

ACCELERATING CLIMATE ACTION IN COLOMBIA

A REVIEW OF PLANNING AND CLIMATE LAW
FRAMEWORKS



University of Michigan, Taubman College of Architecture and Urban and Regional Planning in
collaboration with the United Nations Human Settlements Programme

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Integrative Fieldwork Experience
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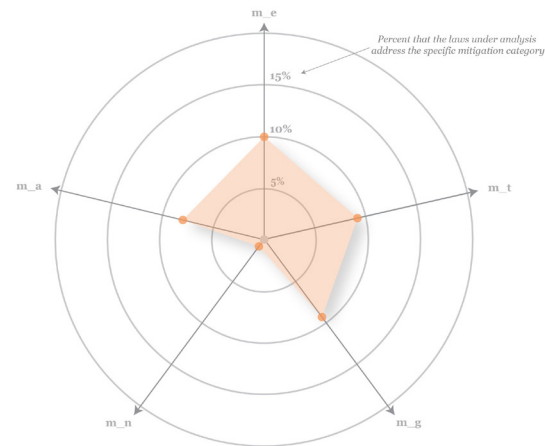
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EXECUTIVE SUMMARY

INTRODUCTION

The way cities and human settlements are planned, designed, governed and managed has an impact on their resilience and adaptation to climate change and on their greenhouse gas (GHG) emissions. Urban law has an important role to play in increasing cities' resilience and in helping cities reducing their GHG emissions: it defines urban forms, where land, infrastructure and basic services can be built; lays out rules for planning and decision making; and sets the context within which urban authorities, local governments and communities are expected to fulfil their mandate and react to emerging challenges.

¹ "Law and Climate Change Toolkit." Accessed March 31, 2021. <https://climatelawtoolkit.org/>.



Planning for Mitigation

m_e	Urban plans and greenhouse gas emissions
m_t	Urban form and reduction of greenhouse gas emissions from transportations and infrastructure
m_g	Green spaces for environmental and climate services
m_u	Neighborhood design and energy saving in buildings
m_a	Development approval and mitigation

The **UN Law and Climate Change Toolkit** (the Toolkit) is “designed for use by national governments, international organizations and experts engaged in assisting countries to implement national climate change laws, as well as any academia and research institutions that are undertaking analysis of the growing body of climate change-related legislation throughout the world.”¹ The Toolkit covers five (5) domains of legislation and policy:

1. Governance and Institutional Arrangements
2. Planning Instruments
3. Planning for Adaptation
4. Planning for Mitigation
5. Financial and Economic Instruments

The combined analysis of the five domains for a specific morphological or political geography identifies areas of strength and opportunity in planning for climate change, with the aim of increasing cities' resilience to climate risks and vulnerabilities and pursuing a sustainable urban development.

The **University of Michigan Urban and Regional Planning Capstone**, in collaboration and partnership with the United Nations Human Settlements Programme (**UN-Habitat**), analyzed over **100 laws, policies, and decrees** using the Toolkit. The main objectives of the analysis are:

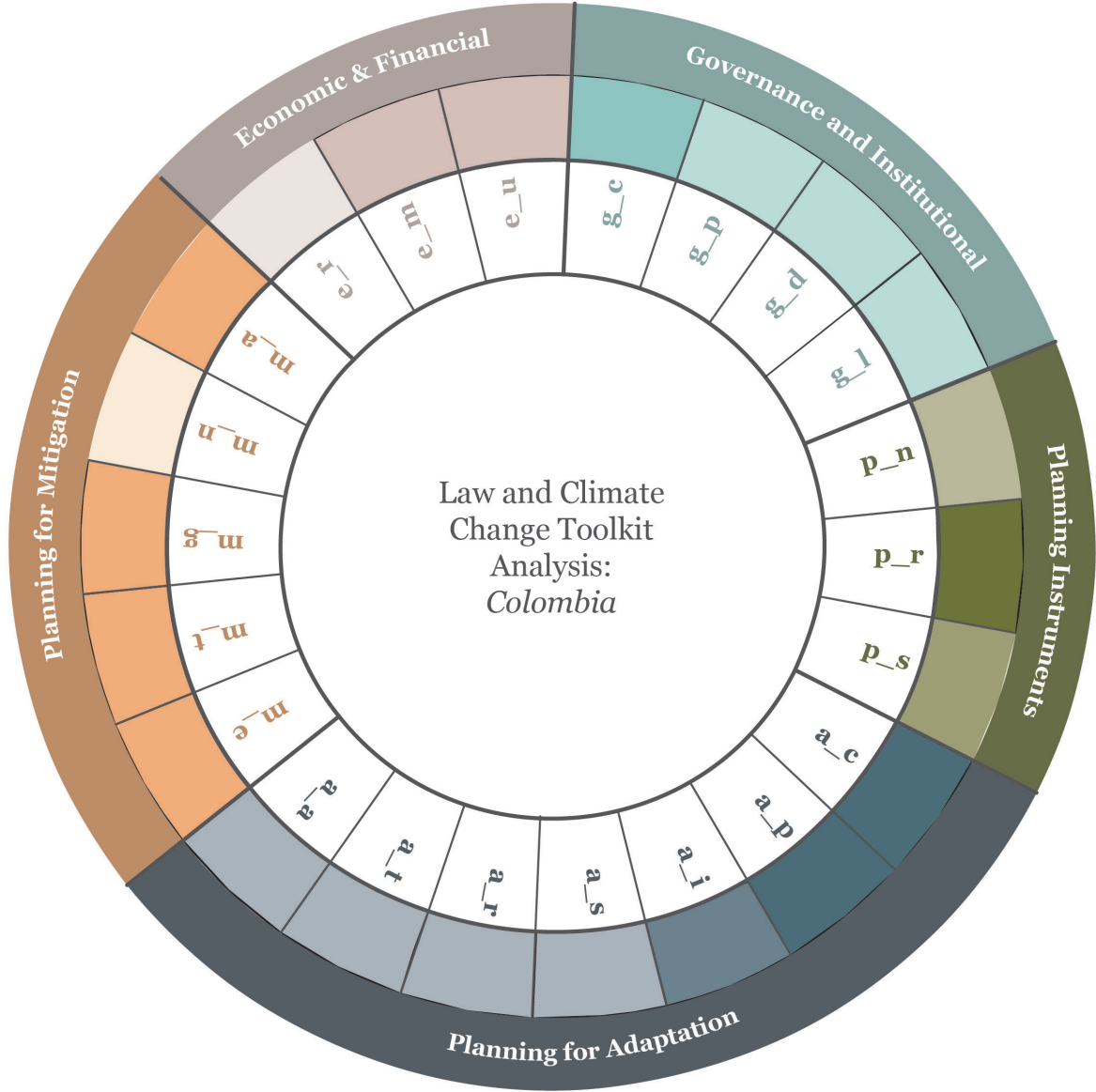
- Establish an in-depth understanding of Colombian legislation under each of the five Toolkit domains
- Formulate an overall understanding of urban planning, environmental and climate change laws and policies in Colombia
- Based on the Toolkit analysis and findings, create specialized recommendations and identify relevant stakeholders for initial engagement with the recommendations
- Synthesize findings and recommendations with graphics into a series of presentations and reports

An important component in the visualization of the analysis is the **Radar Graph** (pictured left). Radar graphs quantify, in

a percentage, the number of the answers “yes” for each question presented in the specific Toolkit domains. A higher number percentage (and sharper point on the graph) indicates a more robust legislative engagement with the topics in the Toolkit; a lower number identifies opportunities for government institutions to establish stronger climate change policies and laws.

The country of **Colombia** has a robust body of territorial planning legislation and has been expanding its body of climate change laws and policies. Therefore, the country provides a unique opportunity to analyze opportunities for synergies between climate change laws and policies and multi-level planning instruments.

The following figure is a summary of our results from the Law and Climate Change Toolkit analysis of Colombian legislation. The figure shows the Toolkit domains divided into subcategories. The darker colors represent subcategories that are most frequently mentioned in the Colombian legislation, while the lighter colors are the least mentioned. Thus, strengths and weaknesses of Colombia's climate change policy can be identified.



Governance and Institutional Arrangements

- g_c Multi-level institutional coordination
- g_p Participatory governance
- g_d Data collection and sharing
- g_l Local governments' mandate for urban planning in urban areas

Planning instruments

- p_n National territorial planning
- p_r Regional territorial planning
- p_s Spatial plans for urban areas

Planning for Adaptation

- a_c Climate risks and vulnerability for planned areas and infrastructure
- a_p Identification and prioritisation of adaptation options
- a_i Implementation of the identified adaptation options
- a_s Adaptation of slums and other vulnerable settlements
- a_r Planned relocations from areas at risk of climate change
- a_t Security of tenure
- a_a Development approval and adaptation

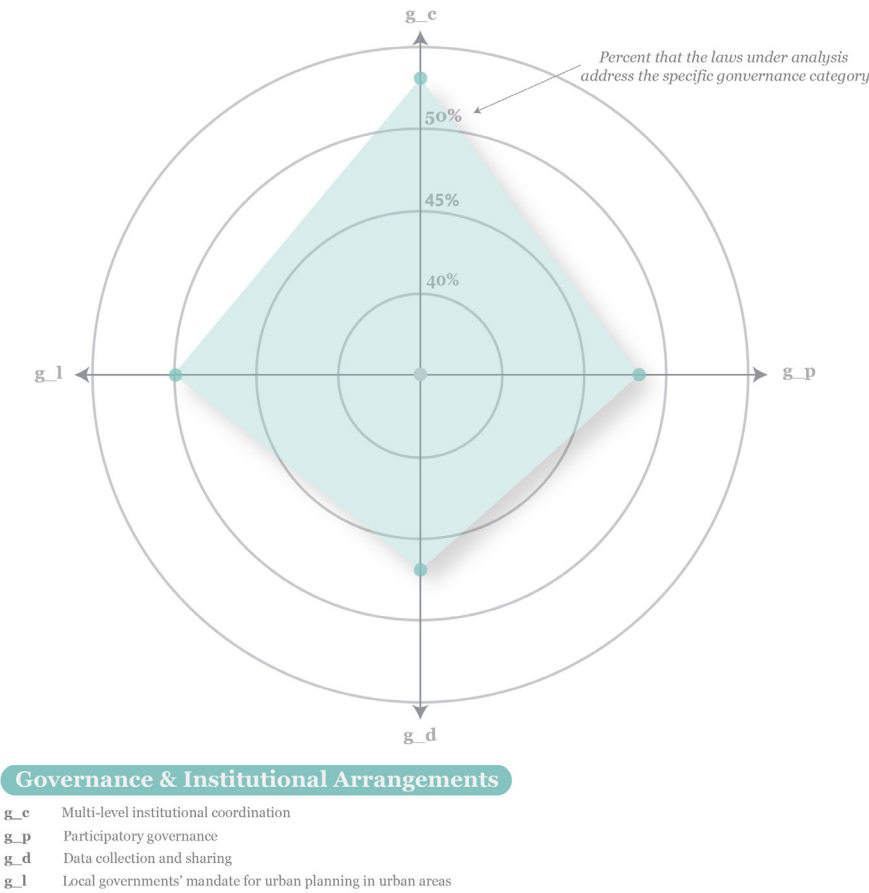
Planning for Mitigation

- m_e Urban plans and greenhouse gas emissions
- m_t Urban form and reduction of greenhouse gas emissions from transportation and infrastructure
- m_g Green spaces for environmental and climate services
- m_n Neighborhood design and energy saving in buildings
- m_a Development approval and mitigation

Economic and Financial Instruments

- e_r Resources for urban planning and climate change
- e_m Incentives for mitigation and adaption in urban planning
- e_u Incentives that promote unsustainable urban land uses

00.1 GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS



Starting from the 1990s, Colombia has enacted a number of territorial and environmental planning laws and policies stemming from the 1991 National Constitution and extending to the present day, producing waves of evolving climate change laws and policies that establish new climate governance networks and environmental governance systems. Climate governance in Colombia relies on building vertical and horizontal relations among existing government

bodies as well as forming brand new regional territories of climate governance. Many legislative provisions foresee the need for vertical coordination and there are several provisions creating bodies to support multi-level institutional governance (e.g., *Comisión de Ordenamiento Territorial*, COT; *Consejo Nacional Ambiental*, CAN; *Nodos Regionales de Cambio Climático*). However, while the General Environmental Law does have strong provisions supporting multi-level institutional

governance, there are some key gaps in this law and in the two specific regulations on climate change (Law 1931 of 2018 and Decree 298 of 2016): there are no legal provisions that require coordination among different line departments in local governments. Cross-level involvement is encouraged through the creation of several bodies such as SISCLIMA, the CICC, and SINA, and further encouraged through mechanisms such as the PIGCCS and PIGCCT. Though while these tools encourage cross-level involvement from the national level to territorial and municipal levels, more mechanisms for horizontal collaboration (in addition to territorial associative schemes) would be beneficial to foster coordination from municipality to municipality, as well as specific structures for urban-rural coordination beyond administrative boundaries, that take into consideration rural needs when rural areas are part of the same economic, social or environmental functional areas even if within the boundaries of two or more local government authorities. In addition, the legislation provides limited guidance on how local governments should implement environmental management and preservation beyond coordinating with Regional Autonomous Corporations.

Participatory governance is enshrined in the Constitution and in Colombian legislation, which beyond acknowledging the importance of a participatory planning process, include mechanisms, such as direct citizen participation, stakeholder

representation, and specialty consultation, that allow citizens to intervene directly throughout the urban planning process, effectively applying the principle of democratic participation enshrined in the Constitution (e.g., right of petition, the holding of public hearings, the exercise of the enforcement action, the intervention in the formulation, discussion and execution of urban development plans and in the processes of granting, modification, suspension or revocation of urban development licenses). Nevertheless, among the provisions requiring citizens' participation, there does not seem to be any provision forcing planning institutions to take into consideration citizens' demands, needs and input (except for the enforcement judicial action that, as such, needs to provide a response to each claim). While some laws explicitly require consideration of the needs of Indigenous and Black communities, such as Law 99 of 1993, there lacks engagement with the general public. For example, the National Council on Climate Change (composed, among others, of representatives of trade unions, academia and NGOs) can provide recommendations to the Intersectoral Commission on Climate Change (CICC) that, as such, are not mandatory for those who receive them. Decree 298 of 2016 encourages the inclusion and participation of citizen voices in climate change policy making, but does not explicitly foresee stakeholders and community identification nor how they would be included beyond representatives from different sectors in the regional nodes.

Several information systems (e.g., urban databases that municipalities and districts are obliged to organize by Law 388 of 1997; the National Information System on Climate Change; the National Registry for the Reduction of Greenhouse Gas Emissions (RENARE)) have been created, allowing for faster and more transparent organization and access to information. However, there do not seem to be explicit requirements for the coordinated collection and the exchange of data between the different governmental levels (neither vertical nor horizontal) in the field of urban and climate planning.

Since 1991, Colombia has comprehensively dedicated itself to a decentralization process, that is now well established as a national strategy and set of goals. Roles and mandates of the territorial entities in land use planning are comprehensively established; however, the abundance of legislation brings to the light the issue of implementation of the ample set of regulations, laws, projects and policies. Indeed, decentralization of competencies has not been accompanied by an appropriate fiscal decentralization: for the most part, competencies were ceded and resources to finance them were distributed to subnational governments, without transferring substantial fiscal competencies to them. Although subnational governments in Colombia have significant financial resources and spending responsibilities, most of subnational financial resources come from transfers from the general budget. Moreover, most

of subnational taxes and transfers from the revenue sharing system are earmarked and subnational governments' autonomy in using the funds is limited. According to the Colombian Constitution, municipalities are entitled to administer their own resources and to collect the taxes necessary to the performance of their functions "within the limits imposed by the Constitution and the law" (Article 287). The extent of local government taxing powers thus depends upon the terms of the law that authorize the levy of each specific tax. The decentralization process has been accompanied by an increase in the amount of national tax revenue shared with departments and municipalities and the creation of some subnational taxes as sources of own tax revenues. However, subnational tax revenues represent only 18% of overall tax revenues. As a result, departments and municipalities currently rely mainly on transfers from the national government, meaning that local governments have financial limitations that often mean they are under-resourced and lack the basic information and qualified technical teams required for preparing comprehensive land use plans with undeniable consequences for the effective performance of their functions.

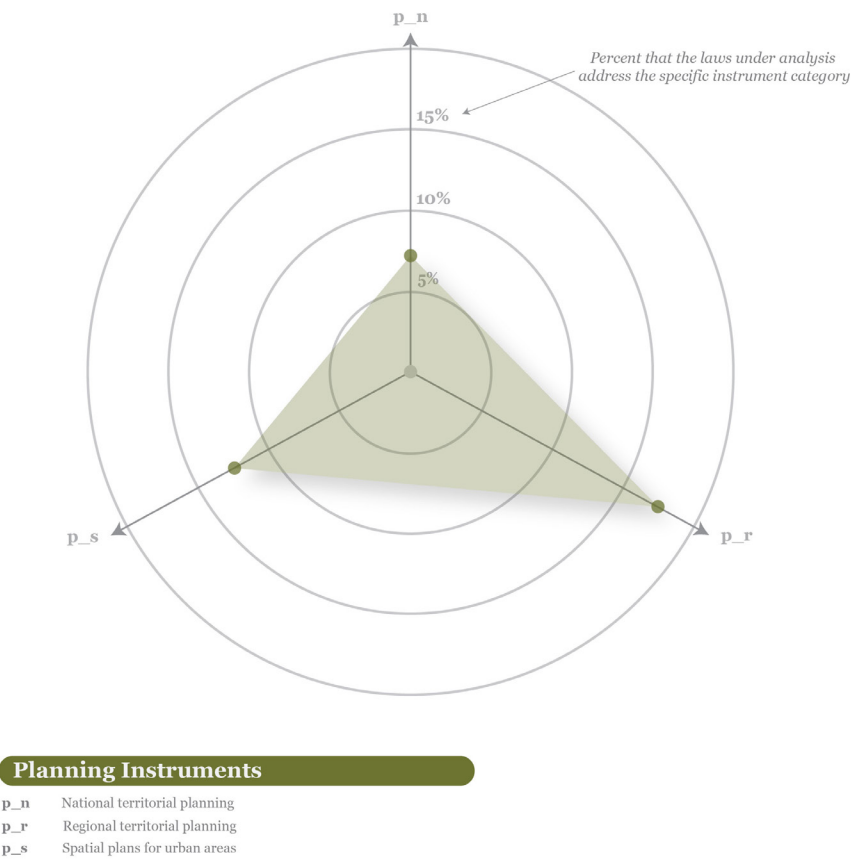
Multiple provisions exist within Colombian legislation that facilitate inter-municipal coordination for urban planning. The Constitution and other supplemental legislation allow for the organization of two or more jurisdictions sharing economic, social, and/or fiscal relations as an

"administrative entity." Law 128 of 1994 supplements this function by addressing functional and morphological boundaries as they relate to Regional Autonomous

Corporations, though the specific needs of informal settlers and indigenous groups are not taken into consideration for these kinds of collaborations.

Toolkit Subcategory	Recommendations	Actors
<i>Multi-level institutional coordination</i>	<p>Define and create coordination mechanisms (in addition to territorial associative schemes) to facilitate horizontal collaboration at city level and urban-rural coordination, as well as more tools and structure for coordination between different line departments and sectors at all levels (national, subnational and local).</p> <p>Provide more guidance on how local governments should implement environmental management and preservation beyond coordinating with Regional Autonomous Corporations</p>	<p>National Planning Department (DNP);</p> <p>Ministry of the Interior and Justice (MIJ);</p> <p>Territorial Order Commission;</p> <p>Ministry of Housing, City and Territory (MVCT), Ministry of Environment and Sustainable Development (MADS)</p>
<i>Participatory governance</i>	<p>Create mechanisms for an effective participatory planning process, including requirements to take into consideration citizens' demands, input and needs. Especially in environmental and climate legislation, specify requirements related to stakeholder and community identification.</p>	<p>DNP; MVCT; MIJ, MADS</p>
<i>Data collection and sharing</i>	<p>Define and create mechanisms and structures to boost the flow of information and collaboration between institutions at all levels on data collection and sharing, enhancing vertical and horizontal alignment of data collected and produced.</p> <p>To this end, improved technological infrastructures and innovations are necessary, as well as the development of technical capacities within the ministries and territorial entities for data collection and analysis.</p>	<p>DNP; MIJ; MADS; Territorial Order Commission</p>
<i>Local governments' mandates for urban planning in urban areas</i>	<p>Substantial fiscal decentralization, to increase the institutional and technical capacities of territorial entities to formulate, manage, and implement the POTs. For example, subnational tax reform that would allow territorial entities to generate greater local own revenues would be beneficial. A potential measure could be the local property tax assessments at local level, instead of national (e.g., a few municipalities, like Bogotá and Medellin, have their own cadastre offices; this has allowed Bogotá to increase its property tax base substantially).</p> <p>Colombian legislation pertaining to informal and flexible inter-municipal collaborations for urban planning, when administrative boundaries do not correspond to functional boundaries and morphological boundaries, should give further consideration to the specific needs of indigenous communities and slum dwellers.</p>	<p>DNP; MADS; MIJ</p>

00.2 PLANNING INSTRUMENTS



Planning instruments are integral in climate change considerations as they enable and standardize the national, territorial, and municipal objectives and policies for land-use, urban expansion, city and regional infrastructure, and environmental protection. This section analyzes approximately 30 laws and policies through the Law and Climate Change Toolkit, examining the themes of national territorial planning, regional territorial planning, and spatial plans for urban areas.

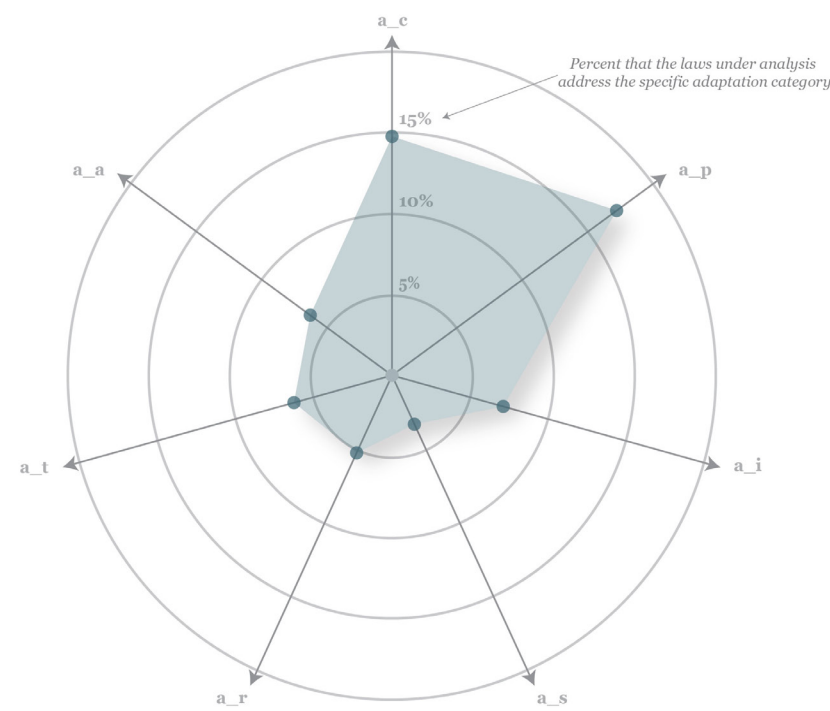
The genealogy of Colombia’s urban planning legislation and policy is extremely robust. Due to Colombia’s decentralization objectives, urban planning instruments are identified for national, regional, and municipal entities. Several of these documents are in the process of including climate change specific elements, like vulnerability and greenhouse gas assessments. Many of the planning instruments do facilitate and guide the planning process even when there are no legal requirements to do so. However,

in our analysis, many of the toolkit responses were “No” because of the lack of a legal requirement. In some areas, this may create a lack of clarity regarding which planning

authorities have decision-making power, capacity-building responsibilities, or research and knowledge responsibilities.

Toolkit Subcategory	Recommendations	Actors
National territorial planning	Strengthen land use guidelines, controls, and standards due to its far-reaching impacts on watershed management, soil health and erosion, biodiversity, pollution, and public health. Include requirements for scenario modelling and environmentally-focused assessments and research.	National Planning Department (DNP); Ministry of Housing, City and Territory (MVCT); National Council on Climate Change; Regional Land Use and Zoning Commissions
	Create legal requirements to update plans as climate change knowledge progresses.	DNP; MVCT; National Council on Climate Change; National Information System on Climate Change; Ministry of Environment and Sustainable Development
National & regional territorial planning	Create legal provisions that require the national territorial plan to establish an integrated national inland and coastal transportation and infrastructure network. This might be done through creating a CONPES document, coordinating integrated transportation at the national level.	DNP; MVCT; Ministry of Transport; National Council for Economic and Social Policy
Regional territorial planning	Create appropriate linkages between municipal Development Plans, Investment Plans, and the POT plans.	MVCT; Regional Autonomous Corporations (CARs)
Spatial plans for urban areas	Create a clear and transparent system of planning instruments that incorporate solid waste management strategies into POTs and other planning instruments.	CARs; MVCT

00.3 ADAPTATION



Planning for Adaptation

- a_c Climate risks and vulnerability for planned areas and infrastructure
- a_p Identification and prioritisation of adaptation options
- a_i Implementation of the identified adaptation options
- a_s Adaptation of slums and other vulnerable settlements
- a_r Planned relocations from areas at risk of climate change
- a_t Security of tenure
- a_a Development approval and adaptation

It is imperative that Colombia is able to adapt to climate change in order to mitigate its devastating effects on infrastructure, water resources, agriculture, ecosystems, and human health. Climate change projections for Colombia highlight a variety of risks including an increase in temperatures, average annual rainfall, extreme rainfall days, and a rise in sea level. Many hazards like flooding, landslides, and storms are already occurring with increasing frequency and severity. Climate change hazards are also

likely to be experienced differently by different geographic regions and communities. For example, Colombia's Black population is largely concentrated in coastal urban areas and often lives in communities with more precarious housing and infrastructure that is more vulnerable to extreme weather and flooding. This section on climate change adaptation analyzes approximately 45 laws and policies through the Law and Climate Change Toolkit, looking at the general themes of climate risks and vulnerabilities, identification

of adaptation strategies, and the adaptation of informal human settlements and other vulnerable settlements and provides recommendations.

