where those that directly impact cities stand out, such as the National Urban Development Policy (PNDU), the National Climate Change Action Plan (PANCC), and the CC Adaptation Plan for cities. This implies that CC mitigation and adaptation criteria should be incorporated in future versions of the PNDU. In terms of the roll-out on a regional scale, its guidelines should be incorporated into Regional Development Strategies (ERD), Regional Spatial Planning Plans (PROT), and Intercommunal or Metropolitan Regulatory Plans (PRI-PRM). Meanwhile, at the local level, they should be incorporated into the Communal Development Plans (PLADECO) and the Communal Regulatory Plans (PRC).

To promote cities' carbon neutrality, the National Council of Urban Development (currently CND Territorial) published a document in 2021 called *Proposals to move towards carbon-neutral and climate-resilient cities*. This document positions cities as key actors in climate action to achieve alignment and coordination among the different public policies and governance systems. Its two goals target (1) resilient and adaptable cities by 2050 and (2) carbon-neutral cities by 2050, i.e., adaptation and mitigation. To guide cities' climate action, this document puts citizens at the heart, followed by governance and planning. Their outer concentric rings identify the fields to face these goals: resilience, infrastructure and ecosystem, adaptation, energy, sustainable mobility, mitigation, or disaster risk management. Moreover, the actions to deal with adverse effects in cities are very heterogeneous and require the coordination of diverse instruments and institutions.

Hence, local governments must use and coordinate all local-scale instruments to achieve the greatest possible effectiveness in climate action. The development sphere and the sectoral CC plans can address many issues, such as sustainable mobility, waste management, or food resilience, that today's planning instruments, due to the limited faculties, cannot address. These lines and actions achieve measurable effectiveness in the short term and can be aligned with projects at other scales (regional, national, or even international) to obtain financing. On the other hand, despite the limitations of the PRCs' competencies, faculties have been included in recent years through incentives to incorporate subjects related to sustainability, environment, and climate change. From the climate perspective, the PRC regulates structural areas such as buildings, risk areas, mitigation measures, green infrastructure, and heat islands, whose effectiveness is only measurable in the medium and long term. In this sense, it is relevant to identify both types of instruments as complementary in local climate action, both in terms of the levels of action they can face, and the deadlines in which their results are perceived.

Finally, it is essential to highlight that, in addition to guiding the type of guidelines and actions that cities should address to face the adverse effects of climate change, the state, from its multiple scales and areas of action, must ensure the strengthening of municipalities' capacities in terms of climate change mitigation and adaptation, as well as support or channel financing to implement policies and actions emerging from sectoral, development, or urban planning.