A few pieces of legislation stand out as excelling in addressing a variety of climate adaptation categories. Law 388 of 1997, Ley de Desarrollo Territorial (Territorial Development Law) aims to preserve ecosystems as well as prevent disasters in high-risk settlements. Decree 1077 of 2015 states that the Ministry of Housing, City, and Territory shall execute plans and policies related to sustainable land use patterns, taking into account housing affordability, and the provision of public drinking water and basic sanitation services. Plan Nacional de Adaptación al Cambio Climático (PNACC) (National Plan for Adaptation to Climate Change) introduces important adaptation strategies to climate change in order to influence environmental, territorial, and sectoral planning processes. In general, the government will focus on providing public goods and protecting the most vulnerable population from climate hazards. Plan Nacional de Gestión de Riesgos de Desastres (PNGRD) 2015–2025 (National Plan for Disaster Risk Management) guides the actions of the State and civil society in terms of risk awareness, risk reduction, and disaster management contributing to safety, well-being, quality of life, and sustainable development. Law 1415 of 2010 regulates applications and implementation of the Rural Family Housing Subsidy for households located in high-risk areas. If a family applies

for the subsidy as a preventative measure, the funds must go toward relocation, meaning that those funds cannot be used to build or rebuild in the same high-risk area.

This legal analysis brings several key findings to light. Colombian legislation most frequently mentions the need for climate risk and vulnerability assessments and the identification of adaptation strategies. These considerations are crucial for building climate resilience for people, infrastructure, ecosystems, and economic sectors. However, the National Plan for Adaptation to Climate Change would most benefit from mechanisms to prioritize and implement climate adaptation strategies. Another important gap in the national legislation revolves around the housing sector, with the adaptation of informal settlements and other vulnerable settlements to climate change being seldom mentioned. While municipal Land Use Plans (POTs) define and regulate vulnerable housing settlements, there could be greater consistency in addressing these issues at the national level. It is essential to provide an overarching framework for additional resources, support, consultation, and considerations for adaptation to these already vulnerable populations and developments.

We have provided several recommendations for each of the seven toolkit subsections related to adaptation. Our recommendations primarily pertain to updating and disseminating climate hazard information to the public, prioritizing and providing benchmarks for identified

adaptation strategies, and establishing detailed guidelines delineating where future developments and essential infrastructure can be located. Regarding vulnerable and informal settlements, we generally recommend participatory and community-led processes to regularize them and guide their redevelopment, guaranteeing utility services and affordability, and expanding the Rural Family Housing Subsidy (SFVR) and other subsidy programs to relocate homes in high-risk areas. Finally, we recommend strengthening development approval legislation by including climate change risk and hazards consideration in the assessment criteria of existing license review processes.

Toolkit Subcategory	Recommendations	Actors
<i>Climate risk and vulnerability for planned areas and infrastructure</i>	Develop a more proactive approach to public engagement and cartographic education of climate hazard maps. Update maps on a regular basis.	National Planning Department (DNP); Departments; Regional Autonomous Corporations (CARs); Districts; Municipalities
<i>Identification and prioritization of adaptation options</i>	Employ cost-benefit analyses to aid in the prioritization and inform the implementation of adaptation strategies. Establish verifiable benchmarks for each strategy to encourage continuous monitoring and revision of plans.	Departments; CARs; Districts; Municipalities
<i>Implementation of the identified adaptation options</i>	Establish detailed guidelines delineating where future developments can be located. Incorporate coastal and riparian zone setback requirements, buffer zones, and nature-based stormwater management solutions into legislation. Set the requirements for POTs to identify evacuation routes in low-risk areas.	DNP; Departments; CARs; Districts; Municipalities
<i>Adaptation of slums and other vulnerable settlements</i>	Employ participatory and community-led processes to guide informal settlement upgrading and redevelopment. Guarantee utility services and affordability after redevelopment.	Municipal or District planning authorities, Urban Curators
<i>Planned relocations from areas at risk of climate change</i>	Assure that families will be consulted during planned relocations and guaranteed livelihood opportunities. Expand the Rural Family Housing Subsidy (SFVR) and other financial subsidy and assistance programs.	The Ministry of the Interior and Justice (MIJ), Ministry of Agriculture and Rural Development, Ministry of Finance and Public Credit and the Ministry of Housing, the Banco Agrario de Colombia, the Directorate for Disaster Prevention and Attention (within the MIJ), and Local and Regional Committees for Disaster Prevention and Attention
<i>Security of tenure</i>	Develop participatory processes that help occupants of informal settlements obtain property rights and proof of ownership. Guarantee compensation and consultations for those living in informal settlements that are relocated to host communities. Incorporate a variety of dispute resolution mechanisms into legislation.	The Ministry of Agriculture and Rural Development, MIJ, Directorate of Legal Land Management, Directorate of Land Information Systems, Municipal or District planning authorities, Urban Curators
<i>Development approval and adaptation</i>	Explicitly link the development approval process to climate adaptation strategies. Outline specific mechanisms for enforcement.	Ministry of Environment and Sustainable Development (MADS), CARs, Departments, Municipal Areas, Districts, Municipalities, Urban Curators

00.4 MITIGATION



Planning for Mitigation

- m_e Urban plans and greenhouse gas emissions
- m_t Urban form and reduction of greenhouse gas emissions from transportations and infrastructure
- m_g Green spaces for environmental and climate services
- m_n Neighborhood design and energy saving in buildings
- m_a Development approval and mitigation

The planning for mitigation section analyzes greenhouse gas (GHG) emissions in urban plans, carbon sinks, urban form and GHG in infrastructure and transportation, urban green spaces and their climate services, neighborhood design and energy savings in buildings, and the development process through the lens of mitigation.

Forests are an extremely important factor for Colombia and its geography, economy and

mitigation efforts. About half (52%) of Colombia’s surface is forests, and the nation contains half of the world’s moorlands. Further, deforestation is Colombia’s largest GHG contributor at 16.68%. Taking these two facts into account, it is not surprising that Colombia focuses a lot of its climate change policies on its forests and biodiversity goals. Colombia’s 2020 NDC Update includes over 30 mitigation measures and a goal to reduce GHG

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Forests are an extremely important factor for Colombia and its geography, economy and mitigation efforts. About half (52%) of Colombia’s surface is forests, and the nation contains half of the world’s moorlands. Further, deforestation is Colombia’s largest GHG contributor at 16.68%. Taking these two facts into account, it is not surprising that Colombia focuses a lot of its climate change policies on its forests and biodiversity goals. Colombia’s 2020 NDC Update includes over 30 mitigation measures and a goal to reduce GHG emissions by 51% by 2030, and to be net-zero by 2050. It is worth noting that this is a significantly larger reduction commitment compared to their iNDC of 2015 which committed a reduction of 20%. This indicates that the policies and their outcomes have been positively impactful enough that the nation felt confident in increasing their reduction goals. Colombia is especially committed to its reductions because they recognize that they are highly vulnerable to the effects of climate change as a diverse geography and economy which are both dependent on the use of natural resources and climatic conditions. Colombia produced an estimated 0.46% of global GHG emissions in

2010, and by 2017 they reported producing 0.25% of global GHG emissions. The Planning for Mitigation section analyzes 22 laws, decrees, plans and policies alongside other literatures to come to an understanding of Colombia’s mitigation needs, efforts, and goals.

The Mitigation Team determined that the climate mitigation strategy in Colombia seeks to address environmental and public health consequences related to global climate change in 5 key areas: consideration of GHG emissions in planning efforts, urban form and physical infrastructure, green space, neighborhood and building design and development approval and mitigation. In regards to GHG emissions assessments, there are several provisions that call for an evaluation of urban form-related emissions, the estimation of carbon sinks and their contribution to overall reductions and climate-based scenario-planning efforts. Colombia also meets the Toolkit’s standards in the way of assessing plans’ abilities to meet mitigation targets across different levels of government and maintains adequate provisions for emission reduction benchmarks.

There are adequate legal provisions promoting a connected, dense, and accessible and urban landscape, with the exception of legislation requiring consideration for existing and planned transportation infrastructure relative to local population and population density. National provisions for greenspace meet toolkit standards in terms of offering environmental and mitigation services through

networks of greenspace. Legislation identifies minimum standards for greenspace and the distribution thereof, though there is limited consideration for networks of greenspace in proximity to existing water bodies. Colombian legislation also requires that neighborhood design principles consider mechanisms for achieving energy savings in buildings, thermal properties of urban spaces, and optimal orientation of buildings in plot design for achieving maximum energy savings.

Colombia also has ample legal provisions regarding enforcement mechanisms for planning and design standards designed to mitigate GHG emissions. These include provisions linking development approval processes to existing urban plans and zoning regulations, allowing for developer fees, and tools and strategies for monitoring the compliance of new development efforts within existing constraints and conditions.

The recommendation is to create additional scenarios to determine the impact and potential of carbon sinks in helping to mitigate climate change. An example of carbon sinks is forests, such as forest reserves or urban forests. Since 2015, Colombia has made a commitment to decrease their GHG output by 51%, and these carbon sinks can help the nation achieve this goal. Creating these various scenarios can assist in balancing the need for green space with capacity, resources, and financial allocation. Colombia tracks the emission of greenhouse gas by type, sector, and per capita, but there are

no provisions mandating that emissions from development be tracked on a standardized timeline or the explicit greenhouse gases that should be monitored. Therefore, Colombia would greatly benefit from instituting laws that mandate the assessment of greenhouse gas emissions associated with developments found in urban plans.

Another area of improvement would be to create planning guidelines or requirements requiring the connection of green spaces such as parks and urban forests to blue spaces, like waterways, ponds and rivers. Cities and communities will have a standard to follow when implementing these types of spaces, creating greater regional cohesion and continuity. Greenbelts can be developed to encourage sustainable and proper usage of these spaces, which would increase green areas.

A number of policies aim to regulate neighborhood design principles to achieve energy savings in buildings, though the majority of the policies target active design measures or more generic strategies such as stating a need for “sustainable construction.” An area for improvement is for policies that make provisions similar to those recommended in the toolkit, such as neighborhood plans that consider wind and sun direction when deciding the orientation and layout of the streets; consideration of thermal properties of urban surfaces (specifically recognizing application of thermal properties, such as reducing the urban heat island effect, or a need for high-albedo roof surfaces); and

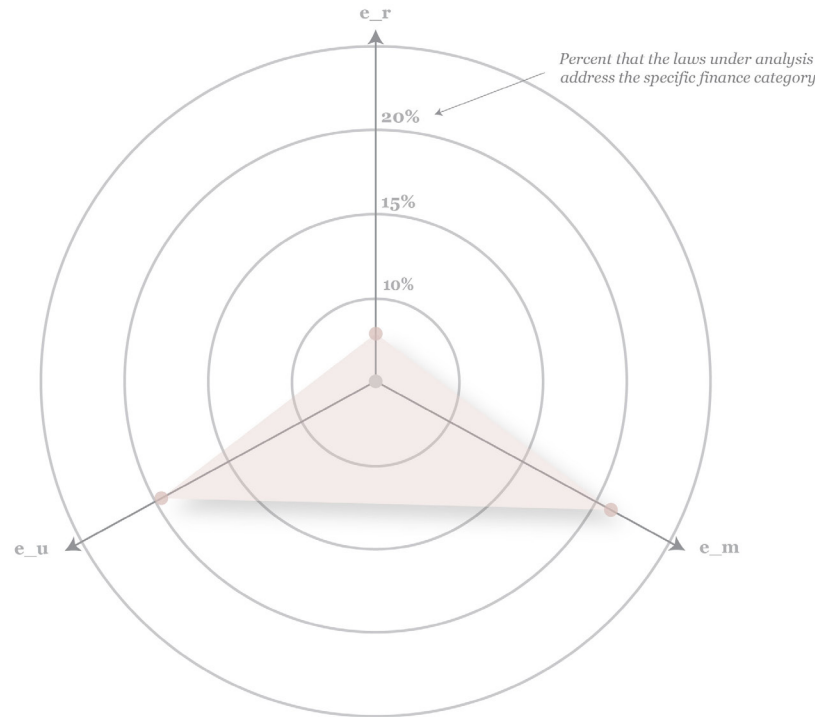
regulation of plot design to achieve optimal orientation of buildings.

The last area of opportunity that Colombia can benefit from would be to create a system where developers of greenhouse gas mitigation initiatives can be held accountable for noncompliance

at the time of the development’s approval process. Adding systems in place to keep these developments accountable and to ensure compliance would greatly bolster the rate of green energy development, even possibly closing the loop in the approval process.

Toolkit Subcategory	Recommendations	Actors
<i>Urban plans and greenhouse gas emissions</i>	Implement a requirement to estimate the carbon sink potential associated with planning scenarios. Close the information gap in measuring carbon pools and sinks and utilize these in developing planning scenarios. Institute laws that mandate the assessment of GHG emissions with urban plans. Integrate GHG emissions as a factor in decision-making when analyzing possible urban plans, and possible planning scenarios proposed in the plans.	Carbon Sink Potential Estimation: Environmental Information System for Colombia (SIAC); National Information System on Climate Change, Forest and Carbon Monitoring System (SMBYC); National Forest Inventory (IFN), National Forestry Information System (SNIF); Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM) Requirement for the Estimation in Scenario Planning: Ministry of Environment and Sustainable Development; Intersectoral Commission on Climate Change (CICC)
<i>Urban form and reduction of greenhouse gas emissions from transportation and infrastructure</i>	Conduct transit studies to determine appropriate placement of transit infrastructure around population centers; promote community engagement activities to determine transit needs in population centers; create partnerships with adjacent municipalities to establish transit networks.	National Information System on Climate Change; National Registry for the Reduction of Greenhouse Gas Emissions (RENARE); Ministry of Environment and Sustainable Development; National Environmental System (SINA)
<i>Green spaces for environmental and climate services</i>	Assess environmental conditions to determine feasibility of green and blue space connections; analyze health benefits of integrating spaces; conduct environmental impact assessments to determine how the urban form will affect nature areas.	Regional Autonomous Corporations, Municipalities, Ministry of Transportation; Regional Autonomous Corporations, Municipalities, Local Parks and Recreational Programs
<i>Neighborhood design and energy saving in buildings</i>	Implement provisions such as neighborhood plans that consider wind and sun direction when deciding the orientation and layout of the streets. In general there should be a focus on adding regulations for a variety of passive design strategies for buildings and neighborhoods.	Ministry of Environment and Sustainable Development; Intersectoral Commission on Climate Change (CICC); Municipalities
<i>Development approval and mitigation</i>	Enforcement mechanisms would significantly increase the rate of green energy development, even possibly closing the loop in the approval process.	Ministry of Environment and Sustainable Development; Intersectoral Commission on Climate Change (CICC); Municipalities

00.5 ECONOMIC AND FINANCIAL INSTRUMENTS



Economic & Financial Instruments

- e_r Resources for urban planning and climate change
- e_m Incentives for mitigation and adaptation in urban planning
- e_u Incentives that promote unsustainable urban land uses

Colombia continues to build a very progressive future-focused national climate agenda, including many financing policies supporting mitigation and adaptation efforts. Colombia has taken steps to build a national climate financing system based on intergovernmental coordination and a decentralized power structure. Climate financing in Colombia is driven by public, private, and international actors, with an emphasis on climate mitigation efforts.

To summarize the findings in Section 5, Climate financing in Colombia dates back in 1993, when Law 99 of 1993 established the country's environmental management system SINA. SINA was designed to protect the environment by better coordinating environmental protection work between levels of governments. Law 99 of 1993 created a system of economic instruments to incentivize efficient environmental management,

including retribution fees on all sources of air, water or soil pollution, as well as compensatory fees to help maintain renewable resources. Law 1931 of 2018, Climate Change Law, introduced the National Programme of Tradable Emission Quotas for Greenhouse Gases. The program allows for one CO2 ton equivalent unit to be recognized and paid into a national carbon tax offset scheme and links the country's carbon trading, carbon taxes, and carbon offset schemes.

Law 1931 of 2018 builds upon the National Climate Change System (SISCLIMA), established in 2016, which was designed to coordinate climate change policies, including a system of national-level mitigation actions for each sector under the responsibility of the National Planning Department. In 2018, CONPES 3934 introduced the Country's green growth policy, which aims to increase financial incentives for green infrastructure. In addition, Law 344 of 1996 established the Environmental Compensation Fund authorized by the Ministry of the Environment, which created a system of transferring national income from the energy sector towards local development. Law 1819 of 2016 establishes a national carbon tax and the legal basis for the National Emissions Trading System (ETS).

In regards to non-sustainable incentives, Law 141 of 1996 created the National Royalty Fund. This fund collects royalties from

the natural resource industry, including the fossil fuel industry, in exchange for exploitation of the country's non-renewable natural resources. The money in the fund is then earmarked for local economic development. The Law has been adjusted many times, but from what we could gather in our analysis, the law appears to continue to incentivize fossil fuel extraction.

The radar graph shows that Colombia's legislative framework does lack specific information on toolkit item 5.1, resources for urban planning and climate change. This includes lacking specific information on earmarked intergovernmental fiscal transfers for climate financing or information on earmarking local government resources for climate change. Our inclusion of Law 141 of 1996 and its subsequent adjustments have skewed the incentives that prompt unsustainable land uses patterns bullet higher on the graph. Generally, we found many more incentives for sustainable land use than non-sustainable land use.

In summary our legal analysis showed that Colombia is primarily focused on creating financial and economic mechanisms to assist climate change mitigation. These are usually done through incentives, such as tax breaks and direct subsidies for green infrastructure, renewable energy, electric vehicles, and resource management.

Toolkit Subcategory	Recommendations	Actors
<i>Resources for urban planning and climate change</i>	Improve coordination and opportunity for fiscal transfer across levels of governments; Provide regional level governments greater ability to lead climate change efforts and allow local government to collect local revenue and engage with their own mitigation and adaptation strategies; Strengthen community engagement	Ministry of Finance and Public Credit (MOFPC), Ministry of Foreign Affairs, Municipalities, National Planning Department (DNP), Regional Autonomous Corporations
<i>Incentives (economic and non-economic) for mitigation and adaptation in urban planning</i>	Provide more incentives for the private sector to invest in climate change mitigation and adaptation; Implement increased compensatory fees for activities that harm the environment; Provide financial incentives to practice sustainable cattle ranching projects that can stimulate more intensive, low-carbon practices.	Ministry of Finance, Ministry of Foreign Affairs, Ministry of Environment and Sustainable Development (MADS), Municipalities, DNP, National Council on Climate Change, National Institute of Renewable Natural Resources and Environment (INDERENA), National Development banks, National Environmental System (SINA), The Ministry of Agriculture and Rural Development
<i>Incentives (economic and non-economic) that promote unsustainable uses of urban space</i>	Reflect a climate drive agenda in the National Royalty System and note that fiscal transfers for local economic development is not separated from the royalty system for fossil fuel extraction	National Royalty Commission, MADS

01

GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS

Multi-level institutional coordination

Does your country have provisions in legislation or regulations requiring multi-level institutional coordination for climate action and urban planning?	
Do these include legal provisions that require inter-institutional coordination among national and subnational governments?	<input checked="" type="checkbox"/>
Do these include legal provisions that require coordination across line ministries at the national level?	<input checked="" type="checkbox"/>
Do these include legal provisions that require coordination among local jurisdictions that belong to the same metropolitan area?	<input checked="" type="checkbox"/>
Do these include legal provisions that require coordination between neighbouring cities and rural areas that are part of the same economic, social or environmental functional areas?	<input checked="" type="checkbox"/>
Do these include legal provisions that require coordination among different line departments in local governments?	<input checked="" type="checkbox"/>

Participatory Governance

Does your country have provisions in legislation or regulations requiring engagement with local stakeholders, civil society and businesses in urban planning processes and climate planning processes?	
Do these include legal provisions that require stakeholder and community identification?	<input checked="" type="checkbox"/>
Do these include legal provisions that require participation across the planning process and not only when the urban plans have already been developed?	<input checked="" type="checkbox"/>
Do these include legal provisions that require planning institutions to tailor participatory processes to specific community needs?	<input checked="" type="checkbox"/>
Do these include legal provisions that require consideration of and response to community demands and priorities?	<input checked="" type="checkbox"/>
Do these include legal provisions that grant access to dispute or appeals mechanisms?	<input checked="" type="checkbox"/>

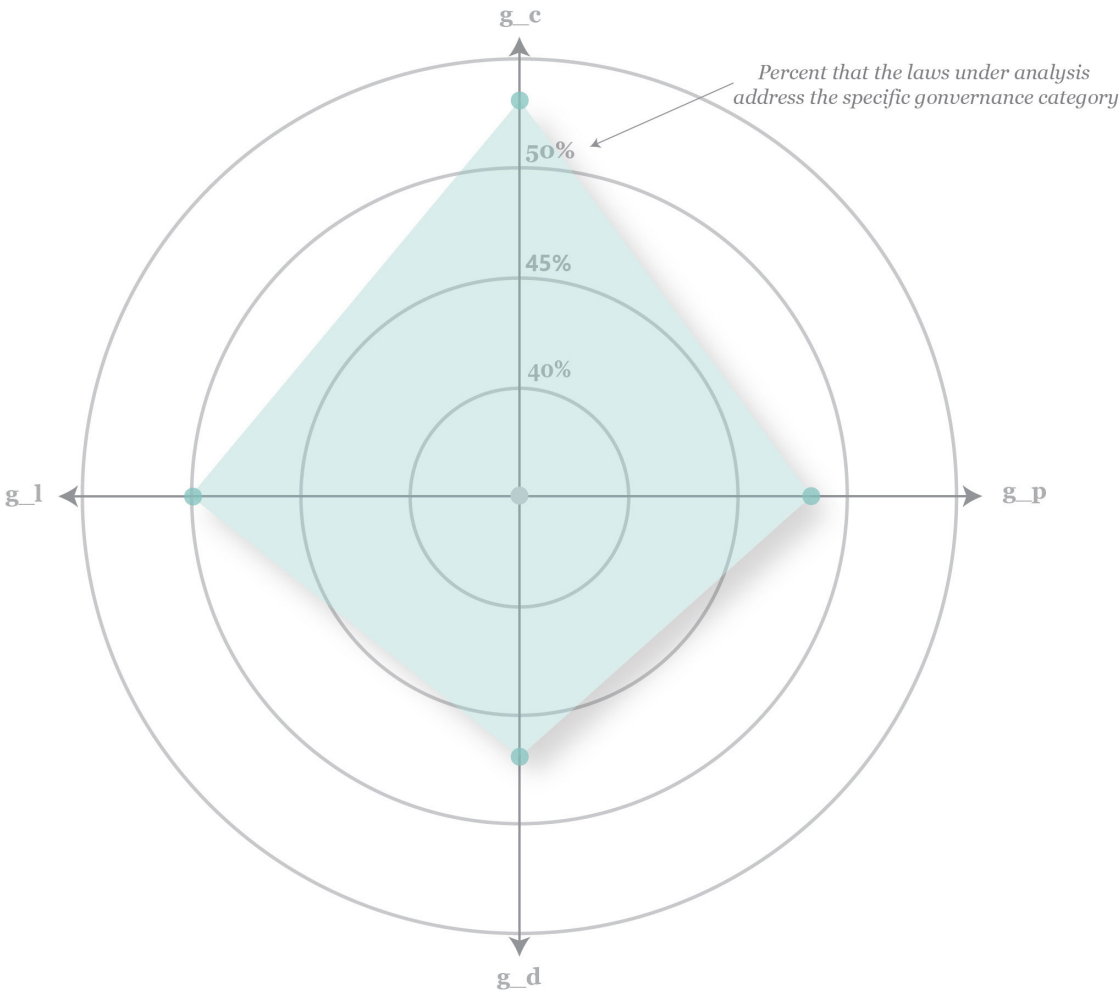
Data Collection and Sharing

Does your country have provisions in legislation or regulations requiring data collection and sharing arrangements of climate sensitive information among different institutions dealing with urban planning and climate planning?	
Do these include legal provisions that require data collection and sharing among local, subnational and national levels?	<input checked="" type="checkbox"/>
Do these include legal provisions that require data collection and sharing among subnational governments (different cities, regions, provinces)?	<input checked="" type="checkbox"/>
Do these include legal provisions that require data collection and sharing among different departments and institutions in the same city?	<input checked="" type="checkbox"/>

Local governments' mandate for urban planning in urban areas

Does your country have provisions in legislation or regulations assigning local governments the mandate for urban planning in their urban areas?	
Do these include provisions with the clear definition of institutional roles and responsibilities?	<input checked="" type="checkbox"/>
Do these include provisions that require local governments to build and improve their capacities* to implement their mandates?	<input checked="" type="checkbox"/>
Do these include provisions that require or facilitate informal and flexible inter-municipal collaborations, for urban and infrastructure planning, when administrative boundaries do not correspond to functional boundaries and morphological boundaries*?	<input checked="" type="checkbox"/>

01 PLANNING FOR GOVERNANCE



Governance & Institutional Arrangements

- g_c** Multi-level institutional coordination
- g_p** Participatory governance
- g_d** Data collection and sharing
- g_l** Local governments' mandate for urban planning in urban areas

The legislation on urban and climate planning in Colombia dates back to the 1990s, starting with the Political Constitution of 1991¹ and followed by a slate of legislation that regulated the development of territories² and metropolitan areas³ and set the competencies and requirements for environmental management⁴. With the turn of the 21st century, Colombia introduced new laws and regulations on urban planning and land management.⁵ The recent enactment of climate change legislations⁶ has been an important step forward. Additionally, the adoption of regulations on disaster risk management⁷ has been significant in securing Colombia's environmental future.

The **Political Constitution of 1991** and its enabling legislation established a framework for planning and environmental institutions that now coexist with mechanisms enacted through newer climate change law. The Constitution established different functions among institutions and territorial entities related to urban and environmental planning in Colombia and introduced a hierarchical order for their authority: starting with departments, then districts, municipalities, and lastly indigenous territories (article 286). At the same article, the

Constitution also provides for the possibility that territorial entity status may be granted to:

- Regions, formed by the association of several departments (articles 306 and 307).
- Provinces, formed by the association of several municipalities or neighboring indigenous territories belonging to the same department (article 321).

Metropolitan areas, which are groups of municipalities united by economic, social and physical relations, do not constitute territorial entities in the strict sense, but may be established as environmental and planning authorities (article 319).

Each entity enjoys a level of political and administrative autonomy that allows it to set and pursue its own territorial interests and facilitates decentralization, according to territorial planning responsibilities, competences and actions aimed at promoting urban development provided for by **Law 388 of 1997**, known as **Ley de Ordenamiento Territorial** (the Territorial Development Law) and **Law 1454 of 2011**, known as **Ley Orgánica of Ordenamiento Territorial** (the Organic Law of Territorial Planning).

¹ Political Constitution of Colombia, 1991, <https://www.corteconstitucional.gov.co/inicio/Constitucion%20politica%20de%20Colombia.pdf>

² Law 388 of 1997, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=339>

³ Law 128 of 1994, http://www.secretariassenado.gov.co/senado/basedoc/ley_0128_1994.html, repealed by Law 1625 of 2013, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=52972>

⁴ Law 99 of 1993, http://www.secretariassenado.gov.co/senado/basedoc/ley_0099_1993.html

⁵ Law 1454 of 2011, http://www.secretariassenado.gov.co/senado/basedoc/ley_1454_2011.html; Law 1551 of 2012, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=48267>; Law 1537 of 2012, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=47971>; Law 1962 of 2019, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=96110>, and Decree 1077 of 2015, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=77216>.

⁶ Decree 298 of 2016, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=68173> and Law 1931 of 2018 <https://www.minambiente.gov.co/index.php/ley-de-cambio-climatico>.

⁷ Law 1523 of 2012, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=47141>.

It is also worth to mention **Law 1523 of 2012** adopting the National Disaster Risk Management Policy and establishing the **National Disaster Risk Management System**⁸ and the **Decree 1077 of 2015 “Housing, City and Territory Sector”**, which regulates the incorporation of risk management in the POTs. This Decree also establishes the objective of the **Ministry of Housing, City and Territory**,⁹ that is, to achieve, within the framework of the law and its competencies, to formulate, adopt, direct, coordinate and execute the public policy, plans and projects regarding the territorial and planned urban development of the country, the consolidation of the system of cities, with efficient and sustainable land use patterns, taking into account the conditions of access and financing of housing, and the provision of public drinking water and basic sanitation services. The same Decree also provides for the functions of the **Superior Housing Council**¹⁰, of municipalities, districts and departments¹¹, and of the entities responsible for public space, which may be created at the initiative of municipalities and districts.¹²

Since the ratification of the Political Constitution of 1991, Colombia has attempted to formalize land use planning through the forementioned legislation, which builds upon the decentralization strategy of the National Constitution and attempts to build a framework for stronger regional land use planning. Though climate change is not explicitly mentioned, each law can be analyzed through their

effectiveness in supporting climate change initiatives. Indeed, urban and regional planning institutions co-exist with environmental and climate bodies and must conform to climate change policies and guidelines.

Though the **1991 Constitution** does not specifically mention climate change, it declares the social and ecological functions of property (article 58). The right to property is not absolute and can be restricted for social and ecological reasons; along with the bundle of rights granted to property owners, there are duties and obligations to the community. The Constitution distinguishes between the right to develop property from the right to own property, further enabling the public function of property and the distribution of benefits and burdens in urban development. The two main Constitutional principles regarding property are (1) the social and ecological functions of property and (2) the prevalence of public over private interest. When in conflict, public interest takes precedence over private development interests. Furthermore, the National Constitution states that “it is the duty of the State to protect the diversity and integrity of the environment, to conserve the areas of special ecological importance, and to foster education for the achievement of these ends” (article 79). To this end, according to article 80, the State shall plan the management and use of natural resources to guarantee their sustainable development, conservation, restoration or substitution. In addition, it must prevent and control the factors

of environmental deterioration, impose legal sanctions and demand repairs, should damage incur. Likewise, it shall cooperate with other nations in the protection of the ecosystems located in the border areas.

Moreover, three main specific legal instruments related to environmental and climate change management have been enacted and they identify additional institutions in these areas. **Law 99 of 1993** (the General Environmental Law) clearly defines at its first article institutional roles and responsibilities as a decentralized and democratic process. With this law, the **Ministry of the Environment** is created as a state entity with the functions of guiding and regulating the design and planning process for the use of the nation’s territory and renewable natural resources, in order to guarantee their adequate exploitation and sustainable development; it also establishes the functions of the territorial entities and environmental planning (Title IX) and configures a system of environmental management, the “**National Environmental System**” (**SINA**), in which the environmental authority, in ascending order, corresponds to the municipalities or districts, the departments, the Regional Autonomous Corporations and the Ministry of the Environment.

Decree 298 of 2016 establishes at its article 1 the **Sistema Nacional de Cambio Climático** (**SISCLIMA, National Climate Change System**), which is the set of state, private and non-profit entities,

policies, standards, processes, resources, plans, strategies, instruments, mechanisms, as well as information related to climate change, which is applied in an organized manner to manage the mitigation of greenhouse gases and adaptation to climate change in the country. The bodies that coordinate the system are provided for in Article 5: at the national level, the **Intersectoral Commission on Climate Change** (**CICC**), which regularly brings together the heads of Colombia’s national executive ministries for the purpose of coordinating climate policy (Article 8); at the regional level, the **Regional Climate Change Nodes** are responsible for inter-institutional coordination at the regional level to promote, accompany and support the implementation of policies, strategies, plans, programs, projects and actions for both mitigation of greenhouse gas emissions and adaptation to climate change (Article 10).

Law 1931 of 2018, Ley de Cambio Climático (Climate Change Law) establishes guidelines for climate change management through general provisions, identifying the national climate change system and its instruments, tools for climate change management, information systems for climate change, and economic and financial instruments. Notable, this law includes the establishment of the **National Council on Climate Change** (Article 5), comprehensive climate change management plans, the **National Information System on Climate Change**, and the

⁸ Law 1523 of 2012, Article 5. The structure of the System is foreseen in Chapter II and its functions in Article 17.

⁹ Decree 1077 of 2015, Article 1.1.1.1.1.1.

¹⁰ Decree 1077 of 2015, Article 2.1.7.1.

¹¹ Decree 1077 of 2015, Article 2.3.2.2.3.3.4.11 for municipalities and districts and Article 2.3.3.2.3.3.4.12 for departments.

¹² Decree 1077 of 2015, Article 2.2.3.3.2.

Decree 298
Law 1931 - Climate Change Law
Law 99 - General Environmental Law

Global

National

Sub-National

Institutional

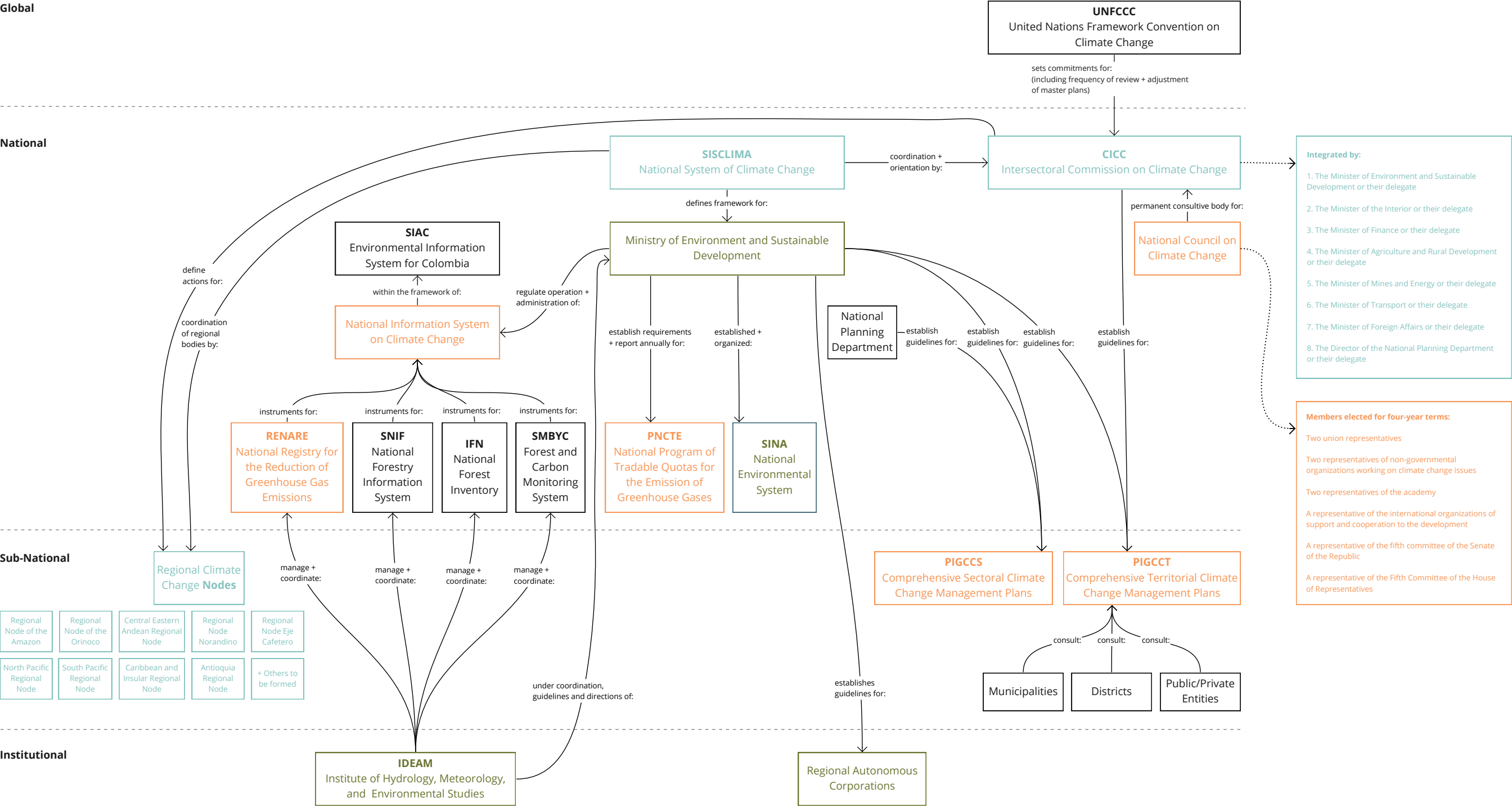


FIGURE 1 Mapping Key Actors of Environmental Laws in Colombia

National Program of Tradable Quotas for the Emission of Greenhouse Gases (PNCTE).

Together these laws enable, establish, and oversee a series of

actors in Colombia working with global, national, subnational, and institutional actors as mapped in Figure 1.

01.1 URBAN PLANS AND GREENHOUSE GAS EMISSIONS

Colombian decentralization process, which started with the Political Constitution of 1991, is based on a strong regional coordination. According to article 288 of the Political Constitution, the powers attributed to the different territorial levels by the organic law of territorial organization will be exercised in accordance with the principles of **coordination, concurrence and subsidiarity** under the terms established by law.

As a mechanism for vertical inter-institutional coordination, the Constitution establishes the **National Planning Council**, a consultative body, part of the National Planning System, created to discuss the National Development Plan among the national government and representatives of the territorial entities and of the economic, social, ecological, community, and cultural sectors (Articles 340 and 341). This Council is the embodiment of inter-institutional coordination among national and subnational governments.

Law 1454 of 2011 (the Organic Law of Territorial Planning)

also establishes that the Nation and the territorial entities must exercise their competences in an articulated, coherent and harmonious manner (Article 27). At the time of determining the competences assigned to the Nation (paragraph 1, Article 29), the law provides that these shall be carried out in coordination with the territorial entities. In addition, in paragraph 1 of Article 29, the law establishes that the distribution of competencies contemplated in this article will be carried out under the principles of decentralization, concurrence and complementarity of the actions established by the territorial entities and in coordination with the provisions of their respective authorities in the local and regional planning instruments.

For these purposes, Law 1454 of 2011 establishes the **Land Use Planning Commission** (*Comisión de Ordenamiento Territorial*, COT), whose function is to “promote integration” between departments, districts, and municipalities,¹³ thus pursuing vertical coordination, and acts as an advisory body to the National Government and Congress in

matters of decentralization and land use planning. Other functions are determined in Article 6. Moreover, article 8 provides for the power of the Departmental Assemblies and Municipal Councils to establish **Regional Land Use and Zoning Commissions** (departmental or municipal), whose functions will be established directly by the COT. Finally, the law decides that the Technical Secretariat of the aforementioned COT will form a **special inter-institutional committee** made up of the competent national entities in order to provide the logistical, technical and specialized support required by the COT for the full development of its functions (Article 7).

This law also foresees mechanisms for coordinated action between departments, metropolitan areas, municipalities and districts. In particular, it promotes the creation of **territorial associative schemes** (Chapter II), such as administrative and planning regions, planning and management regions, associations of departments, metropolitan areas, associations of special districts, administrative and planning provinces, and associations of municipalities.¹⁴ The associations of territorial entities will be freely formed by two or more territorial entities to jointly provide public services, administrative functions of their own or assigned to the territorial entity by the national level, execute works of common interest or fulfill planning functions, as well as to procure the integral development of their territories.¹⁵ In particular, article 14 states that

“two or more municipalities of the same department or of several departments, may associate administratively and politically to jointly organize the provision of public services.”¹⁶ The possibility that two or more municipalities may associate, independently of their administrative boundaries, to fulfill urban planning functions, expands the mandate of local governments in this matter, since they may exercise their planning functions in spite of municipal spatial limits and thus pursue a more effective planning that takes into account the needs of the territory.

Law 388 of 1997 also contains language to encourage multi-level government participation though such engagement is not always explicitly mandated. For example, municipalities and districts are supposed to work together to create territorial action plans.¹⁷ The national government can also set standards as to how municipalities are to conduct themselves based on their population sizes.¹⁸

More explicitly, the Territorial Development Law provides an example of **metropolitan inter-jurisdictional coordination**, requiring municipalities within the same metropolitan area to coordinate their work under the larger Metropolitan Board that they are a part of to ensure that the implementation of their strategies is in harmony with the broader goals of the Board.¹⁹ The Regime for Metropolitan Areas (**Law 1625 of 2013**, repealing Law 128 of 1994) further supports the Territorial Development Law by regulating municipalities to coordinate

¹³ Law 1454 of 2011, Article 4.

¹⁴ Law 1454 of 2011, Articles from 9 to 16.

¹⁵ Law 1454 of 2011, Article 11.

¹⁶ Law 1454 of 2011, Article 14.

¹⁷ Law 388 of 1997, Article 12.

¹⁸ Law 388 of 1997, Article 91, Paragraph 1.

¹⁹ Law 388 of 1997, Article 24.

through the Metropolitan Board. This law indicates that the formation of metropolitan areas requires the coordination of “two or more municipalities integrated around a core municipality, linked together by dynamics and territorial, environmental, economic, social, demographic, cultural and technological interrelationships,”²⁰ which can also include municipalities within departments or from multiple departments. The Regime for Metropolitan Areas also enables joint coordination of municipalities and associations for public services, as well as for regional transportation infrastructure.²¹ Additionally, during formation, the initiating municipalities coordinate with the national government to appropriately establish the metropolitan area, and “the promoters shall submit the project to the Special Commission for the Follow-up of the Decentralization and Territorial Planning Process of the Senate of the Republic and the House of Representatives.”²² It also establishes the subsequent governing and advisory bodies, Metropolitan Boards and Metropolitan Councils. Metropolitan area management obligations are also provisioned and include fiscal, social, and environmental duties for territory within the area, with coordination with neighboring Colombian jurisdictions, and with consideration of adjacent international territory. Finally, in accordance with the provisions of Law 1454 of 2011²³, two or more Metropolitan Areas of the same department or of several departments may associate to

jointly organize the provision of public services, the execution of regional works and the fulfilment of their own administrative functions²⁴.

As a result of law’s intent to decentralize, further compliance of national regulations is not conducted via direct coordination, but in alignment of the **National Development Plan - Departamento Nacional de Planeación (DNP)**, the Political Constitution of 1991, and other applicable statutes and laws for National Social Interests, transportation, and the environment. Law 1625 of 2013 also dictates “organic norms to provide the metropolitan areas with a political, administrative and fiscal regime, which within the autonomy recognized by the National Constitution and the law, serves as a management instrument to comply with their functions.”²⁵ This further supports the metropolitan areas provisions in the **Organic Law of Territorial Planning, Law of Territorial Development**, and **Law 1469 of 2011**, and strengthens regional authority to strategize, resource, and implement territorial plans.

Regarding coordination between **rural and urban areas**, Law 388 of 1997 mandates coordination between municipalities and the rural areas they oversee on a broad level: Article 12 of this law establishes that the general content of the POT (*Plan de Ordenamiento Territorial*) should include “the urban-rural structure” to be achieved in the long-term (para. 2) and the communication systems between urban and rural

areas and their articulation with the respective regional systems (para. 2.1); consequently, article 14 defines the “rural component of the POT” as a tool to guarantee the adequate interaction between rural settlements and the municipal capital, the appropriate use of rural land and public actions aimed at providing infrastructure and basic facilities for the service of rural dwellers. The same article provides for the content of this rural component in a list of seven points. Article 2 of Law 1454 of 2011 describes the “relationship between rural and urban ways of life” as an important element of land use planning, but the measure lacks specificity and does not require coordination between neighboring cities and rural areas. The Regime for Metropolitan Areas specifies that the Comprehensive Metropolitan Development Plan includes “the determination of the urban-rural structure for medium- and long-term horizons”²⁶ and the Strategic Metropolitan Plan of Territorial Planning must plan rural and suburban land. Some specific agencies and councils have been created to coordinate activities to be realized in rural areas: **Decree 2363 of 2015** creates the National Land Agency, in charge of the policy of social ordering of rural property, and the Agency for Territorial Renewal, which coordinates the intervention of national and territorial entities in rural areas, executing projects for the territorial renewal of these areas; the same Decree also creates the Superior Council for Rural Land Management, in charge of formulating general policy guidelines, and coordinating and

articulating the implementation of public policies on rural land management. However, the identified provisions should be integrated and accompanied by additional legislation identifying specific mechanisms and structures for urban-rural coordination to take place effectively beyond administrative boundaries, when rural areas are part of the same economic, social or environmental functional areas even if within the boundaries of two or more local government authorities.

On the environmental and climate sectors, **Law 99 of 1993** (General Environmental Law) requires that Colombia’s environmental management be a coordinated task between the department, local community, non-governmental organizations, and the private sector²⁷ and emphasizes the importance of multi-institutional governance at the national and subnational level. Article 63 establishes that the exercise of environmental functions by the territorial entities shall be subject, among others, to the principle of regional harmony to ensure the collective interest of a healthy and adequately protected environment and to guarantee the harmonious management and integrity of the Nation’s natural heritage. According to this principle, the Departments, Districts, Municipalities, Indigenous Territories, as well as the regions and provinces to which the law gives the character of territorial entities, shall exercise their constitutional and legal functions related to the environment and renewable natural resources, in a coordinated and harmonious

²⁰
Law 1625 of 2013, Article 2.

²¹
Law 1625 of 2013, Articles 6, 7.

²²
Law 1625 of 2013, Article 8, Part G.

²³
Law 1454 of 2011, Article 15.

²⁴
Law 1625 of 2013, Article 34.

²⁵
Law 1625 of 2013, Article 1.

²⁶
Law 1625 of 2013, Article 13, Part D.

²⁷
Law 99 of 1993, Article 1.

manner, subject to the superior norms and the guidelines of the **National Environmental Policy**, in order to guarantee a unified, rational and coherent management of natural resources.

The law establishes the Ministry of the Environment (currently: Ministry of Environment and Sustainable Development, MADS) which is responsible for establishing the environmental criteria to be incorporated in the formulation of sectoral policies and in the planning processes of other ministries and entities, after consultation with these bodies²⁸; the MADS is also responsible for coordinating the **National Environmental System (Sistema Nacional Ambiental, SINA)**, that ensures the “adoption and execution of the policies and the respective plans, programs and projects”²⁹ and advances decentralized planning, coordination, and implementation while providing opportunities for all stakeholders and levels of government to work towards sustainable development and conservation.

To ensure intersectoral coordination at the public level of environmental and renewable natural resources policies, plans and programs, Law 99 of 1993 created the **National Environmental Council (Consejo Nacional Ambiental, CNA)** which includes members from the national level (ministers) and members from the territorial level (a representative of the governors, a mayor representing the Colombian Federation of Municipalities, etc.), as well as

members of private organizations whose functions affect or may affect the environment and renewable natural resources.³⁰ The National Environmental Council will create councils at the level of the different territorial entities so that different local sectors can participate and collaborate in environmental management. However, it is important to note that it is essentially a function of the department to regulate and guide environmental management and sustainable development in their respective territories.³¹

One critical example of public entities that lead multi-level institutional governance are **Regional Autonomous Corporations (CARs)**. These corporations are “made up of territorial entities that geographically constitute the same ecosystem or another geopolitical boundary, endowed with administrative financial autonomy, their own assets and legal personality, entrusted by law to administer, within the area of their jurisdiction, the environment and renewable natural resources and to promote their sustainable development.”³² Thus, the Regional Autonomous Corporations carry out their tasks in close coordination with territorial entities, in accordance with the legal provisions and policies set by the national Ministry of the Environment.³³

In Article 64, where it defines the functions of the departments, the law provides that they must exercise the control and surveillance function in coordination with the other

entities of the **SINA**; in addition, the departments may develop cooperation and integration programs with equivalent and neighboring territorial entities of the neighboring country, with the advice or participation of the Regional Autonomous Corporations. There are also forms of coordination established within the framework of the functions of the municipalities: article 65 provides that municipalities and districts are competent to participate in the elaboration of plans, programs and projects for environmental development and renewable natural resources at the departmental level. In addition, they collaborate with the Regional Autonomous Corporations in the elaboration of regional plans and in the execution of programs, projects and tasks necessary for the conservation of the environment and renewable natural resources. Through the mayor, and in coordination with the other entities of the SINA, municipalities and districts also participate in the functions of control and surveillance of the environment and renewable natural resources.

Specifically on the climate sector, as already anticipated, **Decree 298 of 2016** creates the **Intersectoral Climate Change Commission (CICC)**, which coordinates the **SISCLIMA** at the national level (through eight national-level ministries³⁴) and the **Regional Climate Change Nodes**, which lead the regional coordination of the SISCLIMA and are composed of regional inter-institutional and interdisciplinary groups, from public and private institutions of the local, departmental, regional

and/or national order.³⁵ Among the functions of the CICC, the Decree envisages the fostering of coordination between the national government, territorial entities, and the private sector for the “joint execution of policies, in order to avoid the duplication of efforts and maintain coherence and articulation in the area of climate change.”³⁶ The purpose of the regional nodes, as anticipated, is to achieve interinstitutional coordination between the central and territorial levels to promote policies, strategies, plans, programs, projects, and actions for mitigating greenhouse gas emissions and adaptation to climate change, articulated with planning and land use and integrated risk management processes. National climate change policy is coordinated across the national government as well as between the national and regional levels through these regional nodes. The Regional Climate Change Nodes may participate as guests in the **CICC**, through a representative, as a body that participates in the coordination of the SISCLIMA in conjunction with the CICC.

Coordination between the national and department levels takes place through guidelines establishing that department authorities will follow **CICC** guidelines and report to **SISCLIMA** on the progress of their plans. If necessary, departments will also provide guidelines to municipalities within their jurisdiction.³⁷ Simultaneously, municipalities must follow department guidelines when incorporating climate change into their plans,³⁸ though

²⁸ Law 99 of 1993, Article 5.

²⁹ Law 99 of 1993, Article 2.

³⁰ Law 99 of 1993, Article 13.

³¹ Law 99 of 1993, Article 7.

³² Law 99 of 1993, Article 23.

³³ Law 99 of 1993, Article 31, Paragraph 4.

³⁴ Decree 298 of 2016, Articles 6 and 7.

³⁵ Decree 298 of 2016, Article 10.

³⁶ Decree 298 of 2016, Article 8, Section 6.

³⁷ Law 1931 of 2018, Article 8.

³⁸ Law 1931 of 2018, Article 9.

there is no requirement for inter-departmental coordination. The law includes requirements for coastal territory at the department, municipal, and district levels to formulate, adopt, and implement climate change adaptation actions specific to the protection of coastal areas. However, there are no requirements for neighboring cities or other rural areas to coordinate. Likewise, the law does not explicitly require further coordination with a metropolitan inter-jurisdictional, urban-rural, or local inter-institutional level.

In addition, **Law 1931 of 2018 (Climate Change Law)** includes provisions requiring inter-institutional coordination on a national level and vertical coordination between departments, municipalities, and districts. Article 2 states that the Nation and the territorial entities will exercise their competences within the framework of the principles of coordination, concurrence and subsidiarity. Under the provision of this last principle, the law states that it is up to the Nation and the departments to support the municipalities, as required by the latter given their lower institutional, technical and/or financial capacity, to efficiently and effectively exercise the competences and responsibilities arising from the management of climate change. Vertical coordination can be also found in the provision related to the **National Council on Climate Change** (article 5), created by this law, which has the purpose of achieving an effective articulation between the CICC and the civic associations, guilds, the fifth

commissions of the Chamber of Deputies and the academia, in the management of climate change in the national territory. The use of Comprehensive Sectoral Climate Change Management Plans (PIGCCS)³⁹ and **Comprehensive Territorial Climate Change Management Plans (PIGCCT)**⁴⁰ to coordinate consistent efforts across territories and ministries further supports vertical inter-institutional coordination.

While the General Environmental Law does have strong provisions supporting multi-level institutional governance, there are some key gaps in this law and in the two specific regulations on climate change: there are no legal provisions that require coordination among different line departments in local governments. In addition, the laws provide limited guidance on how local governments should implement environmental management and preservation beyond coordinating with Regional Autonomous Corporations.

Finally, multi-level institutional coordination in relation to housing and associated environmental issues are discussed in Chapter 1, Article 3 of **Law 1537 of 2012** partially regulated by **Decree 2088 of 2012**, which establishes rules to facilitate and promote urban development and access to housing. Article 3 of this law lists a series of aspects for which coordination between national and territorial entities in relation to housing policy is required, including: the articulation and consistency of national housing

policies and programs with those of the departments and municipalities; the transfer of land for the development of Priority Interest Housing programs; the establishment of information mechanisms and the preparation of studies on the needs, inventory, modalities and characteristics of housing and the population. Article 4 of the same law highlights the departmental co-responsibilities and relations between national and local entities concerned with urban development and Social and Priority Interest Housing Programs.⁴¹

Law 1537 of 2012, Chapter 2 contains several provisions that require coordination across line ministries. Article 10 provides a framework for the “prioritization of resources for social infrastructure and public utilities in housing projects.”⁴² The law dictates the duties and functions of agents involved in securing Special Interest Housing and Priority Interest Housing for low-income families in Colombia. The goals of Law 1537 of 2012 in summary are, regulating planning instruments and tools to ensure that decent and affordable housing is accessible to low-income families, identifying the roles of local, regional, and private entities in this process, securing adequate financing for Special Interest Housing and Priority Interest Housing Projects, and the promotion of planning, development and urban renewal in Colombia. Subsequently, climate action planning is not explicitly

addressed throughout the entirety of the text but rather loosely alluded to within various pieces of planning legislation.

In conclusion, many legislative provisions foresee the need for vertical coordination: on several occasions, the creation of councils, committees, and other bodies that can facilitate interinstitutional coordination has been chosen as a tool for coordination. The National Environmental Council (even if it provides for the participation of only one representative of the governors and only one mayor) and the National Council on Climate Change can be included as examples of these mechanisms. However, more mechanisms and processes for horizontal coordination, in addition to territorial associative schemes, would be beneficial to foster coordination from municipality to municipality, as well as urban-rural coordination beyond administrative boundaries.

Climate governance in Colombia relies on building vertical and horizontal relations among existing government bodies as well as establishing brand new regional territories of climate governance. However, more mechanisms and processes for multilevel institutional coordination between Colombian urban, environmental and climate planning institutions would be beneficial.

³⁹ Law 1931 of 2018, Article 17.

⁴⁰ Law 1931 of 2018, Article 18.

⁴¹ Law 1537 of 2012, Chapter 1, Article 4.

⁴² Law 1537 of 2012, Chapter 2, Article 10.

01.2 PARTICIPATORY GOVERNANCE

Stakeholder participation is a critical component of governance: it not only increases the quality of policy proposals and ensures that they respond to the real needs of the population, but also improves the degree of compliance through increased acceptance. Public participation must be “meaningful”: it must allow residents to actively integrate their opinions and needs into the process and see them reflected in the final outcome.

Based on Article 318 of the **National Constitution**, which seeks to ensure citizen participation in the management of local public affairs and in decision-making contexts that directly affect the lives of citizens, the Colombian State has endeavored to strengthen participatory democracy in Colombia through the provision of new participation mechanisms.

Before proceeding to examine them, other provisions of the Constitution should be looked at. Article 79 states that “every individual has the right to enjoy a healthy environment. An Act shall guarantee the community’s participation in the decisions that may affect it.” Article 342 requires that citizen participation “shall be effective in the discussion of the development plans and the appropriate modifications” of the functions of the National Planning Council and territorial councils. Locally, Article 311 states that municipalities are responsible for promoting community

participation in the planning process.

Coming to examine legislative provisions, **Law 134 of 1994**⁴³ establishes rules on citizen participation mechanisms and grants citizens, in addition to the referendum and plebiscite, the following mechanisms:

- Revocation of mandate, which is the political right to terminate the mandate conferred on a governor or mayor
- Legislative and regulatory popular initiative, which consists of the political right of a group of citizens to present a Legislative Act and law project before the Congress of the Republic, an Ordinance before the Departmental Assemblies, an Agreement before the Municipal or District Councils and a Resolution before the Local Administrative Boards, and other resolutions of the corporations of the territorial entities
- Popular consultation, which consists of a question on national, departmental, district, municipal and local issues, submitted to the people so that they may formally pronounce themselves on the matter

In addition, **Law 850 of 2003**⁴⁴ regulates citizen oversight bodies, a democratic mechanism also provided for in the Constitution

that allows citizens or different community organizations to exercise oversight over public management with respect to administrative, political, judicial, electoral, legislative and control authorities, as well as public or private entities, national or international non-governmental organizations operating in the country, in charge of the execution of a program, project, contract or the provision of a public service.

Likewise, **Law 1757 of 2015**⁴⁵ dictates provisions on the promotion and protection of the right to democratic participation and provides for accountability mechanisms, by which the entities of the public administration of the national and territorial level and public servants inform, explain, and disclose the results of their management to citizens. It is an expression of social control that includes actions of requesting information and explanations, as well as the evaluation of management.

Likewise, in the area of urban planning, **Law 388 of 1997** provides at its article 4 that, in the exercise of the different activities that make up urban planning, municipal, district and metropolitan administrations must promote coordination between social, economic and urban planning interests, through the participation of the inhabitants and their organizations. This citizen participation may be developed through the right of petition, the holding of public hearings, the exercise of the enforcement action, the intervention in the formulation, discussion and execution of urban

development plans and in the processes of granting, modification, suspension or revocation of urban development licenses, under the terms established in the law and its regulations. In particular, with the enforcement action (Article 116), any person may resort to the judicial authority to enforce compliance with a law or administrative act related to the application of urban planning instruments provided for in the national regulations. This action has a very relevant impact, since it allows citizens to obtain the enforcement of a law or an administrative act by the administrative authority allegedly in default. Being a judicial action, clearly each claim will have a response, which may be negative or positive, since the judge has an obligation to issue a sentence. However, left out of this action is the definition of the damages that may have been caused by the non-application or attack of the law.

Law 388 of 1997 also stipulates that communities can decide what specific land uses are appropriate for them based on their neighborhood scale as long as public spaces are not affected. Indeed, article 22 regulates community participation in the definition of the urban and rural content of the land use plan. The law emphasizes the importance of distributing the urban burdens as well as benefits accordingly across affected parties as urban development is implemented. This is to prevent one community from being advantaged or disadvantaged when developments are built and planned across municipalities. Consequences addressed include land use and air space impacts.

⁴³ Law 134 of 1994, http://www.secretariasenado.gov.co/senado/basedoc/ley_0134_1994.html

⁴⁴ Law 850 of 2003, http://www.secretariasenado.gov.co/senado/basedoc/ley_0850_2003.html

⁴⁵ Law 1757 of 2015, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=65335>

In the course of the formulation and agreement of the land use plans, the duly recognized civic organizations of such groups of neighborhoods or hamlets, through democratic mechanisms that ensure the representativeness of those elected, may designate representatives to transmit and submit for consideration their proposals on the urban and rural components of the plan.

The same law provides that the municipal or district mayor submits the POT to the consideration of the Government Council and, in any case, prior to the submission of the draft POT to the district or municipal council, “the procedures for inter-institutional consultation and citizen consultation shall be carried out.”⁴⁶ The article also defines the procedure for this mechanism and ends by stating that “democratic consultation must be guaranteed in all phases of the zoning plan, including the diagnosis, the basis for its formulation, follow-up and evaluation”. In this way, citizens and relevant stakeholders are involved in each stage through requests for opinions from economic and professional associations, public consultations to discuss the plan, and, also, compilation of all recommendations and observations made by the different trade, ecological, civic and community entities of the municipality. The basic documents of the plan and materials presented must also be accessible to all interested parties, and their input must be considered and implemented in the plan revision.⁴⁷

Once approved and in force, citizens may exercise oversight and control through periodic revisions of the land use plans, since these must be subject to the same procedure established for their approval, which includes citizen participation.⁴⁸ Citizens may also intervene in the partial plans that directly affect them, through processes of socialization and consultation with the respective administration.⁴⁹

The mechanisms provided for by **Law 388** are of fundamental importance, since they impose democratic participation in each stage of the territorial planning process. Years later, these provisions were extended with the provisions of **Law 507 of 1999**⁵⁰, which strengthens democratic intervention by establishing that in the process of elaboration of plans and land use planning schemes, consultation and participation mechanisms must be held, including the ethnic communities located in the territory. Specific cities also incorporated participatory mechanisms. For example, Bogotá’s District Decree 469 of 2003 specifies other planning instruments that fall within the mechanisms of participation contained in Article 4 of Law 388 of 1997, but which are not expressly stated, such as master plans, zoning plans, zoning plans, zoning planning units - UPZ, master plans for parks, implementation plans, regularization and management plans, reordering plans and environmental mining plans (Alcaldía de Bogotá, 2003).

Similarly, **Law 1454 of 2011** understands land use planning as a planning and management instrument of territorial entities and a process of collective construction, which implies progressively and flexibly built citizen participation. Citizen participation is mentioned among the guiding principles of land use planning (Article 3): “the land use planning policy will promote participation, consultation and cooperation so that citizens take an active part in the decisions that affect the territorial orientation and organization”. Despite language encouraging participation in Article 3, Law 1454 of 2011 does not specify language that requires consideration of specific community demands beyond promoting “agreement and participation”, so what this participation may entail is not clear. However, this provision should be read in the context of the set of provisions emerging from prior legislation regulating participatory mechanisms for urban planning.

The final provisions in Article 37 of **Law 1454 of 2011** state that “the National Government shall submit to the Congress of the Republic... a special bill that regulates the formation of Indigenous Territorial Entities, accepting the principles of democratic participation, autonomy and territory, in strict compliance with the special mechanisms of prior consultation, with the participation of representatives of indigenous communities.” Law 1454 of 2011 is designed to decentralize the planning process following generic principles of participation.

The same law foresees in subsequent articles a series of urban planning figures and instruments that allow associative models at the municipal, departmental and regional levels (the associative schemes foreseen by article 10 and mentioned among mechanisms for inter-institutional coordination) and regulates the management of each scheme, always taking into account citizen participation.

Law 1551 of 2012 modernizes the organization and operation of municipalities and provides in Chapter VII, entitled “**Community Participation**”, that municipalities have the possibility of entering into agreements with community action organizations, civil organizations and associations for the construction of works and the satisfaction of the needs and aspirations of the communities.

The **Regime for Metropolitan Areas** addresses “the call for popular consultation to be periodically disseminated through the mass media with the greatest impact in the municipalities concerned.”⁵¹ **Law 1625 of 2013** calls for popular consultation for the creation and establishment of new special districts.⁵²

On the environmental front, apart from the specific laws on citizens’ participation and from the provisions included in Colombian urban planning legislation, it is possible to mention **Law 99 of 1993** (General Environmental Law), that clearly sets a precedent that Colombia’s environmental management will be decentralized, democratic, and participatory

⁴⁶ Law 388 of 1997, Article 24.

⁴⁷ Law 388 of 1997, Article 24.

⁴⁸ Law 388 of 1997, Article 28.

⁴⁹ Law 388 of 1997, Article 27.

⁵⁰ Law 507 of 1999, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=10774>

⁵¹ Regime for Metropolitan Areas, Article 8.

⁵² Law 1625 of 2013, Article 35.

in accordance with the National Constitution.⁵³ Title X of the law (on the modes and procedures of citizen participation), introduces the right to intervene in environmental administrative procedures,⁵⁴ the publicity of environmental decisions,⁵⁵ administrative public hearings on environmental decisions,⁵⁶ the right to request information.⁵⁷ In addition, Law 99 of 1993 creates the National Environmental Council, which includes members from the national level (ministers), members from the territorial level (a representative of the governors, a mayor representing the Colombian Federation of Municipalities, etc.), and members of private organizations whose functions affect or may affect the environment and renewable natural resources (Article 13), among them: a representative of the indigenous communities, a representative of the black communities, a representative of each of the following: a representative of the agricultural production, industrial production, mining production, exporters, forestry activity; a representative of the non-governmental environmental organizations, a representative of the University. The NEC has some restrictions as it provides for the participation of only one representative of the governors and only one mayor. The Council may also invite public officials and other persons to their sessions “with voice but without a vote” to help better understand issues and make recommendations.⁵⁸

At a subnational level, the Regional Autonomous Corporations must

“promote and develop community participation in programs for environmental protection, sustainable development, and property management of renewable natural resources.”⁵⁹ Many of these corporations also have provisions to promote the integration of traditional, indigenous communities that inhabit the region and their ancestral methods of environmental management into the process of conservation and the sustainable use of resources.

As already anticipated, the National Council on Climate Change created by **Law 1931 of 2018**, is composed, among others, of representatives of trade unions, academia and NGOs working on issues related to climate change. This Council has the functions established by Article 5 of the same law which, among others, include: making recommendations to the CICC in matters of climate change management in the national territory; issuing concepts on the implementation of the National Climate Change Policy and its planning and implementation instruments; recommending to the CICC the necessary actions to follow in the coordination of climate change management activities between the productive sectors, academia and social organizations, with the public entities that comprise it; suggesting to the CICC guidelines and criteria in climate change management, for the coordination of actions between the national and territorial levels. These are functions that provide for the formulation of recommendations that, as such, are not obligatory for those who receive them;

however, these functions allow representatives of civil society to participate in climate issues in some way.

Because it is primarily aimed at establishing coordination amongst national ministries and between national and regional policies, **Decree 298 of 2016** does not stipulate specific venues or mechanisms of participatory governance. The law lists broad categories of stakeholders for whom the law applies (“public, private, and nonprofit entities”) but does not require that they be specifically identified.⁶⁰ Article 4 encourages the inclusion and participation of citizen voices in climate change policy making, but this is stated as a broad goal and the Decree does not explicitly foresee stakeholders and community identification nor how they would be included beyond representatives from different sectors in the regional nodes.

It is clear that in Colombia participatory governance is not reduced to a system of democratic decision making but represents a model of social and political behavior that sees citizens involved in each stage of the public function, allowing them to actively integrate their opinions and needs in the processes that affect them and see

them reflected in the final result.

The set of instruments analyzed allows citizens to intervene directly in urban planning matters and see their input taken into consideration (e.g., on the formulation of the POT), effectively applying the principle of democratic participation enshrined in the Constitution. However, there is still a lot to be done in order to guarantee that both public and private actors comprehend the scope and impact that these tools have and the rights and duties inherent to their activity in the city-building processes⁶¹. Indeed, among the provisions requiring citizens’ participation, there do not seem to be any provision forcing planning institutions to take into account citizens’ demands, needs and input (except for the enforcement judicial action that, as such, needs to provide a response to each claim). Moreover, some of the environmental and climate provisions taken into consideration fail to clearly identify stakeholders directly or indirectly affected by climate change planning processes. Finally, there do not seem to be legal provisions that require planning institutions to tailor participatory processes to specific community needs (e.g., indigenous communities needs).

⁵³ Law 99 of 1993, Article 1.

⁵⁴ Law 99 of 1993, Article 69.

⁵⁵ Law 99 of 1993, Article 71.

⁵⁶ Law 99 of 1993, Article 72.

⁵⁷ Law 99 of 1993, Article 74.

⁵⁸ Law 99 of 1993, Article 13.

⁵⁹ Law 99 of 1993, Article 31.

⁶⁰ Decree 298 of 2016, Article 3.

⁶¹ Urban Law in Colombia, Urban Legal Case Studies Volume 5, UN-Habitat, <https://unhabitat.org/sites/default/files/download-manager-files/Urban%20legislation-Colombia11.pdf>

01.3 DATA COLLECTING AND SHARING

Data collection and sharing is an essential component of governance, as it helps public agencies make more informed policy decisions, reveal new correlations and patterns that can help governments address multidimensional challenges, and reduce search and processing times, which in turn helps accelerate decision making and improve efficiency.

A number of data and information collection mechanisms exist in Colombia that allow for better organization, consultation and consistency of data in urban and climate planning. For example, article 112 of **Law 388 of 1997** states that municipalities and districts are required to create databases consisting of documents, plans and georeferenced information on their respective jurisdictions. Likewise, the Ministry of Economic Development is required to organize and maintain an urban information system containing data on land, housing, public utilities, public space, urban transportation and collective equipment.

Law 1454 of 2011 (Organic Law of Territorial Planning) does not specifically address data collection and sharing arrangements for climate planning, but Article 4 establishes the creation of the **Territorial Order Commission (COT)** with the specific purpose of integrating resources between departments.⁶² In addition, the

Technical Secretary of the COT “will be in charge of ensuring the logistical, technical and specialized support that it requires for the full development of its functions and will invite the ministers, heads of the respective administrative departments, academic experts from different universities, the private sector, or whoever it deems necessary, when matters within its competence must be dealt with or when concepts external to the Commission are required.”⁶³ While the COT may be bringing together a range of experts, Organic Law of Territorial Planning does not have language requiring data collection or sharing arrangements of climate sensitive information between territorial entities.

Data collection and sharing is not explicitly mentioned throughout **Law 1537 of 2012**, except for the preparation of a “list of potentially eligible individuals and families in each Municipality and District in accordance with the targeting criteria used in the programs for overcoming poverty and extreme poverty, or others defined by the National Government.”⁶⁴ Data collection outside of this context is not currently a component of regulatory processes for Special and Priority Interest Housing programs in Colombia.

In **Law 1625 of 2013 (Regime of Metropolitan Areas)**, Article 7(a) requires Metropolitan Areas “to identify and regulate the Metropolitan Facts, in accordance with the provisions of this law”

and Article 10 mandates the evaluation of Metropolitan Facts of “economic, social, technological, environmental, physical, cultural, territorial, political or administrative phenomena that simultaneously affect or impact two or more of the municipalities that make up the metropolitan area constitute metropolitan events.” There is a broad implication of data collection for the Metropolitan Board, Metropolitan Planning Council, and municipalities to create and administer the territorial and metropolitan development plans. Article 26 enables “the required studies [to] be made directly by the members of the councils, or external advisors may be hired.” Article 40 aims “to provide transparency to their actions and keep the citizens informed, the metropolitan areas shall have a web page for the purpose of publishing online and in real time the information regarding their organization, contracting and administrative acts issued by them.”

Regarding disaster risk management, **Law 1523 of 2012** outlines implementation strategies for a national disaster risk management information system which must be kept up to date and functional by integrating the contents of all national and territorial entities. The intent is to promote the generation and use of information on disaster risk at all levels of government (Article 45). In addition to a national system, the law provides for departmental, district and municipal authorities to establish information systems for disaster risk management within their jurisdiction in

harmony with the national system, guaranteeing interoperability with it.

In the environmental sector, all data is public and environmental agencies have a duty to enable full access to whoever wishes to verify it. **Law 99 of 1993 (General Environmental Law)** includes legal provisions that require data collection and sharing among different national scientific institutions. IDEAM (Institute of Hydrology, Meteorology and Environmental Studies) is responsible for providing “information, predictions, warnings, and advisory services to the community” and coordinating with the National Institute for Renewable Natural Resources and the Environment (INDERNA) to receive basic general research.⁶⁵ INDERNA transfers research and information to “Alexander von Humboldt” Biological Resources Research Institute.⁶⁶ The purpose of the Amazon Institute of Scientific Investigations (SINCHI) is to “carry out and disseminate high-level scientific research studies related to the biological, social, and ecological reality of the Amazon region.”⁶⁷ Furthermore, the Ministry of National Education, in relation to the environment and renewable natural resources, shall promote non-formal education and outreach programs with the Ministry of the Environment.⁶⁸

Law 1931 of 2018 (Climate Change Law) and **Decree 298 of 2016** coordinate policies across national and regional governance scales, thus information sharing is implied in the laws, although not specifically mandated. The

⁶² Law 1454 of 2011, Article 5.

⁶³ Law 1454 of 2011, Article 7.

⁶⁴ Law 1537 of 2012, Chapter 2, Article 10, Paragraph 4.

⁶⁵ Law 99 of 1993, Article 5.

⁶⁶ Law 99 of 1993, Article 5.

⁶⁷ Law 99 of 1993, Article 5.

⁶⁸ Law 99 of 1993, Article 5.

Climate Change Law establishes the National Information System on Climate Change and lists specific instruments to be used for the “generation of official information that allows making decisions, formulating policies and standards for planning, sustainable management of natural forests... and the management of climate change.”⁶⁹ This includes the establishment of the National Registry for the Reduction of Greenhouse Gas Emissions (RENARE), as one of the necessary instruments for information management of GHG mitigation initiatives. Decree 298 does not include any formal mechanisms or requirements for data collection and sharing. Article 10 does require the nodes to publish their operational regulations within six months of the law’s enactment, but there are no more detailed or ongoing requirements.

Despite the information systems addressed by the laws mentioned above, which allow faster and more transparent access to information, for the exchange of information between scientific institutions and for a better organization of the information (e.g., the urban file that municipalities and districts are obliged to organize), there do not seem to be explicit requirements for the coordinated collection and the exchange of data between the different governmental levels (neither vertical nor horizontal) in the field of urban and climate planning in Colombia. Improved technological infrastructures and capacities are necessary to boost the flow of information, as well as the development of technical capacities within the ministry

and territorial entities for data collection and analysis.

The Institutional Strategy for the articulation of policies and actions on climate change in Colombia (**CONPES 3700 of 2011**)⁷⁰ suggests that the decision-making process in productive sectors does not adequately reflect the research on the topic. Conversely, if this information is represented, it is not done adequately or is unknown by the key sectoral and territorial actors⁷¹. This leads to a lack of knowledge on the part of the sectors and territories of the threats, vulnerability, and economic and financial dynamics related to climate change. Additionally, the strategy stresses that, in the same environmental sphere, the impact of climate change on biodiversity and the services that ecosystems provide to society is unknown.

National adaptation initiatives are insufficient and a better understanding of the relationship between the effects of climate change and biodiversity is necessary. The Strategy’s 2011 suggestion called for a transformation of the Colombian government’s climate change website⁷² into an information portal for climate change adaptation and mitigation issues. This climate change web page has now changed and represents a true information portal that collects national communications on climate change and identifies all the main laws, policies and mitigation measures adopted by the government in this area, also offering basic and in-depth virtual courses on climate change.

The **National Climate Change Policy (PNCC)**, initiated in 2014, recognizes the great challenges associated with the information facing climate change management, sets out the need for adequate human and financial resources, taking into account the importance of adaptation and mitigation information for decision making⁷³. According to **CONPES 3700 of 2011**, the type of information required is “the result of the generation of future climate scenarios at national, regional and local scales; quantification of the physical impacts on ecosystems, societies and economic activities; estimation of the economic and social costs and benefits thereof”; and vulnerability assessments.

In addition to the need for adequate information, there is a need to align the data collected and produced by ministries, administrative departments and

research institutions. The PNCC identifies six institutions that are responsible for the generation of information at the national level and clearly states that they should collaborate with the regional and local levels to achieve institutional integration in this process. The PNCC also proposes that a national information strategy be formulated, focusing on the generation and use of information required to empower climate change management and containing provisions for the publication, dissemination and public approval of climate change management information.

In conclusion, the issues of data collection and exchange are well known to policymakers in Colombia and there is ample evidence that suggests innovations, technologies and technical capacity building is necessary to advance this field.

01.4 LOCAL GOVERNMENTS’ MANDATE FOR URBAN PLANNING IN URBAN AREAS

Local governments have unique knowledge about their territories and about the climate challenges affecting them. They are also more likely to have an accurate appreciation of the needs and concerns of their local population and their authority is more likely to be accepted as legitimate. Rapid urbanization can result in the emergence of human settlements that do not fit entirely within a single municipality but extend across two or more. In this

sense, administrative boundaries may not correspond to functional and morphological boundaries, resulting in institutional gaps and deficiencies in the provision of services.

According to article 311 of the Political Constitution, the **municipality** is the fundamental entity of the political-administrative division of the State; article 330 considers municipalities to be the central

⁶⁹ Law 1931 of 2018, Article 26.

⁷⁰ CONPES 3700 of 2011, <https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3700.pdf>

⁷¹ CONPES 3700 of 2011, p. 32.

⁷² <https://www.minambiente.gov.co/index.php/cambio-climatico>

⁷³ National Climate Change Policy (PNCC), <https://www.minambiente.gov.co/index.php/politica-nacional-de-cambio-climatico>

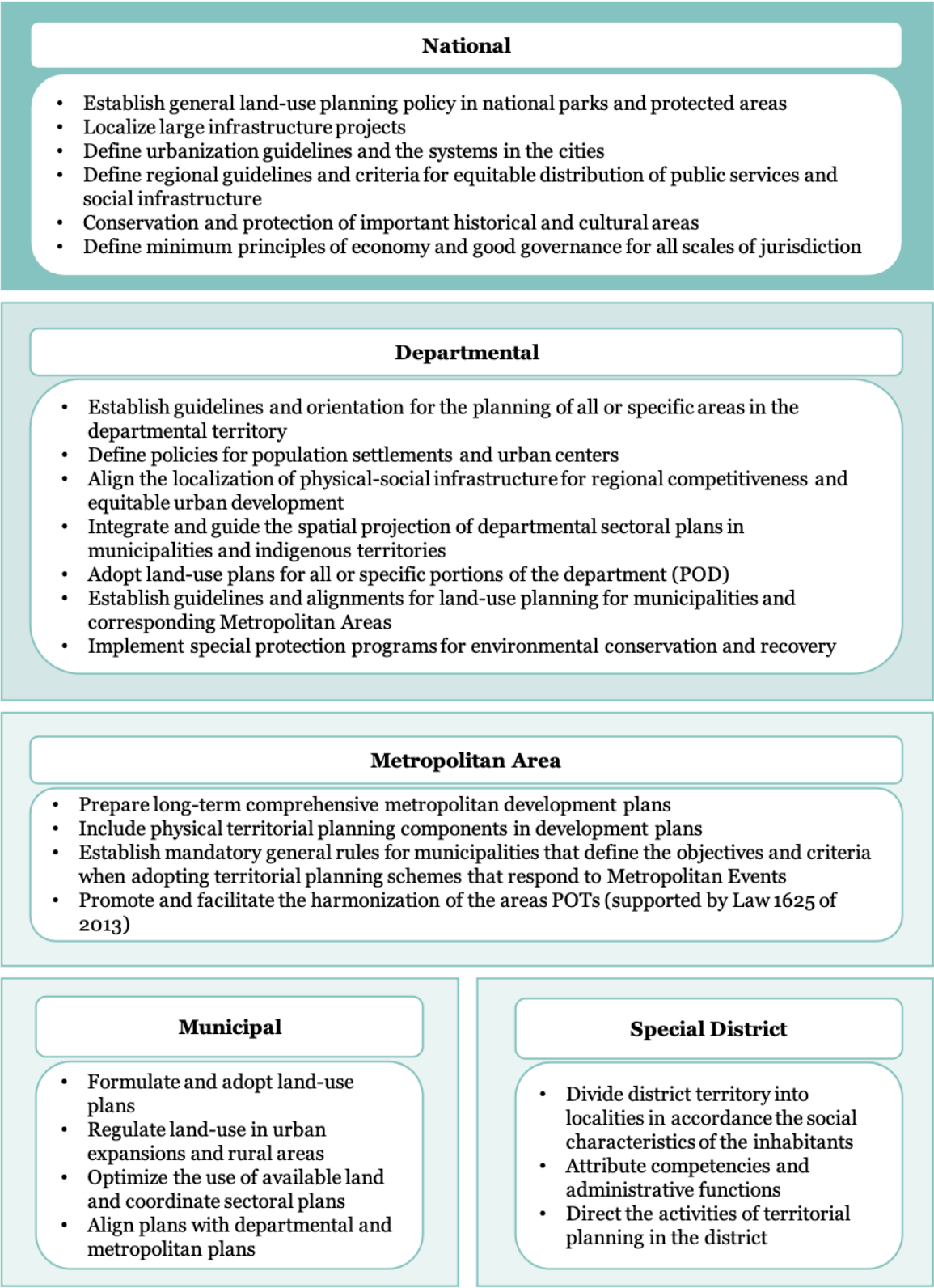


FIGURE 3 Governmental Competencies Assigned by Law 1454 of 2011

entity in the political and territorial planning.⁷⁴ The Constitution defines specific municipal functions for city councils, who are responsible for plans and social programs related to public service provision, the construction of public works, and overseeing the sale of real estate for housing.⁷⁵ Municipalities are responsible for regulating the development of their own territories and must regulate land uses and construction processes, though this is subject to department oversight.⁷⁶ **Departments**, formed by the union of several municipalities, functions as an entity of intermediation, support, and administrative coordination among the municipalities within its jurisdiction.⁷⁷ A department can execute and intermediate national functions as they are delegated, complementing municipal actions through cooperation or co-participation. **Districts** are cities with special primacy over other cities or territorial entities given their economic, social, environmental, or strategic importance to the nation.⁷⁸ **Indigenous territories** have functions within their respective jurisdiction established by Article 330 of the Constitution, including enforcing land use and settlement regulations; overseeing the conservation of natural resources; and designing plans and programs for economic and social development in alignment with the National Development Plan.

In the last few decades, significant progress has been made in the management of Colombian territory and, above all, in

the national decentralization process. Indeed, each entity enjoys a level of political and administrative autonomy that allows it to set and pursue its own territorial interests and facilitates decentralization. **Law 388 of 1997**, known as **Ley de Ordenamiento Territorial** (the Territorial Development Law)⁷⁹, focuses on responsibilities and actions that municipalities and jurisdictions can take to promote urban development in its territories. Articles 5 and 8 of **Law 388 of 1997** recognized the territorial autonomy of municipalities and districts, establishing that land use planning and intervention in land use will take the form of specific urban planning actions promoted by the local authorities: the law endowed the municipalities with autonomy to promote the development of their territory. The law includes timelines for implementing plans, differentiated plan types for municipalities with different population levels, as well as the institutional roles (e.g., mayor) that are involved in carrying out certain aspects of a plan. The law requires districts and municipalities to consider the distribution of burdens and benefits across different communities when implementing urban developments.⁸⁰ This Law also define the specific competences of local entities in matters of territorial planning at its article 7 that, however, was declared unconstitutional by the Constitutional Court of Colombia in 2000.⁸¹

As a consequence, **Law 1454 of 2011**, known as **Ley Orgánica**

74 Political Constitution of 1991, Article 330.

75 Political Constitution of 1991, Article 311 and Article 313, Paragraph 7.

76 Political Constitution of 1991, Article 334.

77 Political Constitution of 1991, Article 298.

78 Political Constitution of 1991, Article 322.

79 Law 388 of 1997 develops the Territorial Management Plans (in Spanish, “Planes de Ordenamiento Territorial”, POT) as an instrument for territorial planning and management.

80 Law 388 of 1997, Article 49.

81 Decision C-795/00, <https://www.corteconstitucional.gov.co/relatoria/2000/C-795-00.htm>

of Ordenamiento Territorial, issued updated rules on Colombia's legal framework for land use planning and, seeking to “transfer competences and decision-making power” away from the national government to the regional entities⁸², it defines competences, functions and responsibilities for national government, departments, special districts, municipal governments and metropolitan areas at its article 29 (as shown in the figure on the right). Its aim is “to promote increased capacity for decentralization, planning, management and administration” at the local level and allow for greater territorial integration.⁸³ It aims to articulate National and subnational jurisdictions and establish competencies and roles in a decentralized, regional, and coordinated fashion.

The law encourages territorial entities to work with one another to coordinate and “jointly organize the provision of public services, the execution of regional works and the execution of comprehensive development projects, as well as environmental management.”⁸⁴

Article 30 of **Law 1454 of 2011**, as amended by Article 4 of **Law 1962 of 2019** (the Regions Law), provides for the possibility for the governors of two or more departments to voluntarily establish an **Administrative and Planning Region (RAP)**. RAPs are legally and administratively autonomous, with missions to promote economic and social development, investment, and regional competitiveness. Their functions include: promoting a regional development approach;

promoting the coherence and articulation of planning actions among their component territorial entities; designing and promoting the execution of plans, programs and projects that are of mutual interest of the entities that comprise it; promoting the incorporation of the regional approach in Land Management Plans, the Departmental Management Plans, Development Plans, and other planning instruments.

Article 32 of Law 1454 of 2011, as modified by Article 5 of Law 1962 of 2019, designates the RAPs will be financed with the resources coming from the territorial entities that constitute that specific RAP, plus the incentives allocated by the Government. The law also establishes the possibility for RAPs to access resources from the general royalty system by submitting investment projects. Another purpose of the Law 1962 of 2019 is to establish the conditions for converting RAPs into **Territorial Entity Regions (RET)** which will become possible in 2022. The law provides a non-exhaustive list of powers that may be complemented by additional powers conferred in the creation of a RET, though the law does not include specific financial resources or the power for regions to adopt their own taxes.

Law 1551 of 2012 modernized the organization and operation of the municipalities and reiterated the competence of municipalities in the adoption of land use plans, clarifying their role in surrounding rural areas and promoting harmonization with other national, departmental, and municipal

plans. In Article 3, the law lists 23 points elaborating the functions of municipalities, including the mission to implement municipal development plans in accordance with the National Development Plan, departmental plans, life plans of territories and indigenous areas, and “incorporating the visions of ethnic minorities, community organizations and vulnerable population groups present in their territory, taking into account the criteria and instruments defined by the Planning Unit for Rural Land and Agricultural Uses (UPRA).”⁸⁵ This articulation places each municipal plan in conversation and context with other territorial and governmental plans.

Law 1625 of 2013 (Regime for Metropolitan Areas), in contrast to its predecessor Law 128 of 1994, adds specific provisions enabling metropolitan areas to have the authority to carry out environmental planning by creating “joint commissions for the regulation and administration of the ecosystems or basins shared with other environmental authorities.”⁸⁶ Articles 10 to 13 further define the areas’ environmental planning competencies by mandating they develop “guidelines for the location of transportation infrastructure, public services, equipment and public spaces of metropolitan scale; as well as the reserve areas for the protection of the environment, natural resources and landscape, [and] the determination of strategic areas susceptible to be declared as protected areas.”⁸⁷ Article 24 joins with the preceding sections to enable metropolitan areas and

entities within them to create the fiscal, land, contracting, and labor capacities to necessary to carry out their plans (article 13).

Law 152 of 1994 (Organic Law of the Colombian Development Plan) establishes the procedures and mechanisms for the preparation, approval, execution, evaluation, and control of the development plans for territorial entities, and also provides for the preparation of land use plans for municipalities.⁸⁸

Legal provisions that facilitate informal and flexible inter-municipal collaborations for urban planning, when administrative boundaries do not correspond to functional boundaries and morphological boundaries, exist within Colombian legislation in both the Constitution and national laws. **Articles 318 and 319** of the Constitution facilitate this type of coordination, which can take several forms; for example, the organization of two or more jurisdictions sharing economic, social, and/or fiscal relations as an “administrative entity”.⁸⁹ **Law 128 of 1994 (Organic Law of Metropolitan Areas)** supplements this function by addressing functional and morphological boundaries as they relate to Regional Autonomous Corporations, though the specific needs of informal settlers and indigenous groups are not specifically taken into consideration for these kinds of collaborations.⁹⁰ Modifications to legislation of this variety should consider inter-municipal collaborations that consider the specific realities of slums and indigenous communities.

⁸² Law 1454 of 2011, Article 2.

⁸³ Law 1454 of 2011, Article 2.

⁸⁴ Law 1454 of 2011, Articles 11 and 16.

⁸⁵ Law 1551 of 2012, Article 3.

⁸⁶ Law 1625 of 2013, Article 9.

⁸⁷ Law 1625 of 2013, Articles 10 – 13.

⁸⁸ Law 152 of 1994, http://www.secretariassenado.gov.co/senado/basedoc/ley_0152_1994.html

⁸⁹ Constitution of Colombia, Article 318 and 319

⁹⁰ Law 128 de 1994 (Ley Orgánica de las Áreas Metropolitanas)

Local governments’ roles and responsibilities are assigned the mandate for urban planning in their areas by **Law 1537 of 2012** related to housing and basic home infrastructure. Article 1 of Chapter 1 expresses that one of the purposes of the law is to “establish instruments for the planning, promotion and financing of territorial development, urban renewal and the provision of potable water and basic sanitation services.”⁹¹ Chapter 1 defines institutional “competencies, responsibilities and functions of the national and territorial entities, and the confluence of the private sector in the development of Social Interest Housing projects and Priority Interest Housing projects for low-income families, the promotion of territorial development, as well as to encourage the specialized housing financing system.”⁹² While institutional roles are explicitly defined by Law 1537 of 2012, it is unclear in many circumstances whether the jurisdictions of certain entities are geographically bound or designated to specific urban areas. Law 1537 of 2012 is specific to housing and, thus, does not address capacity building of local governments or the implementation of local government mandates. It also lacks provisions pertaining to administrative boundaries or their relationship to functional and morphological boundaries.

Specifically on the environmental and climate areas, the General Environmental Law (**Law 99 of 1993**) clearly defines institutional roles and responsibilities as a decentralized and democratic

process.⁹³ Article 1 also supports local governments in building their capacities to implement environmental mandates, and highlights the importance of coordination between public and private actors, stating that “action for the country’s environmental protection and recovery is a joint and coordinated task between the department, community, non-governmental organizations and the private sector.”⁹⁴ The functions at **departmental level** are defined by article 64 : to promote and execute national, regional and sectorial programs and policies related to the environment and renewable natural resources, and to provide budgetary, technical, financial and administrative support to the Regional Autonomous Corporations, the municipalities and other territorial entities in the execution of these programs and policies; to issue, subject to higher regulations, special departmental provisions related to the environment; to exercise control and surveillance functions of the environment and renewable natural resources.

The functions of **municipalities and districts** are listed in article 65 of the same law, completed by article 66 in relation to large urban centers and applied to indigenous territories by provision of article 67. Among the main functions, it is worth to notice the followings: to promote and execute national, regional and sectorial programs and policies in relation to the environment and renewable natural resources; to elaborate municipal environmental plans, programs and projects articulated with regional, departmental and

national plans, programs and projects; to dictate, within the limits established by law, regulations and superior dispositions, the norms of territorial ordering of the municipality and the regulations on land use, as well as the necessary norms for the control, preservation and defense of the ecological patrimony of the municipality.

Additionally, Article 23 states that the Regional Autonomous Corporations (CARs), which are public corporate entities that, due to their characteristics, geographically constitute the

same ecosystem or form a geopolitical, biogeographical or hydrogeographical unit, with administrative and financial autonomy, their own assets and legal personality, will administer environmental management and natural resources in the area of their jurisdiction and in close coordination with local territories (participating, for example, in the territorial planning and management processes, in order to ensure that the environmental factor is taken into account in the decisions adopted at the territorial level).

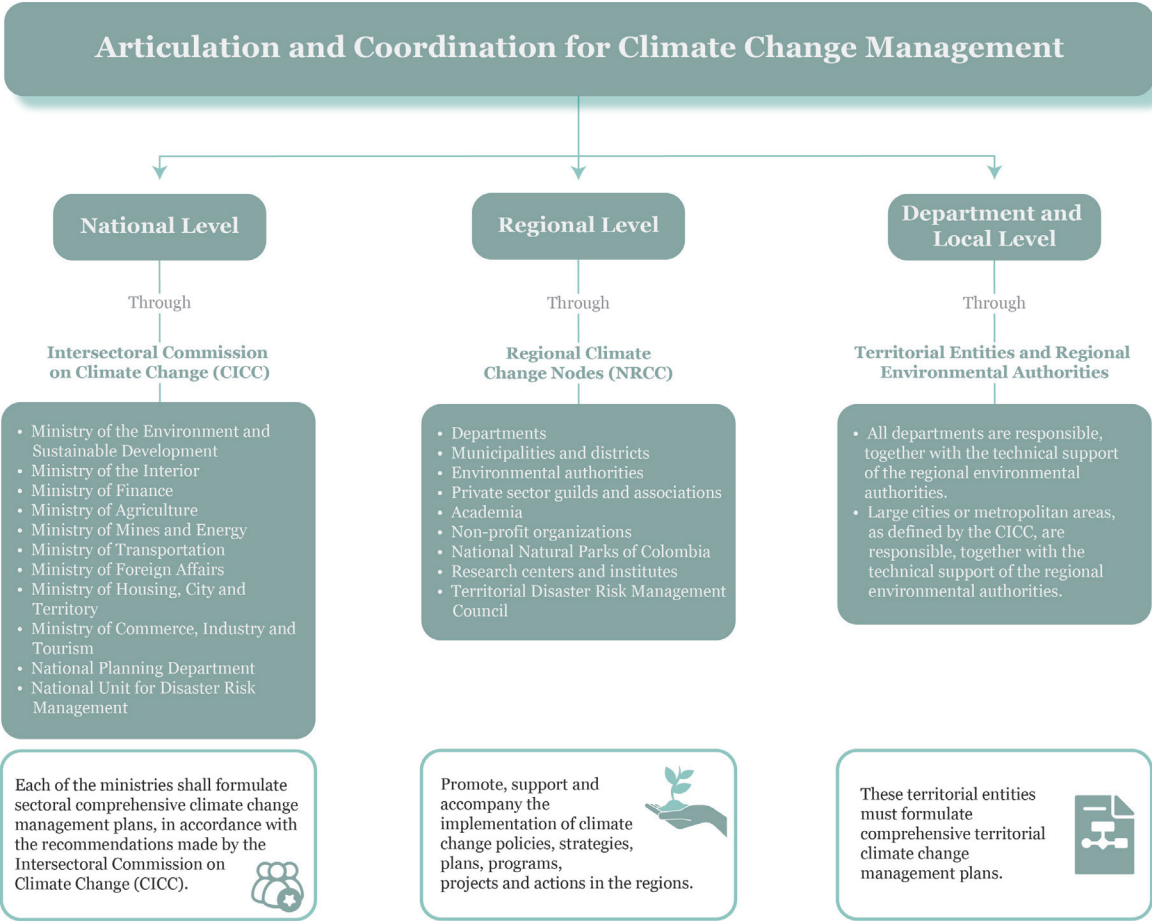


FIGURE 2 Articulation and Coordination for Climate Change Management

Source: Política Nacional de Cambio Climático (PNCC) (National Policy on Climate Change)

⁹¹ Law 1537 of 2012, Chapter 1, Article 1.
⁹² Law 1537 of 2012, Chapter 1, Article 1.
⁹³ Law 99 of 1993, Article 1.
⁹⁴ Law 99 of 1993, Article 1.

While the General Environmental Law makes provisions for local governments to build capacities and execute roles and responsibilities, the law lacks provisions that facilitate informal inter-municipal collaborations when administrative boundaries do not correspond to functional or morphological boundaries. Furthermore, there is no clear vision of the role local governments will play in collaboration with CARs.

The **Decree of 2016** creating the **SISCLIMA system** also defines the mandates at local level within this system. The territorial entities are responsible for the formulation of the comprehensive territorial climate change management plans, with the support of the regional environmental authorities. Likewise, they may guide the departmental risk management plans, taking into account the studies of alternatives and recommendations on climate change adaptation that are defined in the comprehensive territorial climate change management plans. This requires close coordination with the municipalities and districts within their territorial jurisdiction, as well as with the Departmental, District and Municipal Disaster Risk Management Councils.

The departments must establish the bases and instruments to promote the strengthening of institutional and sectorial capacities to face climate change, design and promote the establishment and application of incentives that promote the execution of actions to comply with the object of the Law; promote

the co-responsible participation of society in adaptation and mitigation, in accordance with the provisions of the applicable departmental ordinances; and develop strategies, programs and comprehensive projects for the mitigation of greenhouse gas emissions to promote efficient and sustainable public and private transportation. On the other hand, all **municipalities and districts or metropolitan areas** must formulate a comprehensive territorial climate change management plan for their municipal or district jurisdiction. The **regional environmental authorities**, within the framework of their mission functions, will be in charge, jointly with the governors' offices, of providing technical support for the preparation of comprehensive territorial climate change management plans, as appropriate. The functions of these regional environmental authorities (including the CARs) are further defined by the **Law 1931 of 2018**, which provides other responsibilities for departments, districts, and municipalities including requirements for subnational participation in national and regional plans, though the law does not require coordination among municipalities at the local level. However, the Climate Change Law does include clear roles and responsibilities for respective local governments through the **Comprehensive Sectoral Climate Change Management Plans (PIGCCS)** and **Comprehensive Territorial Climate Change Management Plans (PIGCCT)**, which define

the need for territories, districts and municipalities to complete climate change management plan.

The number and variety of these laws and decrees confirm that the functions and responsibilities of the institutions involved in urban and climate planning in Colombia are defined by a broad and constantly evolving regulatory framework, which reflects the large number of sectors and actors involved in land use and climate planning in Colombia, as well as the strict interconnections between urban planning and environmental and climate issues. However, the abundance of legislation brings to the light the issue of implementation of the ample set of regulations, laws, projects and policies.

Indeed, the decentralization of competencies has not been accompanied by an appropriate fiscal decentralization: for the most part, competencies were ceded and resources to finance them were distributed to subnational governments, without transferring fiscal competencies to them. According to the Colombian Constitution, municipalities are entitled to administer their own resources and to collect the taxes necessary to the performance of their functions “within the limits imposed by the Constitution and the law” (Art. 287). The extent of local government taxing powers thus depends upon the terms of the law that authorize the levy of each specific tax. As a general rule, the national Congress must define the basic elements of the tax, such as its base and rate. In practice, a range of rates are

often established, within which municipalities are free to choose. The same rule applies for fees and special levies (“contribuciones”), with the important exception that the rate can be determined directly by municipalities as long as they follow the procedures established by Congress.⁹⁵

As a result, local authorities have financial limitations that often mean they are under-resourced and lack the basic information and qualified technical teams required for preparing comprehensive land use plans. Limited autonomy in making fiscal decisions has been noted and neither the decentralization process initiated by the Constitution nor the various reforms of the 1990s introduced fundamental changes that would allow local governments to raise their own fiscal resources, meaning they depend mainly on the resources distributed by the national government.

In order to fiscally strengthen territorial entities, the national government has issued a series of laws which sought to introduce fiscal discipline rules and limits on expenditures in order to free up revenues to finance municipal competencies, including those related to territorial planning⁹⁶: **Law 617 of 2000**⁹⁷ adds to the Organic Budget Law and establishes rules to strengthen decentralization; **Law 819 of 2003**⁹⁸ includes provisions on territorial entity budgets, fiscal responsibility, and transparency; and, **Law 550 of 1999**⁹⁹ addresses related issues. Moreover, the **Project for Strengthening Territorial Entities (PFET)**¹⁰⁰

95 Natalia Aristizabal (Harvard Law School), “Land Taxes in Colombia”, World Bank, <http://www1.worldbank.org/publicsector/decentralization/June2003Seminar/Colombia.pdf>

96 CONPES 3870 of 2016, National Program for the Formulation and Updating of Land Management Plans: Modern POT, <https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3870.pdf>

97 Law 617 of 2000, http://www.secretariasenado.gov.co/senado/basedoc/ley_0617_2000.html

98 Law 819 of 2003, http://www.secretariasenado.gov.co/senado/basedoc/ley_0819_2003.html

99 Law 550 of 1999, <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=6164>

100 <https://colaboracion.dnp.gov.co/CDT/Desarrollo%20Territorial/Portal%20Territorial/KIT-OT/05-Proyecto-de-Fortalecimiento.pdf>

was launched to strengthen the institutional, administrative and technical capacities of the territorial entities and, in particular, of the municipalities to facilitate regional development. The project proposed regulatory adjustments to make the current distribution of competencies and resources among territorial entities more effective. In addition to the PFET, other instruments like private contracting have aimed at mobilizing quality investments while deepening decentralization (for example, investments for the updating of POTs and the formulation of PODs).

However, despite the attempts mentioned, local authorities still have financial limitations that affect their ability to have the inputs, basic information and qualified technical teams that are indispensable for the preparation of comprehensive and quality land-use plans¹⁰¹, with undeniable consequences for the effective performance of their functions. The current regulatory framework is not sufficient to allow territorial entities to effectively plan their development.

Legal provisions that facilitate informal and flexible inter-

municipal collaborations, for urban planning, when administrative boundaries do not correspond to functional boundaries and morphological boundaries exist within Colombian legislation in both the Constitution and supplementary laws. **Articles 318 and 319** of the Constitution facilitate inter-municipal coordination for urban planning. While this type of coordination can take several forms, the most significant in terms of urban planning practices is outlined within Article 319 suggests that the organization of two or more jurisdictions sharing economic, social, and/or fiscal relations as an “administrative entity”.¹⁰² **Law 128 of 1994 (Organic Law of Metropolitan Areas)** supplements this function by addressing functional and morphological boundaries as they relate to Regional Autonomous Corporations, though informal entities such as indigenous and informal settlers are excluded from these kinds of collaborations.¹⁰³ Modifications to legislation of this variety should consider informal collaborations and groups.

SUMMARY OF KEY FINDINGS

Colombia since 1991 has enacted laws that establish a system for environmental governance. The country lives through a wave of evolving climate change laws and policies that establish new climate governance networks.

Climate and environmental governance in Colombia rely on building vertical and horizontal relations among existing government bodies as well as establishing brand new regional territories of climate governance, although there are few legal provisions that require coordination among different line departments in local governments. In addition, the environmental and climate laws provide limited guidance on how local governments should implement environmental management and preservation beyond coordinating with Regional Autonomous Corporations.

More broadly, many legislative provisions foresee the need for vertical coordination and there are several provisions creating bodies to support multi-level institutional governance. However, more mechanisms and processes for horizontal coordination would be beneficial (such as coordination from municipality to municipality), as well as urban-rural coordination beyond administrative boundaries, that take into consideration rural needs when rural areas are part of the same economic, social or environmental functional areas even if within the boundaries of two or more local government authorities.

Participatory governance is enshrined in the Constitution and guaranteed from subsequent legislation. Mechanisms include direct citizen participation and stakeholder representation, as well as the requirement to consider citizens’ inputs in some cases, although institutions are not obliged to take into account community demands, input and needs. Stakeholders and community identification is not clearly foreseen, especially in environmental and climate legislation.

The National Constitution and Law 1454 even highlight the importance of including indigenous and rural peoples in planning processes. This is very important, as indigenous and rural people often face climate adaptation in increasingly severe ways than those in urban areas.

There do not seem to be explicit requirements for the coordinated collection and the exchange of data between the different governmental levels (neither vertical nor horizontal) in the field of urban and climate planning. More alignment of the data collected and produced by ministries, administrative departments and research institutions is needed, as well as collaboration with the regional and local levels to achieve institutional integration in this process. Moreover, there is a need for adequate information.

Decentralization is well established as a national strategy and set of goals, and the roles and mandates

¹⁰¹ CONPES 3870 of 2016.

¹⁰² Constitution of Colombia, Article 318 and 319

¹⁰³ Law 128 de 1994 (Ley Orgánica de las Áreas Metropolitanas)

of the territorial entities in land use planning are comprehensively established; however, there is a certain abundance and disarticulation of legislation defining the competences of national, subnational and local governments in the different sectors related to urban, environmental and climate planning, which, although it reflects the large number of sectors and actors involved in land use and climate planning in Colombia, could create overlaps and confusion due to the strict interconnections between the several sectors involved.

The decentralization of competencies has not been accompanied by fiscal decentralization: for the most

part, competencies were ceded and resources to finance them were distributed to subnational governments, without transferring fiscal competencies to them. Local authorities have financial limitations that often mean they are under-resourced and lack the basic information and qualified technical teams required for preparing comprehensive land use plans with undeniable consequences for the effective performance of their functions. They also have limited autonomy in making fiscal decisions and they depend mainly on the resources distributed by the national government.

RECOMMENDATIONS

Define and create coordination mechanisms (in addition to territorial associative schemes) to facilitate horizontal collaboration at city level and urban-rural coordination, as well as more tools and structure for coordination between different line departments and sectors at all levels (national, subnational and local). In particular, urban-rural coordination beyond administrative boundaries would help in comprehensively taking into consideration the need of a rural territory strictly interconnected for social, economic or environmental functions, although part of different municipalities.

Create mechanisms for an effective participatory planning process, including requirements to take into consideration citizens' demands, input and needs. Especially in environmental and climate legislation, specify requirements related to stakeholder and community identification.

Define and create mechanisms and structures to boost the flow of information and collaboration between institutions at all levels on data collection and sharing, enhancing vertical and horizontal alignment of data collected and produced. To this end, improved technological infrastructures and innovations are necessary, as well

as the development of technical capacities within the ministries and territorial entities for data collection and analysis.

Territorial entities are vital actors in guaranteeing urban-rural balance, solving territorial conflicts, and closing of territorial gaps. As such, the national government should undertake substantial fiscal decentralization to increase the institutional and technical capacities of territorial entities to formulate, manage, and implement the POTs. For example, subnational tax reform that would allow territorial entities to generate greater local own revenues would be beneficial. A potential measure could be the local property tax assessments at local level, instead of national (e.g., a few municipalities, like Bogotá and Medellín, have their own cadastre offices; this has allowed Bogotá to increase its property tax base substantially)¹⁰⁴.

Colombian legislation pertaining to informal and flexible inter-municipal collaborations for urban planning, when administrative boundaries do not correspond to functional boundaries and morphological boundaries, should give further consideration to indigenous groups and slum dwellers.

¹⁰⁴ Fedelino, A. (2010). "6 Colombia". In *Making Fiscal Decentralization Work : Cross-Country Experiences*. USA: INTERNATIONAL MONETARY FUND. doi: <https://doi.org/10.5089/9781589069855.084>.

02

PLANNING INSTRUMENTS

National
territorial
planning

Does your country have provisions in legislation or regulations requiring the formulation of a national territorial plan?

- Do these include legal provisions that require the national territorial plan to classify national land according to its use, for example in urban and non-urban? ☒
- Do these include legal provisions that require the national territorial plan to establish an integrated national inland and coastal transportation and infrastructure network? ☒
- Do these include the legal requirement to coordinate the national territorial plan with national climate plans? ☒
- Do these include the legal requirement to assess the climate vulnerability of the implementation of the national territorial plan? ☐
- Do these include the legal requirement to assess the greenhouse gas emissions associated with the implementation of the national territorial plan? ☐

Regional
territorial
planning

Does your country have provisions in legislation or regulations requiring the formulation of regional territorial plans?

- Do these include legal provisions that require regional territorial plans to establish an integrated transportation network and infrastructure system? ☒
- Do these include legal provisions that require the coordination of the regional territorial plans with national climate plans? ☒
- Do these include legal provisions to ensure that regional plans implement the objectives of the national territorial plan? ☒
- Do these include the legal requirement to assess the climate vulnerability of the regional territorial plans? ☐
- Do these include the legal requirement to assess the greenhouse gas emissions associated with the regional territorial plans? ☐

Spatial
Plans for
Urban
Areas

Does your country have provisions in legislation or regulations requiring the formulation of regional territorial plans?

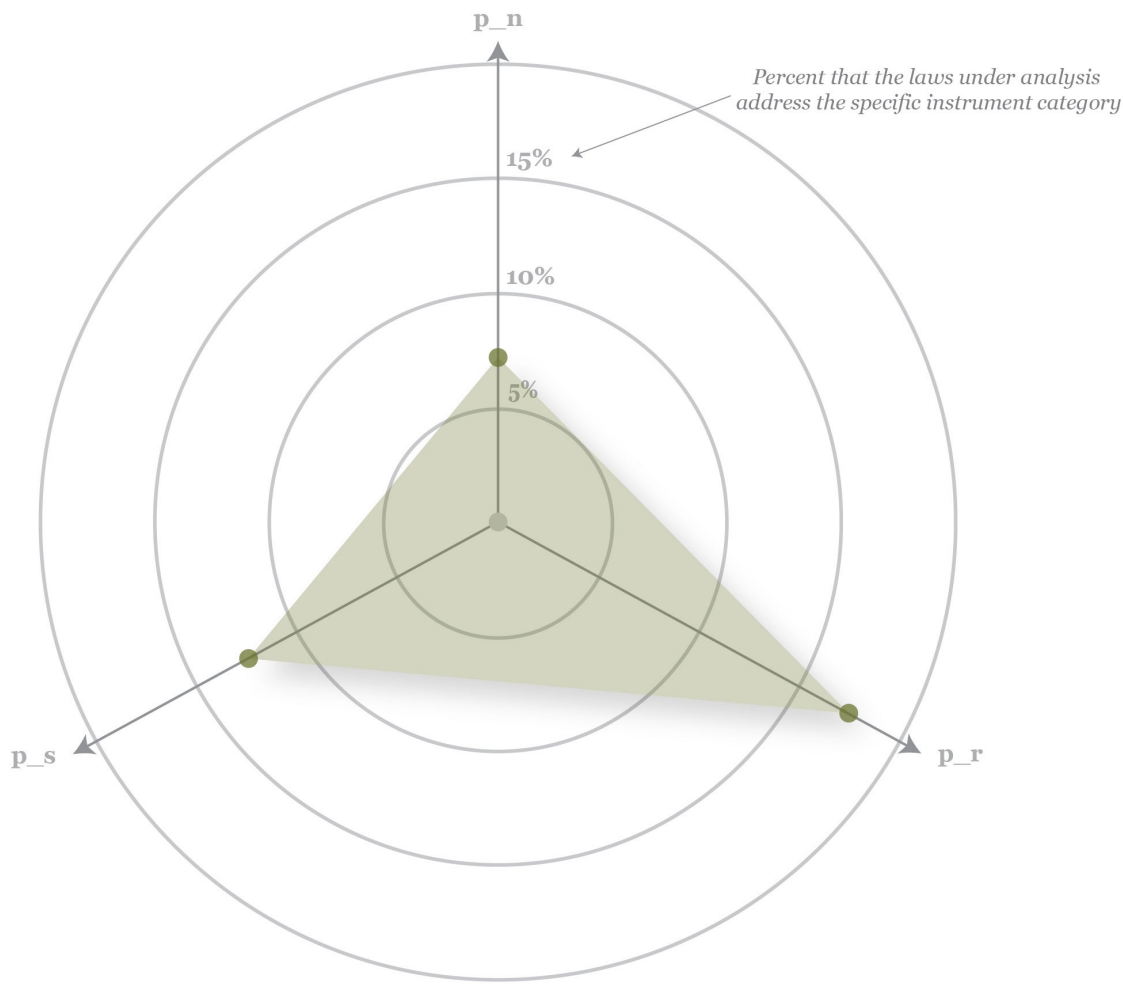
- Do these include legal provisions that require regional territorial plans to establish an integrated transportation network and infrastructure system? ☒
- Do these include legal provisions that require the coordination of the regional territorial plans with national climate plans? ☒
- Do these include legal provisions to ensure that regional plans implement the objectives of the national territorial plan? ☐
- Do these include the legal requirement to assess the climate vulnerability of the regional territorial plans? ☐
- Do these include the legal requirement to assess the greenhouse gas emissions associated with the regional territorial plans? ☒

2.1

2.2

2.3

02 PLANNING INSTRUMENTS



Planning Instruments

- p_n National territorial planning
- p_r Regional territorial planning
- p_s Spatial plans for urban areas

Planning frameworks vary among countries but most of them have a three-tiered hierarchy with national, sub-national (regional) and local levels. The national framework often identifies the broader objectives of planning and strategies for implementation. These are then adopted and tailored at the sub-national and local levels through sub-national (regional) plans and local (urban) plans respectively.

Planning instruments play an important role in reducing greenhouse gas emissions, while increasing resilience through adaptation strategies that promote social equity and economic prosperity. For most countries, territorial planning law and instruments precede climate change legislation and policies. This is the case with Colombia, where many robust planning laws do not reference specific climate adaptation policies. So far, the legal analysis has not identified any legal requirements to coordinate the national territorial plan with the national climate plan. Colombia has robust environmental laws to guide territorial planning and these regulations are important for climate change mitigation and adaptation, even if greenhouse gases emissions are not mentioned.

Planning instruments are integral in climate change considerations as they enable and standardize the national, territorial, and municipal objectives and policies for land-use, urban expansion, city and regional infrastructure, and environmental protection. Planning legislation in the 1990s “provided municipalities with better instruments to realize urban development processes based on tolerance, democracy and justice,”¹ and deliberate and delicate land-use decisions can protect non-urban populations and environmental features as cities expand. According to the World Bank, 81.1 percent of Colombia’s population lives in cities, and with a growth rate of 1.76,² urban areas will continue to grow in the coming years. Unfortunately, this leaves land in the urban periphery vulnerable to real estate and urban development stakeholders, even if the land is classified as agricultural or protected.³ Additionally, the agricultural land critically supports food production for the region and contributes to tourism, trade, and handicraft sectors.⁴ Losing rural land uses and the cultural, social, ecological knowledge of rural peoples would be detrimental to the sustainability of Colombia’s cities.

¹ Koch, Florian. “The Rules of the Game and How to Change Them: Urban Planning Between Formal and Informal Practices. A Colombian Case Study.” *International Planning Studies* 20, no. 4 (October 2, 2015): 407–23. <https://doi.org/10.1080/13563475.2015.1068685>.

² World Bank. “Urban Population (% of Total Population) - Colombia | Data.” Accessed March 16, 2021. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=CO>.

³ Quimbayo Ruiz, Germán A., Juha Kotilainen, and Matti Salo. “Reterritorialization Practices and Strategies of Campesinos in the Urban Frontier of Bogotá, Colombia.” *Land Use Policy* 99 (December 2020): 105058. <https://doi.org/10.1016/j.landusepol.2020.105058>. p 1.

After the decentralization and implementation of early planning instruments, development in many Colombian cities, like Barranquilla, happened very quickly.⁵ Plans like the Territorial Ordering Plan (POT) developed urban planning strategies that placed timeframes on developers for construction. Developers, reluctant to sell undeveloped land back to the City, built quickly, which subsequently encouraged urban growth.

Pace of development was not the only impact of early planning legislation. Prior to 1990s laws, urban growth and management were difficult to control across cities, territories, and departments, and negative impacts from rapid urbanization were increasing.⁶ Colombia's new at the time planning laws introduced important requirements for development plans across all governmental levels, created expectations for environmental protection and urban growth, addressed settlement legalization, and established standards for public and social infrastructure and amenities. These early planning practices were fundamental to centering the decentralization process and normalizing concepts that would become climate change considerations (i.e., protected

areas, hazard areas, transportation, and land-use). Figures 1 and 2 show Colombia's key planning instruments and the chronology of the country's planning laws.

Key Findings are as follows: Where the toolkit is concerned, many of the planning instruments facilitate and guide the planning process even when there are no legal requirements to do so. The radar graphic above shows that many of the toolkit responses were "No." This is because of a lack of legal requirement for most of the planning instruments. Due to Colombia's decentralization objectives, many planning instruments are identified for national, regional, and municipal entities. Numerous of these documents are still in the process of including climate change specific elements, like vulnerability and greenhouse gas assessments. The genealogy of Colombia's urban planning legislation and policy is extremely robust. In some areas, this creates a lack of clarity on which planning authorities have decision-making power, capacity-building responsibilities, or research and knowledge responsibilities.

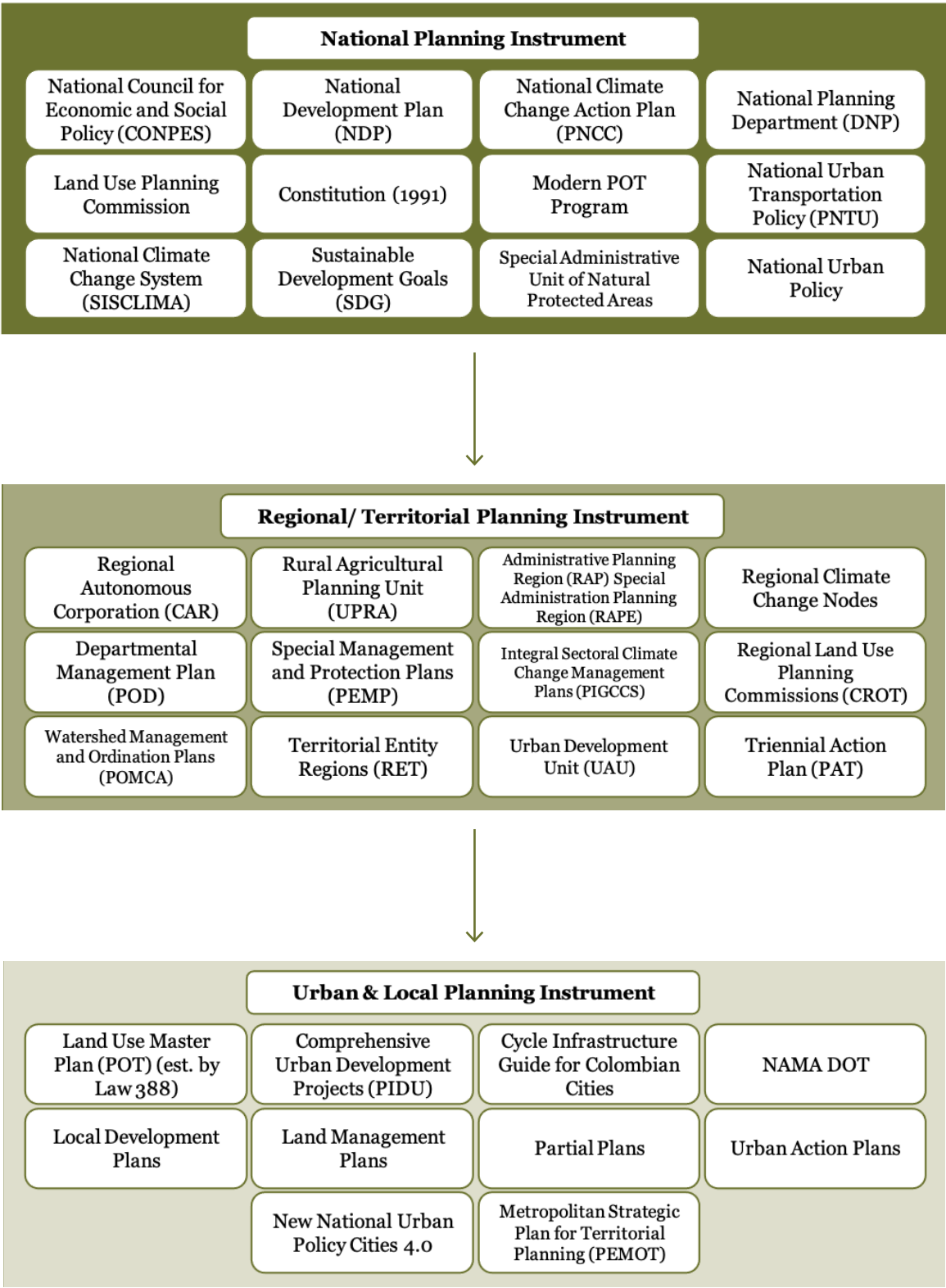


FIGURE 1 Key Planning Instruments

4 Quimbayo Ruiz, Germán A., Juha Kotilainen, and Matti Salo. "Reterritorialization Practices and Strategies of Campesinos in the Urban Frontier of Bogotá, Colombia." *Land Use Policy* 99 (December 2020): 105058. <https://doi.org/10.1016/j.landusepol.2020.105058>. p. 5.

5 Koch, Florian. "The Rules of the Game and How to Change Them: Urban Planning Between Formal and Informal Practices. A Colombian Case Study." *International Planning Studies* 20, no. 4 (October 2, 2015): 407–23. <https://doi.org/10.1080/13563475.2015.1068685>. p. 417.

6 Echeverria, Maria Clara. "Urban Reform in Colombia: A Tool for Democratic Development?" *Cities*, May 1991.

02.1 NATIONAL TERRITORIAL PLANNING

Considering that the function of planning is to promote balanced socio-economic development with environmental considerations, classifying land with allowed uses enables these objectives to be achieved in a coordinated manner. It allows the protection of ecosystems that perform mitigation and adaptation functions (such as mangroves) and restricts urban development in risky areas, ensuring planning in safe places. For instance, it makes it possible to increase the housing stock without destroying green zones and facilitates renewal without the loss of cultural heritage. This classification is especially important in a biodiverse country like Colombia, although there is no specific section in Colombia’s legislation that foresees the

determination of actions based on the ecosystem to be considered (Amazonian, Orinocense, Andean, Caribbean, Pacific, or insular).

The **1991 Constitution** established that the **National Development Plan (NDP)**, a key planning instrument at the national level, must be prepared with active participation from planning and territorial entities. The **NDP 2018-22**, “*Pacto por Colombia, Pacto por la equidad*” (Pact for Colombia, Pact for Equity), includes the areas of environmental sustainability, transport and logistics, public services in water and energy, ethnic groups, people with disabilities, and equality for women, among others.⁷ The NDP is a key planning instrument that develops regional

pacts that identify and prioritize highlighted goals. These pacts focus on interconnecting the nine sub-national territories in the country. The national pact applies in all territories and seeks to strengthen governance in sub-regions and develop strategic initiatives to activate the regions. The NDP 2018-22 has been designed to help fulfil commitments towards the 2030 Agenda and its **Sustainable Development Goals (SDGs)**. The SDGs have served as a tool for promoting coherence within and among the different sections of the plan, as well as a key reference for setting targets aligned with a long-term vision of the country.⁸

Law 388 of 1997, Ley de Desarrollo Territorial (Law of Land Development), highlights general land classification categories for each level of government (national,

department, and municipal, and district).⁹ Compliance between these levels of government is outlined in the objectives of the law, Article 1, and the principles, Article 2. In Article 2, the principle “the social and ecological function of property” implies climate concerns, and Article 10 covers natural hazard risks and preventions through territorial planning. Article 8 defines urban planning actions to concern land expansion, hazardous activities and land uses, transportation characteristics, green areas, building and land use intensities, disaster recovery and prevention areas, and undeveloped areas at risk of natural hazards. These actions are further detailed by subsequent regulations, which are compiled under the **Decree 1077 of 2015 (Unified Decree of the Ministry of Housing, City and Territory)**. Decree

7 Colombia Country Note, Latin American Economic Outlook 2019, Organisation for Economic Co-operation and Development (OECD), <https://www.oecd.org/dev/americas/Colombia-Country-Note-Leo-2019.pdf>

8 Colombia Country Note, Latin American Economic Outlook 2019, Organisation for Economic Co-operation and Development (OECD), <https://www.oecd.org/dev/americas/Colombia-Country-Note-Leo-2019.pdf>

9 Law 388 of 1997, Article 7.

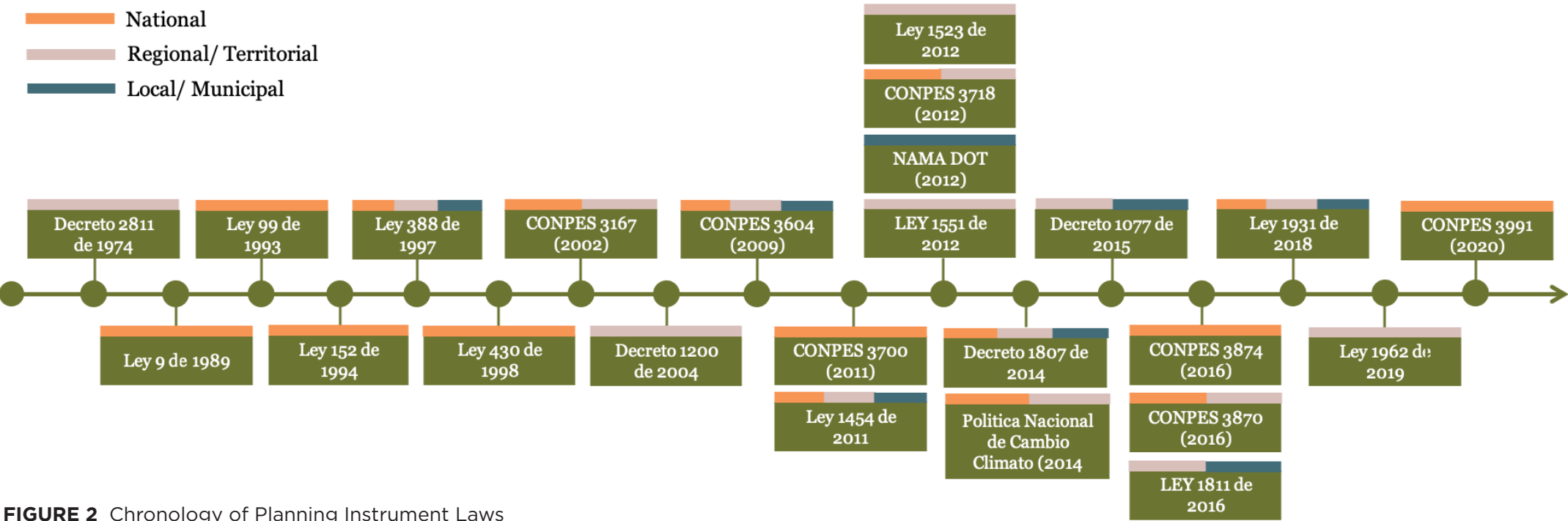


FIGURE 2 Chronology of Planning Instrument Laws

1077 of 2015 does not explicitly require coordination between multi-level development and land use plans, though coordination between multi-level governmental units is required to formulate and implement the urban land use and development objectives, urban and rural climate mitigation and adaptation measures, and other planning instruments for planning and development.

Law 1454 of 2011 (The Organic Law of Territorial Planning) recommends norms regarding the political and administrative organization of territories, establishes the guiding principles of land use planning, defines the institutional framework and instruments for territorial development, defines competencies in land use planning between the nation, territorial entities and metropolitan areas, and establishes general norms for territorial organization. Two instruments stem from this law: land use planning guidelines and the **Departmental Management Plan (POD)**. Although the law did not regulate the POD, it did create them as an instrument. Also noteworthy is the creation of the **Land Use Planning Commission (COT)** as a technical and advisory body to both the national government and Congress in matters of decentralization and land use planning. Law 1454 of 2011 outlines land use planning prerogatives for national, regional, departmental, municipal, and indigenous territorial levels of government: “The territorial ordering will propitiate the conditions to agree on public policies between

the Nation and the territorial entities, with recognition of the geographic, historical, economic, environmental, ethnic and cultural diversity and regional and national identity.” Land use classifications are not specified as this law primarily focuses on the land use planning process; in Article 29, the Nation is assigned land use competency in regards to land uses of national interest, like national parks and protected areas.

Climate change strategies or action plans are also not specified in Law 1454 of 2011, though the land use planning process in Article 3 includes direction to promote environmental sustainability. Article 9 identifies **Regional Autonomous Corporations (CARs)** to manage environmental and ecological planning, especially for water-producing areas. Although not explicit, Article 28 states that “municipalities are holders of any competence that is not expressly attributed to the departments or the Nation,” which could include climate action planning. Article 30 of Law 1454 was amended by **Law 1962 of 2019**, Article 4, to include functions for **Administrative and Planning Regions (RAP**, in Spanish). These amendments include a responsibility for RAPs to develop a regional approach to “environmental particularities” and, overall, use “different planning instruments” to achieve its goals and comply with the National Development Plan.

One of the most traditional planning bodies in the country, the National Council for Economic and Social Policy (CONPES), was

created in 1958. As the highest national planning authority, CONPES enacts guidelines and strategies. The National Planning Department acts as the Executive Secretariat of CONPES. In 2011, **CONPES 3700 (2011)** launched a national strategy to coordinate the implementation of the **National Climate Change Action Plan (PNCC)**, recommending the creation of the **National Climate Change System (SISCLIMA)** via decree to provide guidance to all levels of government on climate change objectives and in all spheres of national development. **Decree 298 of 2016** establishes the national policy of SISCLIMA to guide the development and coordination of Colombia’s climate change policies. The law creates the **Intersectoral Commission on Climate Change (CICC**, in Spanish), which regularly brings together the heads of Colombia’s national executive ministries for the purpose of coordinating climate policy. The law also creates regional climate change nodes, required by law to be led by a coalition of public, private, and nonprofit sector representatives for the purpose of developing region-specific climate change policies and plans, and for coordinating between national and regional policies as well as between regions. The **PNCC (2014)** guides “the inclusion and implementation of adaptation and mitigation actions in planning instruments in territorial planning instruments (e.g., development territorial planning instruments), municipal development plans (e.g., land-use plans, regional plans), regional disaster risk management

plans (e.g., four-year action plans) among others.” Topics of focus also include transportation planning and urban expansion. Cohesion between multiple levels of government and development plans are necessary for effective climate change action strategies.

Significant progress has been made in the management of Colombian territory and, above all, in the decentralization process in which the Colombian State has been engaged for several decades, with **Law 388 of 1997**, known as the “Territorial Development Law,” which develops the **Territorial Management Plans (POT)** as an instrument for territorial planning and management

Through the **Modern POT** program, as described in **CONPES 3870 (2016)**, the national government will assist territorial entities with tools and capacities that will enable them to adequately face urban-rural challenges associated with population growth and urbanization. Other related issues are: “competitiveness, efficient and sustainable land use, design and implementation of modern road and transportation systems, sustainable expansion of public service networks, disaster risk management, adaptation to climate change, protection and conservation of natural resources, fiscal strengthening, increased efficiency of public investment and attraction of private investment.” The program includes two technical assistance components: the first, of national scope, includes articulation and technical support to central government agencies in the improvement of

land-use planning instruments and methodologies. This would guarantee the incorporation of state-of-the-art technical and technological parameters for land use planning and support subnational governments with optimal instruments. The second component, focused on territorial entities, contemplates technical and financial support conditioned to the adoption of the program's standards and methodologies by the eligible territorial entities. To this end, these entities and the national government, through the **National Planning Department (DNP)**, will complement technical and financial efforts to formulate management plans with the support of external operators and the assistance of national and international experts.

CONPES 3718 (2012), according to **Decree 1504 of 1998**, identifies “weaknesses in the application of instruments for planning, ordering and designing public space in territorial entities and environmental authorities” at the national level.¹⁰ This lack of clarity makes sound decision-making around public space during the urbanization process difficult to achieve. CONPES 3718 recommends creating standard methodologies for incorporating public space into urban development planning. Section IV, “Strategies,” recommends the “consolidation of public space as a strategic and articulating element or component of territorial planning. Mainly, as a determinant of urban design from the POT and other instruments that complement it, and the **Special Management and Protection**

Plans (PEMP), and integrator of the different uses and systems that make up the city and its environment.”¹¹

Law 99 of 1993, *Ley general Ambiental* (General Environmental Law)

establishes the basis of Colombia's environmental policy. Primarily, this law outlines the guidelines, goals, and governmental entities for Colombia's environmental policy, as well as reiterating and supporting the Constitution on the rights of people and the ecosystems of the country. Climate considerations are not explicitly highlighted; Article 5, numeral 35; Article 31, numeral 23 and Paragraph 3, all reference territorial and urban planning to adapt or mitigate natural disasters or ecological risk. Article 5 also assigns the **Ministry of the Environment (MoE)** the responsibility of “issu[ing] and updat[ing] the zoning statute for the proper use of the territory for its proper ordering and national regulations on land use with regard to its environmental aspects and set the general guidelines for the ordering and management of hydrographic basins and other areas of special handling.” Numeral 7 of Article 5 specifies that MoE, with the Ministry of Economic Development, formulate the national policy for the human settlements and urban expansion.

Law 152 of 1994, *Ley Orgánica del Plan de Desarrollo de Colombia* (Organic Law of the Development Plan) establishes “the procedures and mechanisms for the preparation, approval, execution, follow-up, evaluation

and control of the development plans” for the Nation and all the territories and public bodies within. This law directly supports Article 342, and in general Title XII, Chapter 2 of the Constitution. Climate action provisions on land use and transportation are not direct requirements in the law, though Article 3, Parts (h) and (i) call for harmonious planning of within and between territories and regions for humans and the natural world. Article 32 issues the scope of planning in the territorial entities; they have “autonomy in matters of economic and social development planning and environmental management, within the environmental management, within the framework of the competencies, resources and responsibilities attributed to them by the Constitution and the law.” Although the territorial entities have autonomy to develop their plans in matters of economic, social and environmental management, they must do so within the parameters of the national framework. Authorities within indigenous territories share the same autonomy and responsibility, per Articles 31 and 32.

Law 1931 of 2018, *Ley de Cambio Climático* (Climate Change Law) requires the Ministry of the Environment and Sustainable Development and the National Planning Department to reference the National Climate Policy when developing guidelines for planning for climate change and ensuring that the **Integral Sectoral Climate Change Management Plans (PIGCCS)** is considered in instruments of

land planning and development.¹² Article 3, Numeral 4 identifies land use as a possible contributor to climate change; in Article 7, “the National Government will regulate Article 10 of Law 388 of 1997 within the framework of its competencies, with the purpose of including the management of climate change among the determinants of territorial planning.”

Decree 2811 of 1974 established the **Watershed Management and Ordination Plans (POMCA)**. POMCA “is the instrument through which the planning of the coordinated use of the soil, water, flora and fauna and the management of the basin is carried out, in which the population that lives in the territory of the basin participates, conducive to the proper use and management of such resources.”¹³ One of the goals of the POMCA is that it will “guide the structuring of the programmatic component and the measures for the administration of renewable natural resources as established by Decree 1076 of 2015.”¹⁴

In general, there is a need for policies to strengthen transport connectivity and electromobility between cities, and policies to enhance active urban mobility based on available infrastructure. Coordination between territorial planning, especially land use and transportation, is essential to accelerate climate action in cities. In 2002, the national government formulated the **National Urban Transportation Policy (PNTU)**, in Spanish), which materialized with the implementation of public transportation systems in seven

¹⁰ CONPES 3718 (2012).

¹¹ CONPES 3718 (2012).

¹² Law 1931 of 2018, Article 17.

¹³ Minambiente, “Watershed Management and Ordination Plans – POMCA”, <https://www.minambiente.gov.co/index.php/gestion-integral-del-recurso-hidrico/planificacion-de-cuencas-hidrograficas/cuenca-hidrografica/planes-de-ordenacion>.

¹⁴ Minambiente, “Watershed Management and Ordination Plans – POMCA”, <https://www.minambiente.gov.co/index.php/gestion-integral-del-recurso-hidrico/planificacion-de-cuencas-hidrograficas/cuenca-hidrografica/planes-de-ordenacion>.

¹⁵ CONPES 3991 (2020), p. 7.

urban agglomerations. While this policy has indeed reduced travel times, polluting emissions, and potential impacts from traffic accidents, little has been done in creating a comprehensive transportation policy in response to existing mobility needs.¹⁵ **CONPES 3991 (2020)** attempts to strengthen the PNTU.

One instrument to incentivize active urban mobility based on available infrastructure is **Law 1811 of 2016**, which incentivizes bicycling as a mode of transportation. However, there is little policy regarding updating and bettering the infrastructure necessary to incentivize alternative, sustainable modes of transportation, such as biking.

An opportunity for improvement related to urban mobility is determining how to develop and

coordinate missing data from different sectors and institutions to have a better population mapping in specific locations/cities, including the type of transfers carried out daily, hours consumed, the possibility to improve mobility based on transfers and available infrastructure.

The main existing policies that coordinate the planning process for a national urban mobility framework are the Colombia **National Development Plan 2018-22** and the **Nationally Determined Contribution (NDC)** for reduction of GHG. **CONPES 3167 (2002)** provides a guiding framework for national, regional, and municipal transportation planning. Through CONPES 3167, the national government aims to strengthen territorial entities and encourage

them to implement transportation systems with operational, economic and environmental efficiency. This document, however, simply recognizes issues and strategizes potential solutions with no legal requirements to follow them. According to CONPES 3167:

The national urban transport policy consists of: (a) institutionally strengthen cities in the planning, management, regulation and control of traffic and transportation; (b) encourage cities to implement transportation systems that meet the mobility needs of the population under criteria of operational, economic and environmental efficiency; (c) break the inertia that motivates the preference of local administrations for the expansion of infrastructure capacity over the adoption of lower cost and high

impact operational solutions; (d) encourage the efficient use of automobiles in urban areas while offering alternatives to users to use urban public transportation under conditions of adequate speed and comfort; e) support city initiatives in public transportation projects based on the use of exclusive bus lanes, provided that the size of the population and levels of demand so warrant and that design and operational aspects are considered in conjunction with infrastructure; f) develop a regulatory framework focused on optimizing private participation and sustainability of the systems using appropriate economic incentives; and g) adapt services to the needs of users, valuing their perception of the transportation systems.”¹⁶

CONPES 3167 does not appear

¹⁶ CONPES 3167 (2002), p. 22.

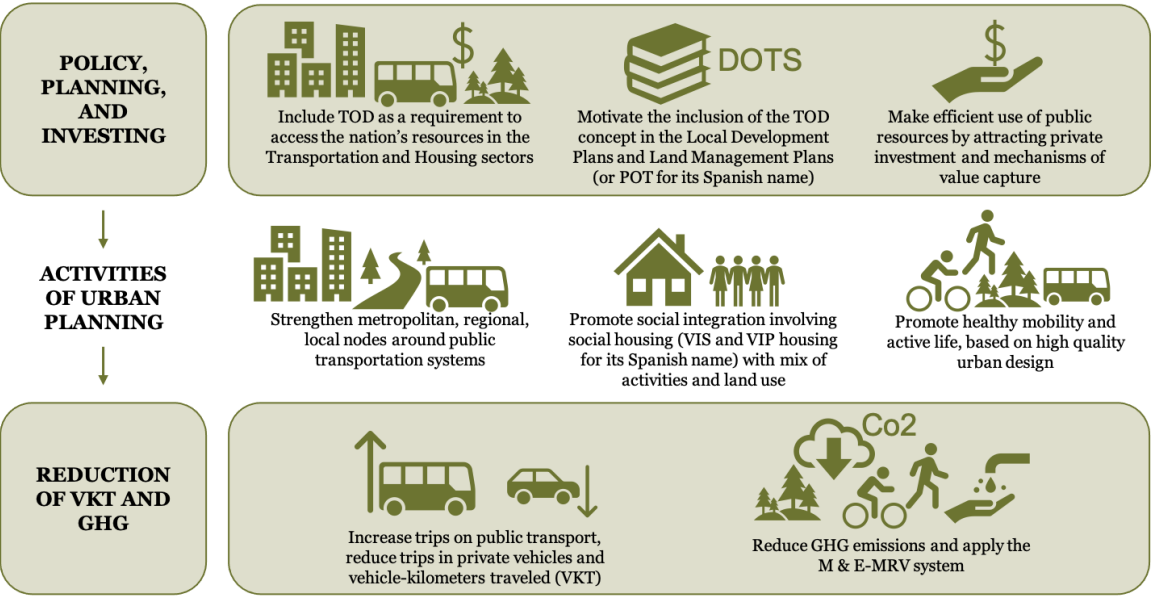


FIGURE 3 Objectives of the TOD policy proposal, as recommended to CIUDAT by CCAP and the Sigma-Despacio consortium.

Source: Center for Clean Air Policy, "Transit-Oriented Development NAMA in Colombia," <https://ccap.org/transit-oriented-development-nama-in-colombia/>

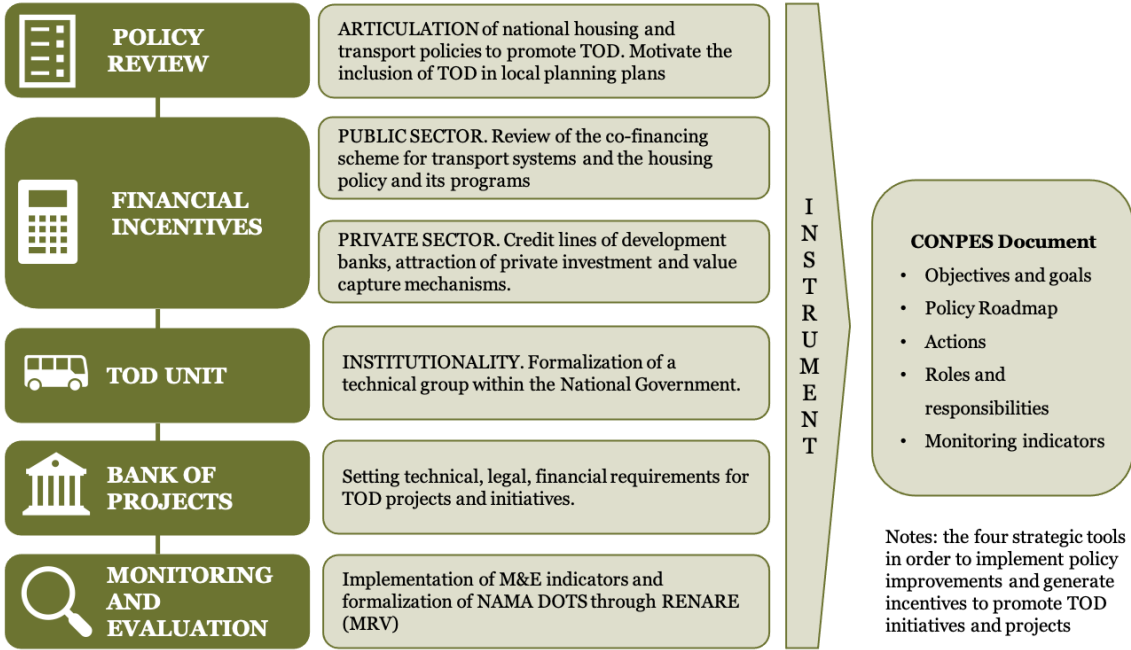


FIGURE 4 Overall structure of the National TOD policy recommendations delivered by the TOD NAMA.

Center for Clean Air Policy (CCAP), "TOD NAMA Delivers National Policy Roadmap for Colombia," <https://ccap.org/assets/01-National-TOD-policy-in-Colombia.pdf>

to require regional plans to implement the objectives of the national territorial plan. In the case of transportation, according to CONPES 3167, the National Planning Department assists in financing studies within municipalities “to address aspects such as the formulation of bus-based mass transportation projects, improvement of traffic management, promotion of public and non-motorized modes of transportation, definition of optimal organizational structures for transit and transportation agencies, among others.”¹⁷ This implies coordination between regional and national transportation plans, though it does not seem to be required. Noteworthy, Article 6 of **Law 1551 of 2012** requires municipal development plans to be in harmony with national development plans.

CONPES 3604 (2009), reinforces the need for integration and includes recommendations of transportation infrastructure framed for accessibility and mobility. Projects in transportation infrastructure “must respond to existing and/or projected land use planning, with the objective of consolidating sustainable compact cities, integrating the neighborhoods to be improved into the physical and functional structure of the city.”¹⁸ This refers to both existing and future transportation infrastructure in relation to land use planning.

Law 1811 of 2016 promotes and incentivizes sustainable transportation options, specifically bicycling. This was created along with the Cycle Infrastructure

Guide for Colombian Cities (*Guía de ciclo-infraestructura para ciudades colombianas*), which contains guidelines for the design and implementation of infrastructure for bicycle users in the country. However, there is still a need for an effective national cycling-inclusive policy.

However, none of the mentioned policy tools truly create a national framework for urban mobility.

The Center for Clean Air Policy (CCAP) worked with leading Colombian stakeholders from 2012 to 2020 to develop and implement a **nationally appropriate mitigation action (NAMA) on Transit-Oriented Development (TOD)**. According to the CCAP website, “the NAMA is a comprehensive urban strategy that integrates sustainable mobility with land use development and focuses public and private development around transit stations to create neighborhoods where people can safely walk, live, work, shop and play.”¹⁹ CCAP aims for the NAMA TOD to introduce and facilitate the inclusion of transit-oriented development in Local Development Plans and Land Management Plans. A goal, more broadly, is to include transit-oriented development as a requirement for regional agencies and municipalities to access the nation’s resources in the transportation and housing sectors.

In 2018, CCAP created a [Matrix of Potential Policy Tools for Transit-Oriented Development in Colombia](#). They analyzed barriers to creating national Transit-Oriented Development Policy

Guidelines and found that there were simply no strong incentives for TOD development.²⁰

While a centralized urban mobility framework could be implemented at the regional level, it is important that this policy be articulated at the national level, particularly through a CONPES document. Figure 4 demonstrates the structure of the framework. Figure 5 shows the path to creating policy changes; the path begins with a new CONPES and results in TOD policy as state policy in the long term.

One key recommendation is to create a TOD Unit within the national government which will lead, coordinate, and assess various aspects of TOD policy and process.²¹ It will be the responsibility of the Ministries of Transport, Environment, and Housing and the Center for the Promotion of Transit-Oriented

Development (CIUDAT) board to formulate policy. Another second recommendation is to create and maintain a TOD project bank that keeps a database of prioritized TOD projects that are either in implementation or pipeline stages. This TOD project bank will be maintained by the TOD Unit. A third key recommendation is to investigate additional strategies to attract private investment.²² According to CONPES 3167, “within the legal framework, urban public transportation is defined as a public service planned, regulated and controlled by the State.” However, “its provision remains mainly in the hands of private operators within a market economy, and the infrastructure necessary for its operation is provided by the State. Therefore, it is essential that a key part of financing nation-wide TOD is through attracting private investments.

²⁰ Center for Clean Air Policy, “Transit-Oriented Development NAMA in Colombia,” <https://ccap.org/transit-oriented-development-nama-in-colombia/>

²¹ Center for Clean Air Policy (CCAP), “TOD NAMA Delivers National Policy Roadmap for Colombia,” <https://ccap.org/assets/01-National-TOD-policy-in-Colombia.pdf>

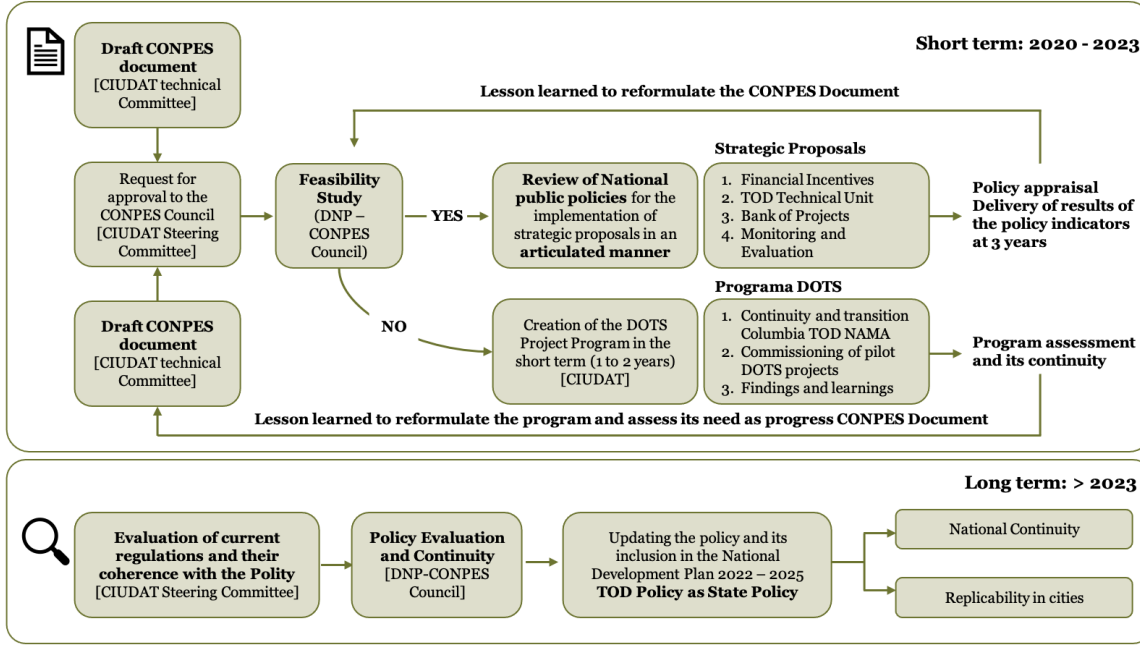


FIGURE 5 National Roadmap for TOD Policy Change

Center for Clean Air Policy (CCAP), “TOD NAMA Delivers National Policy Roadmap for Colombia,” <https://ccap.org/assets/01-National-TOD-policy-in-Colombia.pdf>

¹⁷ CONPES 3167 (2002), p. 21.

¹⁸ CONPES 3604 (2009). Section XI Annexes, Part B Description of MIB.

¹⁹ Center for Clean Air Policy, “Transit-Oriented Development NAMA in Colombia,” <https://ccap.org/transit-oriented-development-nama-in-colombia/>

02.2 REGIONAL TERRITORIAL PLANNING

The second level of planning in most countries is the regional/sub-national level. It is crucial to have adequate linkages between territorial plans and national climate plans for coherence and coordinated action that is needed to address the multi-faceted challenge that is climate change.

The objectives of regional territorial planning are often similar to the national ones but with contextual modifications based on specific challenges and opportunities. In some countries (such as Norway, Canada, Australia and Finland), however, territorial planning is done at the regional rather than the national level due to varying geographical features, natural resource endowments and socio-economic conditions between different regions. These factors make regional territorial planning a valuable instrument for translating national plans and priorities into regional contexts – for those that have national territorial plans – and a must-have tool for jurisdictions where regional planning is the highest level of spatial organization. Accordingly, most elements under the national territorial planning section are also included in this part of the assessment.

Land classification is important because, as described in **Decree 1077 of 2015**, there are different land management mechanisms based on whether an intervention takes place in urban or expansion

land. Additionally, the decree contains mechanisms for reclassification of land due to climate change or environmental protection obligations. Short-term, medium-term, and long-term objectives should be considered, though the exact planning horizons are not explicit.

As noted in **Decree 1807 of 2014**, Articles 39 and 40 of **Law 1523 of 2012** require land use plans to consider climate risks. Furthermore, **Decree 1807 of 2014** states that “in accordance with the provisions of **Law 388 of 1997** and Article 189 of **Decree 019 of 2012**, the basic studies referred to in Article 3 of this decree must be part of the projects for the revision of the medium- and long-term contents of the land use plans or the issuance of a new plan. The municipal or district mayor may not submit to the projects of revision referred to without complying with this requirement will be considered by the Regional Autonomous Corporation or the corresponding environmental authority,”²³ thereby requiring regional territorial plans to coordinate with national climate plans.

The assessed regional territorial plans appear to evaluate climate vulnerability, though it is not clear if there is any legal requirement to do so. Furthermore, there are no legal requirements to assess the greenhouse gas emissions associated with the regional territorial plans.

Law 1931 of 2018, Ley de Cambio Climático (Climate Change Law), in Articles 8, 9, and 14 direct departments, municipalities, and districts to include climate change management into development plans, ensuring compliance and coordination with national and territorial development plans and national climate change plans and policies. Article 14, Paragraph 1 requires that “Municipalities and Districts will implement Greenhouse Gas mitigation measures in the areas of transportation and infrastructure, agricultural development, energy, housing and sanitation, as well as commerce, industry and tourism, all according to their competencies and according to the guidelines defined by the respective **PIGCC**.”

Finally, the **Law 1962 of 2019, The Organic Law of Regions**, represents a new milestone in decentralization for Colombia. This law brings to life the Constitutional provision for regions to act as territorial entities.²⁴ The Organic Law of Regions followed Article 36 of the Law 1454 of 2011, which highlighted that the administrative and planning region could become a territorial entity with specific competencies.²⁵

One key characteristic of the Modern POT program focuses on providing technical and financial support to territorial entities from the national government. Solid waste management

²⁴ Law 1962 of 2019, Article 307.

²⁵ Law 1962 of 2019, pp. 13-37.

02.3 SPATIAL PLANS FOR URBAN AREAS

Land use classification should be an important element of not only national planning instruments but also urban plans, because it would support the determination of actions based on the specific ecosystem, reducing vulnerability to urban settlements. Classifying land with allowed uses enables the protection of ecosystems that perform important mitigation and adaptation functions and restricts urban development in risky areas.

Law 388 of 1997 defines various types of urban norms along with their characteristics

and scope of application. This provides a land classification which allows municipalities to determine appropriate uses in each category (Articles 30 to 32). **Land Use Master Plans (Plan de Ordenamiento Territoriales, POTs)** are introduced by Law 388 of 1997 as a tool through which municipalities direct, manage, and regulate their territories’ land use. This tool is required for all municipalities in Colombia with a population over 100,000 inhabitants. The POT requires urban plans to classify land based on what is and is not allowed

²² Center for Clean Air Policy (CCAP), “TOD NAMA Delivers National Policy Roadmap for Colombia,” <https://ccap.org/assets/01-National-TOD-policy-in-Colombia.pdf>

²³ Decree 1807 of 2015, Article 1.

within each category. Currently, there are no linkages between the Development Plans, Investment Plans, and the POT plans. Land Use Master Plans (POTs) have a validity of 3 mayoral periods (12 years), after which it must be revised.²⁶ There are no legal provisions that require review of the plan if new climate risks or new climate adaptation options are identified.

Municipal governments have autonomy but must plan to harmonize with the plans of other territorial entities. **Law 1551 of 2012** requires sector plans to be aligned with national policies and departmental and metropolitan plans. At the same time, municipalities must “watch over the adequate management of natural resources and the environment, in accordance with the Constitution and the law.”²⁷ Additionally, Law 1551 of 2012 says that municipal land use plans will define “land uses in urban, expansion and rural areas, in accordance with the laws and taking into account the instruments defined by UPRA for land use planning and use.”²⁸ UPRA, *Unidad de Planificación Rural Agropecuaria*, is in charge of rural territorial planning in Colombia.

Decree 1490 of 2011 establishes the creation of **Comprehensive Urban Development Projects** (PIDU, in Spanish) to ensure the availability of land for the construction of housing and for the relocation of human settlements. PIDUs are divided into two categories. The first is to enable define the terms and conditions of the implementation of the current

local development plans, based on an agreement signed between the Ministry of Environment, Housing, and Territorial Development and the Mayor of the respective municipality or district. The second is to enable the modification of the planning regulations of the current local development plan.

Regarding the rights and responsibilities of municipal entities under the purview of the Colombian Constitution, Law 1551 of 2012 aimed to modernize municipal functions and structures. Article 3 of Law 1551 of 2012 requires municipalities “to ensure the proper management of natural resources and the environment, in accordance with the Constitution and the law” as well as the international instruments that integrate global ecological public order. Article 4 of Law 1551 of 2012 requires municipalities and other departmental entities to depend on each other and agree upon land use planning for the sake of efficiency. The law also clarifies municipal financing competencies.

Colombia is a reference in Latin America for the inclusion of informal settlements into the planning process.²⁹ **CONPES 3604 (2009)** focuses on the improvement of and development of neighborhoods and housing. There is a primary consideration for precarious or informal human settlements, connecting high-risk settlements with “the weakness of territorial entities in urban management and in the application of regulations for the implementation of sustainable programs for the integral improvement of neighborhoods.”³⁰

Planning in municipal and district administrations must acknowledge informal settlements. Informal and precarious settlements have higher risks of disaster impacts, land use and property conflicts, and negative impacts on the environment and health of the neighborhoods. The policy suggests land management of the developed areas and areas not susceptible to urbanization, guided by the land classification provisions in Law 388 of 1997 and “other complementary regulations.”³¹ Land management strategies should also include land uses identified as recovery to remediate degrading or degraded land and establishing protected areas. Preventing future risk is identified as a critical goal of improving and integrating neighborhoods, but a specific requirement for risk prevention in development plans is not outlined. In compliance with PND 2006-2010, planning authorities must prevent the growth of informal land and housing markets through “the supply of land for social housing (VIS) in the neighborhoods intervened through the Comprehensive Neighborhood Improvements (MIBs), generating densification.”³²

Regarding the implementation of national territorial plans by regional territorial plans, Article 3, section 11 of **Law 1454 of 2011** states that “land use planning will be guided by a long-term shared vision of the country, with strategic purposes that guide the type of territorial organization required.” Creation and implementation of a land use plan is assigned to municipalities in Article 29, which must include considerations

of urban expansion and rural areas. These plans must also be in harmony with national and territorial plans and be developed with a long-term perspective.

Law 1523 of 2012, *Gestión del Riesgo de Desastres (Disaster Risk Management)* Numeral 10 of Article 3 of considers within the principles that guide risk management the principle of gradualism, making allusion to the fact that “risk management is deployed in a continuous manner, by means of sequential processes in times and scopes that are permanently renewed. Such continuous management shall be governed by the principles of public management enshrined in Article 209 of the Constitution and must be understood in the light of the political, historical and socioeconomic development of the society that benefits.” For the law, disaster risk results from the convergence of hazard and vulnerability and such risk should be considered by all territorial entities when developing and implementing their policies, plans, and programs.

The ***Política Nacional de Cambio Climático of 2014*** (PNCC) recommends delimiting “areas likely to be flooded and/or affected by drought or sea level rise, according to different climate scenarios, and classify hazard zones according to the level of exposure of productive areas, infrastructure, housing and population.” Planning horizons for comprehensive territorial climate change management plans is 12 years with reevaluation occurring in 2030.

²⁶ Law 1551 of 2012, Article 6.

²⁷ Law 1551 of 2012, Article 6.

²⁸ Law 1551 of 2012, Article 6.

²⁹ Fernandes, E. “Regularization of informal settlements in Latin America.” (2011). Cambridge, MA: Lincoln Institute of Land Policy.

³⁰ CONPES 3604 (2009). Section IV Diagnosis, Part A.

³¹ CONPES 3604 (2009), Section XI Annexes, Part B.

³² CONPES 3604 (2009), Section V Objectives, Part A.

As mentioned in **CONPES 3870**, previously, the **National Development Plan (PND) 2010-2014** “Prosperity for All” and the PND 2014-2018 “All for a New Country” require the use of instruments such as the POT to stimulate the productive use of agricultural land while establishing urban growth boundaries and adopting land occupation models that achieve an urban-rural balance.

Departmental Management Plans (PODs) have a term of 16 years, as recommended by the COT (CONPES 3870). It is instrumental

to long-term planning processes, but it is not regulated. Similarly, the Metropolitan Strategic Plan for Territorial Planning (PEMOT) is the instrument through which specific guidelines and orientations are established for the territorial planning of the municipalities that make up the metropolitan areas.

Law 1931 of 2018, Ley de Cambio Climático (Climate Change Law), Article 20 identifies the long-term planning horizon through 2029, at which point the planning horizon becomes 20 years.

and regional level could enhance their focus on transport connectivity and electromobility between cities as well as active mobility based on available infrastructure. One key issue related to urban mobility is how to develop and coordinate missing data from different sectors and institutions to have a better population mapping in specific locations/cities, including the type of transfers carried out daily, hours consumed, the possibility to improve mobility based on transfers and available infrastructure. Creating a CONPES document to define and strengthen transport connectivity between national and regional levels is essential. Create and maintain a TOD project database at the national level. Increasing mobility between urban areas can reduce greenhouse gas emissions. There are attempts to incentivize alternative, sustainable modes of transportation (Law 1811 of 2016) and to provide frameworks for urban mobility (CONPES 3991, 3167, 3604), though these are not legally required, nor are they coordinated at the national level.

Colombia may consider creating appropriate linkages between municipal Development Plans, Investment Plans, and the POT plans. While there are a body of robust planning instruments for urban planning at the national, regional, and urban levels, there are fewer mechanisms that require coordination between them, which may leave knowledge gaps and conflicting information. Specifically, Colombia may consider including specific positions across planning authorities and instruments for indigenous representatives and ensure the positions have authority beyond a consultatory capacity. Similarly, Colombia may consider including specific measures to increase gender equity, especially in participatory processes.

Outside of the toolkit, there is a need for a clear and transparent system of planning instruments that incorporate solid waste management strategies into POTs and other planning instruments.

RECOMMENDATIONS

Colombia has many mechanisms for land classification at the national level. Land classification tools are especially important in Colombia because of its biodiversity. This must include traditional ecological knowledge and practices used by indigenous peoples. Planning instruments will need strengthened land-use guidelines, controls, and standards due to land-uses’ far-reaching impacts on water and watershed management,³³ soil health and erosion,³⁴ biodiversity,³⁵ pollution, and public health. This will likely need to include requirements for scenario modelling and environmentally focused assessments and research.

Due to Colombia’s decentralization objectives, many planning instruments are identified for

national, regional, and municipal entities. Many of these documents are still in the process of including climate change specific elements, like vulnerability and greenhouse gas assessments. One major piece missing from the analyzed legislation is legal requirements to assess greenhouse gas emissions associated with the implementation of the national territorial plan. Furthermore, there are no legal requirements to update plans as climate change knowledge progresses.

At the national level, legal provisions that require the national territorial plan to establish an integrated national inland and coastal transportation and infrastructure network is lacking.

Policy instruments at the national

33 Villamizar, Sandra R., Sergio M. Pineda, and Gustavo A. Carrillo. “The Effects of Land Use and Climate Change on the Water Yield of a Watershed in Colombia.” *Water* 11, no. 2 (February 6, 2019): 285. <https://doi.org/10.3390/w11020285>.

34 Borrelli, Pasquale, David A. Robinson, Panos Panagos, Emanuele Lugato, Jae E. Yang, Christine Alewell, David Wuepper, Luca Montanarella, and Cristiano Ballabio. “Land Use and Climate Change Impacts on Global Soil Erosion by Water (2015-2070).” *Proceedings of the National Academy of Sciences* 117, no. 36 (September 8, 2020): 21994–1. <https://doi.org/10.1073/pnas.2001403117>.

35 Felipe-Lucia, María R., Santiago Soliveres, Caterina Penone, Markus Fischer, Christian Ammer, Steffen Boch, Runa S. Boeddinghaus, et al. “Land-Use Intensity Alters Networks between Biodiversity, Ecosystem Functions, and Services.” *Proceedings of the National Academy of Sciences* 117, no. 45 (November 10, 2020): 28140–49. <https://doi.org/10.1073/pnas.2016210117>.

03

PLANNING FOR ADAPTATION

Identification and prioritisation of adaptation options

Does your country have provisions of law or regulations on how to identify and prioritize adaptation options for the risks and vulnerabilities identified?

- Do these include the requirement to determine available adaptation options for the identified risks and to describe them in detail? ☒
- Do these include the requirement to assess the identified adaptation options based on time, cost, benefits and barriers to implementation? ☒
- Do these include the requirement to prioritise the adaptation options and select the preferred ones? ☒
- Do these include the legal requirement for stakeholders' engagement in the process of identification and prioritisation of the adaptation options? ☒
- Do these include the legal requirement to identify both infrastructure-based and ecosystem based adaptation measures? ☒
- Do these include the legal requirement to have targets to improve the adaptation of urban areas with measurable and verifiable benchmarks against which progress can be assessed? ☒
- Do these include provisions that require the assessment of the urban plan's ability to meet the local, sub-regional and national governments' climate change strategies, adaptations targets and measures? ☒

Implementation of the identified adaptation options

Does your country have provisions of law or regulations with mechanisms to implement the adaptation options identified for planned areas and infrastructure?

- Do these provide for total and partial restrictions on land use and development in hazard prone areas? ☒
- Do these include the provision for a public land buffer between sea and rivers, and land? ☒
- Do these include the requirement to establish riparian setbacks with width based on scientific assessments and projections? ☒
- Do these include the requirement to establish coastal setbacks with width based on scientific assessments and projections? ☒
- Do these include the requirement to develop integrated coastal zone management plans that integrate climate change adaptation considerations? ☒
- Do these include the legal requirement to plan the location of essential infrastructure out of flood prone high-risk areas? ☐
- Do these include the legal requirement to consider nature-based storm water management to manage increasing volumes of storm water in already built-up and expansion areas? ☒
- Do these include provisions that allow the land information system to integrate vulnerabilities and exposure of land parcels to climate hazards? ☒
- Do these include the legal requirement to plan for evacuation routes and identify locations for low risk safety areas in case of extreme weather events? ☐

Climate risks and vulnerability for planned areas and infrastructure

Does your country have provisions of law or regulations that require the consideration of climate risks and vulnerability for planned areas and infrastructure?

- Do these include the requirement to produce climate risk and vulnerability assessments to assess current and estimated future vulnerabilities and risks as part of the urban planning process? ☒
- Do these include legal requirements concerning methods and processes to conduct risk and vulnerability assessments? ☒
- Do these include the requirement to conduct inclusive and participatory vulnerability assessments? ☒
- Do these include a list of potential climate hazards that need to be identified in the risk and vulnerability assessments? ☒
- Do these include a legal requirement to identify the places where climate hazards are most likely to occur through climate hazard maps? ☒
- Do these include the requirement to identify people, property and economic sectors exposed to risks arising from climate change? ☒
- Do these include the requirement for hazard maps to be publicly accessible? ☐
- Do these include the requirement that hazard maps need to be reviewed at least every 10 years? ☒
- Do these include the legal requirement to assess the climate vulnerability of urban plans and infrastructure through environmental impact assessments or strategic impact assessments? ☐

3.4

Adaptation of slums and other vulnerable settlements

Does your country have provisions of law or regulations to support the adaptation of slums and other settlements vulnerable to the effects of climate change?

- Do these include urban planning and land management tools for urban expansion, infill and redevelopment to change the shape and configuration of plots?

☒
- Do these include differentiated and flexible planning and infrastructure standards for slums and other vulnerable settlements?

☒
- Do these include mechanisms to ensure the participation of all owners and residents of slums and other vulnerable settlements in the process of upgrading with special consideration to women, youth, disabled and elderly people?

☒
- Do these include the requirement to conduct community-led surveys, maps and household enumerations to facilitate the adaptation of slums and other vulnerable settlements?

☐
- Do these include provisions that ensure the accessibility of water, sanitation and electricity services based on the provision of customary and non-documentary forms in addition to formal tenure rights documents?

☒
- Do these include the legal requirement to maintain the affordability of the upgraded settlement for the pre-existing community and prevent its economic displacement?

☒

3.5

Planned relocations from areas at risk of climate change

Does your country have provisions of law or regulations that support the relocation of populations from areas at risk of the effects of climate change to ensure their safety and health after all reasonable on site alternatives and solutions have first been explored?

- Do these include the legal requirement to identify and, if necessary, set aside land for relocation in case of extreme weather events?

☒
- Do these include the requirement that the resettlement land need to be safe from current and future climate hazards?

☒
- Do these include a process for planned relocations with inclusive consultation and engagement with the affected resettled and host communities?

☐
- Is there a legal requirement to provide the relocation site before occupation with livelihood opportunities, water and food security, sanitation, education and health facilities?

☒

Security of tenure

Does your country have provisions of law or regulations that ensure the security of tenure of people living in slums and other settlements vulnerable to the effect of climate change or whose tenure security might be affected by planned relocations?

- Do these include the legal recognition of a variety of tenure forms including customary rights, informal tenure rights and occupation?

☒
- Do these include the process to regularize* informal land and property rights?

☒
- Do these include provisions that allow a variety of tenure forms, including customary rights, informal tenure rights and occupation, to be recorded in the official land information system?

☒
- Do these include provisions of law or regulations on how evictions and relocations should be conducted?

☒
- Do these include provisions for land acquisition that consider and compensate loss of formal rights, informal rights and interests and livelihoods for slum dwellers and resettled and host communities?

☒
- Do laws or regulations provide access to formal grievance, review, dispute resolution and redress mechanisms* for land and property disputes for people whose tenure security might be affected by the adaptation of slums, vulnerable settlements and planned relocations?

☒
- Do these include alternative dispute resolution mechanisms for land and property disputes such as customary institutions, negotiation, mediation and arbitration?

☐

Development approval and adaptation

Does your country have provisions of law or regulations to ensure that planning and design standards for adaptation to climate risks and vulnerabilities are implemented, monitored and enforced through the development approval process?

- Do these include provisions that link the development approval process to legally approved urban plans, zoning regulations and evidence from climate risk and vulnerability assessments?

☒
- Do these include provisions that allow governments to charge developers, either in cash or in kind through conditions to be attached to the approval of planning applications, for infrastructure costs associated with their developments?

☒
- Do these include mechanisms to monitor compliance with the approved development and its conditions?

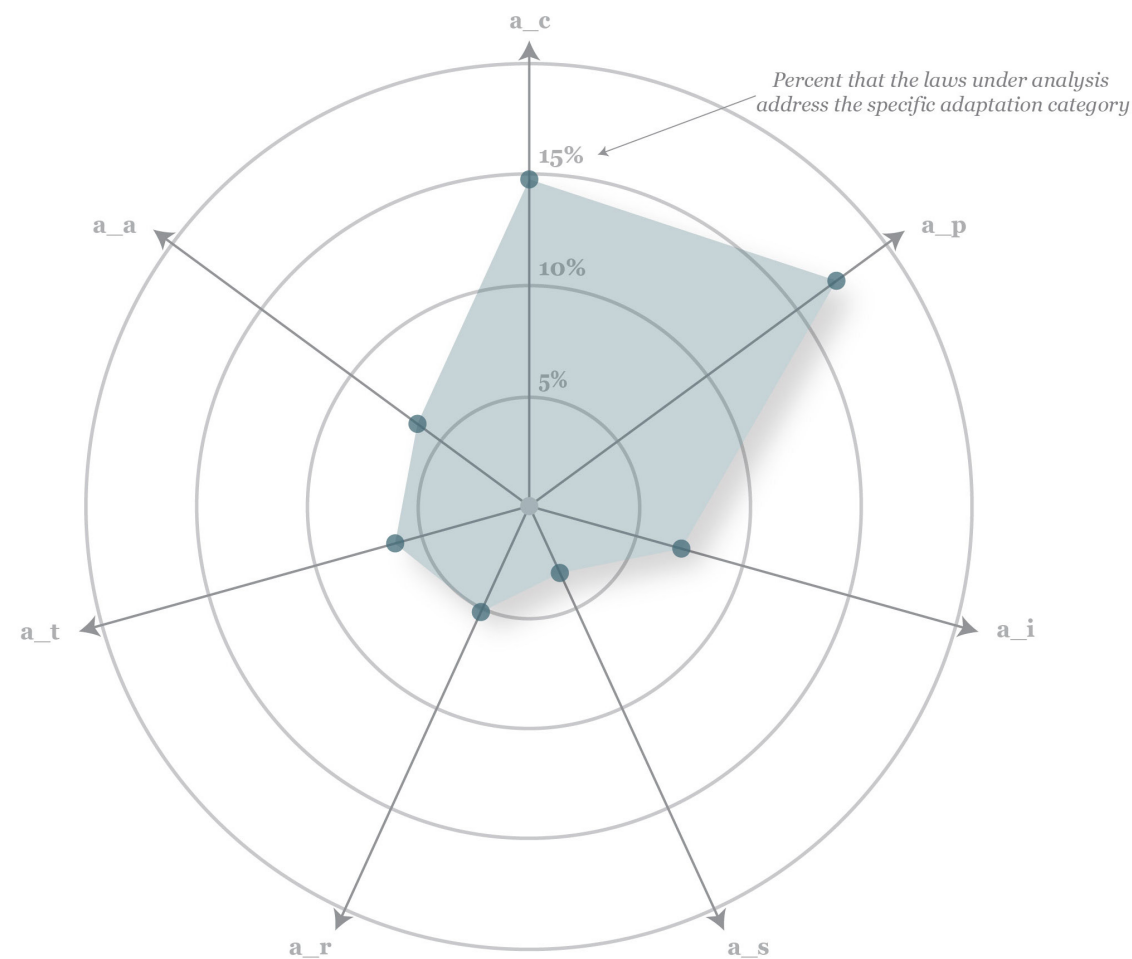
☐
- Do these include mechanisms for enforcement in the event developments are not compliant with the submitted application and its conditions?

☒

3.6

3.7

03 PLANNING FOR ADAPTATION



Planning for Adaptation

- a_c Climate risks and vulnerability for planned areas and infrastructure
- a_p Identification and prioritisation of adaptation options
- a_i Implementation of the identified adaptation options
- a_s Adaptation of slums and other vulnerable settlements
- a_r Planned relocations from areas at risk of climate change
- a_t Security of tenure
- a_a Development approval and adaptation

In the context of climate change adaptation, Colombia has a comprehensive body of territorial planning and environmental laws and policies that frequently acknowledge the need for climate risk and vulnerability assessments. The country has a national system for disaster risk management. At the national, regional and local levels, planning bodies have been identifying adaptation strategies and developing their own adaptation plans. The National Plan for Adaptation to Climate Change is an evolving policy that would benefit from mechanisms to prioritize and implement climate adaptation strategies. An additional key gap in the national legislation revolves around the housing sector, with the adaptation of slums and other vulnerable settlements to climate

change seldom mentioned. While municipal Land Use Plans (POTs) define and regulate vulnerable housing settlements, there could be greater consistency in addressing these issues at the national level. It is essential to provide an overarching framework for additional resources, support, consultation, and considerations for adaptation to these already vulnerable populations and developments.

Climate change projections for Colombia create a variety of risks which include a 1.3 - 1.8°C increase in temperatures by 2050, a 0.8 - 1.6°C increase in average annual rainfall, a 26 - 37% increase in extreme rainfall days by 2050, and a 0.4 - 0.7m rise in sea level by 2090.¹ These climate hazards will have devastating consequences for

¹ USAID, "Climate Risk Profile Colombia," Climate Links, July 2017, https://www.climate-links.org/sites/default/files/asset/document/2017_USAID%20CCIS_Climate%20Risk%20Profile_Colombia.pdf.

CLIMATE PROJECTIONS

1.3 - 1.8° C increase in temperatures by 2050

0.8 - 1.6° C increase in average annual rainfall; 26 - 37% increase in extreme rainfall days by 2050

0.4 - 0.7 m rise in sea level by 2090

KEY CLIMATE IMPACTS

Infrastructure

Damage to buildings and transportation
Damage to human settlements and coastal infrastructure

Water Resources

Reduced water supply and hydropower potential in certain regions
Decline in water quality

Agriculture

Reduced crop yields; Soil erosion
Damage to crops and livestock
Increase in pests and diseases

Ecosystems

Loss of biodiversity
Loss of marine ecosystems
Changes in fish populations/distributions

Human Health

Increased incidence of heat stroke
Spread of vector-borne and waterborne diseases

1.3 - 1.8°C increase in temperatures by 2050, a 0.8 - 1.6% increase in average annual rainfall by 2050, a 26 - 47% increase in extreme rainfall days by 2050, and a 0.4 - 0.7m rise in sea level by 2090

² USAID, “Climate Risk Profile Colombia.”

the country. Many hazards, like flooding, landslides, and storms are already occurring. Specific impacts of climate change will affect key sectors in Colombia that include infrastructure, water resources, agriculture, ecosystems, and human health. The country can expect damage to buildings, transportation infrastructure, human settlements, and coastal infrastructure. In addition, there will be a reduced water supply and hydropower potential in certain regions as well as a decline in overall water quality. Agriculture will produce reduced crop yields while experiencing soil erosion. Crops and livestock will be affected by an increase in pests and diseases. Ecosystems will have a continued loss of biodiversity, marine ecosystems, and potentially devastating changes in the number and distribution of fish populations. Most importantly, human health will be impacted by an increased incidence of heat stroke and spread of vector-borne and waterborne diseases.²

Climate change can also

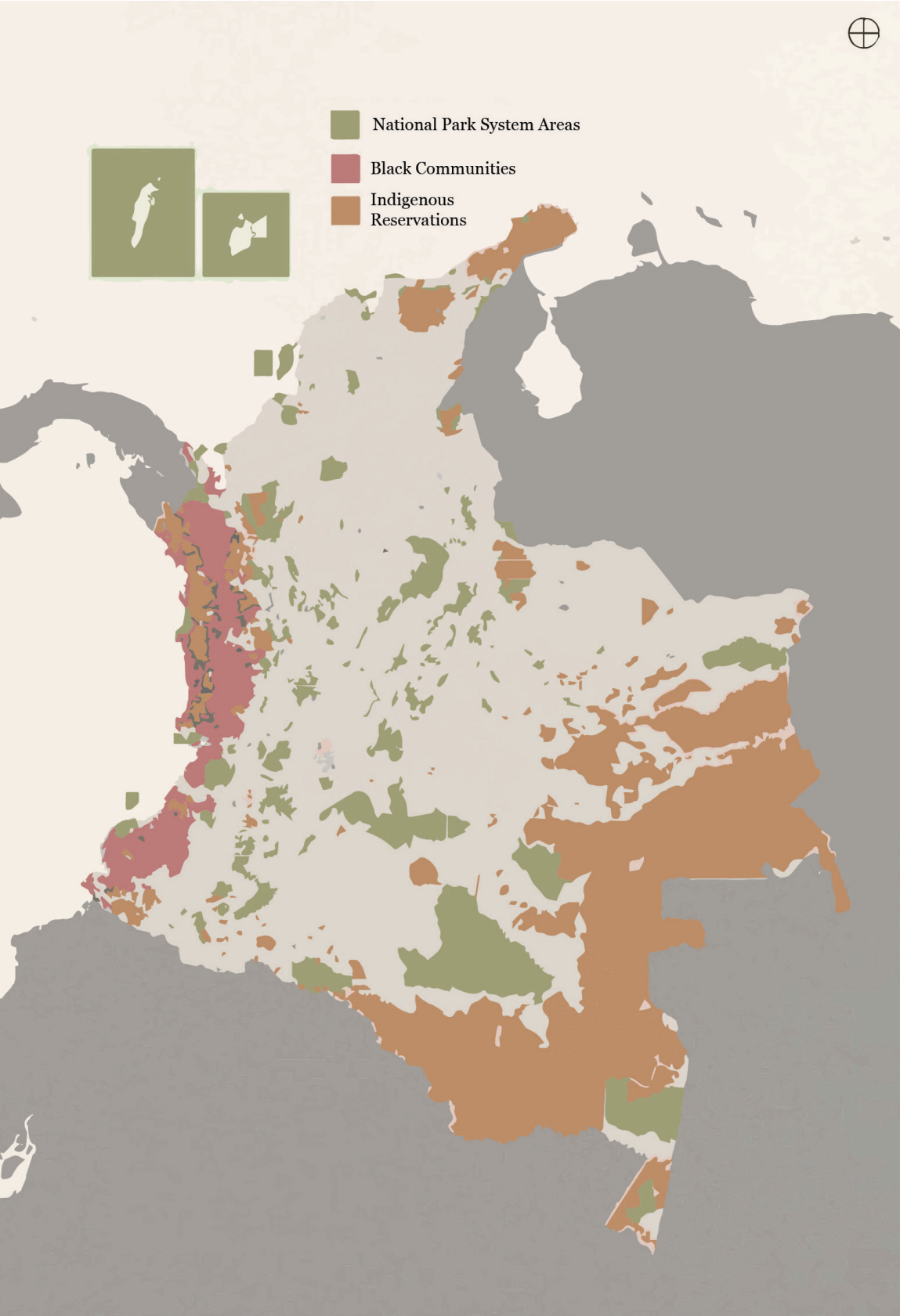
exacerbate the difficulties faced by marginalized communities. According to the United Nations Sustainable Goal Indicators, nearly 28 percent of residents in the nation’s urban areas live in informal human settlements, or ‘slums’ comprised of structures that may lack adequate construction safety, basic infrastructure like water and sanitation access, and are likely more vulnerable to extreme weather events that will become more powerful and frequent with climate change like flooding.³ Indigenous peoples may become more susceptible to political and economic marginalization, loss of land and resources, human rights violations, and discrimination and unemployment. In Colombia, the area fully recognized for Afro-descendants and indigenous peoples as collective property covers over 37 million hectares, and almost 38 million with the inclusion of campesino reserves.

Decree 1745 of 1995 discusses collective land titling for black communities was addressed as a strategy for the recognition

TABLE 1

Mechanism of collective tenure and campesino reserve zones	Area (ha)	Percentage of total national area
Black communities	5,396,376	4.7
Colonial <i>resguardos</i>	410,835	0.4
Indigenous <i>resguardos</i>	32,032,238	28.1
Established <i>campesino</i> reserve zones	837,003	0.7
Total	38,676,452	33.9

Source: prepared by the author on the basis of data from the Módulo de Información Geográfica sobre titulación colectiva formalizada y en trámite (OEC 2016) and the Instituto de Estudios Interculturales (2016).



The European Union defines climate change adaptation as the “means taking action to prepare for and adjust to both the current effects of climate change and the predicted impacts in the future.” Thus, adaptation has been incorporated into key elements of Colombia’s legal institutional framework and planning processes. In general, Colombia is recognized as a regional leader in developing disaster risk management systems

³ United Nations SDG Indicator: 11.1.1 (2018). <https://unstats.un.org/sdgs/indicators/database/>

⁴ Johana Herrera Arango. "Collective land tenure in Colombia - Data and Trend" *Info Brief* (2018): DOI: 10.17528/cifor/006877.

⁵ Johana Herrera Arango. "Collective land tenure in Colombia - Data and Trend" *Info Brief* (2018): DOI: 10.17528/cifor/006877.

⁶ Anonymous. "Adaptation to Climate Change." Climate Action - European Commission. February 16, 2017. Accessed March 15, 2021. https://ec.europa.eu/clima/policies/adaptation_en.

and protection of the ethnic and cultural diversity of these communities, and as an opportunity for organizational strengthening to ensure the participation, autonomy, and the self-government of their traditional lands. However, the rural characteristics of the region, the history of settlement and the diasporic experiences of the 20th and 21st centuries challenge the stable nature of collective ownership rights as fixed in time, space and subject.⁴

In order to understand the importance of the data, collective ownership needs to be analyzed in the context of land and territory-related problems in Colombia. These are reflected in the agrarian

structure and in land ownership, which have several distinguishing features: (i) the inequality associated with land tenure, (ii) incomplete redistributive land policies, and (iii) an important impact of multicultural policies for collective access to lands and to ecosystem goods and services.⁵

The devastating consequences of climate change in Colombia garner a need for further development of climate adaptation strategy. The European Union defines climate change adaptation as the “means taking action to prepare for and adjust to both the current effects of climate change and the predicted impacts in the future.”⁶ Thus, adaptation has been incorporated into key elements of Colombia’s legal institutional framework and planning processes. In general, Colombia is recognized as a regional leader in developing disaster risk management systems.⁷ Additional strategies for adaptation have also been integrated into a variety of other legislation in Colombia as well as national, regional, and local plans.

The city of **Manizales** for example, is a prime example of a municipal integration of climate adaptation mechanisms into local development policies and land use plans. Manizales is internationally recognized for its long-standing urban environmental policy (**Biomanizales**) and local

environmental action plan (**Bioplan**). Manizales has extensive disaster risk and environmental policies that have been incorporated into local territorial and development plans since the 1990s. Some adaptation strategies include housing relocation, education on risk prevention, maintenance of slope vegetation, and early warning disaster meteorological stations. In addition, active stakeholder engagement underlies most of the city’s climate adaptation planning efforts, which has worked to maintain alliances and develop trust. The city’s success can be attributed to “coherent, multi-level governance, including capacity to integrate disaster risk reduction, climate change adaptation, land use and territorial planning within a holistic view of development that includes the views and capacities of multiple stakeholders.”⁸ Stein

and Moser also corroborate that collaboration between community members, local government, the private sector, and NGOs in Cartagena, Colombia created a dialogue that enabled them to better “identify, negotiate and agree on climate adaptation solutions that are legally, financially and technically feasible.”⁹ However, areas where Manizales can further excel in climate adaptation include prevention of disasters rather than response, continued relocation of homes in high-risk areas, and protection of water resources and infrastructure.¹⁰

The following is an analysis of the set of laws in Appendix A through the lens of UN-Habitat’s “Law and Climate Change Toolkit,” focusing on the Planning for Adaptation subsection. Referenced legislation is featured in Appendix A.

03.1 CLIMATE RISKS AND VULNERABILITY FOR PLANNING AREAS AND INFRASTRUCTURE

Law 388 of 1997, Ley de Desarrollo Territorial (The Law of Developing Territories) establishes mechanisms to guide municipal land use planning, guarantees the social and ecological function of all property, while promoting collaboration between the Nation, territorial entities, administrative and planning bodies, and environmental authorities. The law specifically outlines the general

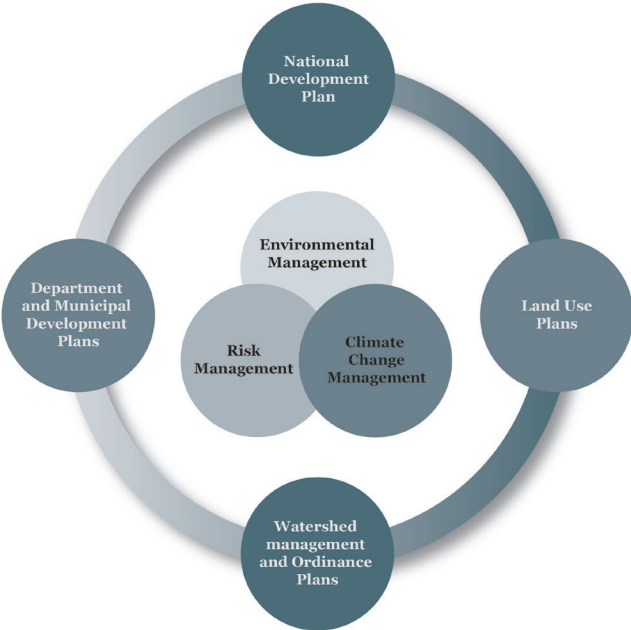
components of municipal zoning plans and land use planning schemes. These plans must identify the location of “areas at high risk for the location of human settlements, due to natural hazards or risks, or unhealthy conditions.”¹¹

According to the **Law 99 of 1993, Ley General Ambiental (General Environmental Law)**, “environmental impact studies will be the basic instrument for decision-making regarding

⁷ Hardoy, Jorgelina, and Luz Stella Velásquez Barrero. "Re-thinking "Biomanizales": Addressing Climate Change Adaptation in Manizales, Colombia." *Environment and Urbanization* 26, no. 1 (2014): 53-68. doi:10.1177/0956247813518687.

⁸ Hardoy, Jorgelina, and Luz Stella Velásquez Barrero. "Re-thinking "Biomanizales": Addressing Climate Change Adaptation in Manizales, Colombia." *Environment and Urbanization* 26, no. 1 (2014): 53-68. doi:10.1177/0956247813518687.

⁹ Stein, Alfredo, and Caroline Moser. "Asset Planning for Climate Change Adaptation: Lessons from Cartagena, Colombia." *Environment and Urbanization* 26, no. 1 (2014): 166-83. doi:10.1177/0956247813519046.



the construction of works and activities that significantly affect the natural or artificial environment.”¹² Furthermore, the **Ministry of the Environment** is responsible for carrying out the “evaluation, monitoring and control of ecological risk factors and those that may influence the occurrence of natural disasters.”¹³ The importance of scientific research is emphasized in coordination with the Ministry of the Environment; the **Institute of Hydrology, Meteorology and Environmental Studies (IDEAM)** will “provide information, predictions, warnings and advisory services to the community”¹⁴ about potential climate hazards. Furthermore, IDEAM has developed climate change scenarios that are most likely to occur in Colombia in the following decades.

The objective of the **Política Nacional de Cambio Climático (PNCC) (National Policy on Climate Change)** is to “mainstream climate change management into public and private decision-making to advance a climate-resilient, low-carbon development pathway that mitigates the risks of climate change and enables to use of climate change mitigation and adaptation measures.”¹⁵ Part 5 of the plan introduces the importance of climate change adaptation monitoring and evaluation systems. More specifically, Part 6 requires territorial climate change management plans that will “generate a geographic diagnosis of the exposure and vulnerability of households, buildings, urban infrastructure, and ecosystems” to prioritize adapting cities and

settlements to climate hazards. Part 6 further asserts that cities assess the vulnerability of transportation infrastructure.

Decree 1077 of 2015 considers the condition and financing of housing and the provision of public services. This decree does plan for climate risks and vulnerabilities by prescribing evaluations of vulnerability and structural reinforcement of social housing, especially to verify seismic resistance standards. Furthermore, the municipal or district administration is responsible for the prioritization of hazards to be evaluated and zoned to incorporate the information into the **Land Use Plan**. Studies should create hazard zoning maps and identify vulnerable populations that may be in need of subsidized housing.

CONPES 3700 (2011), with the objectives of achieving sustainable development at all scales, presents CONPES with a strategy for integrating the economic and social development problems related to climate change into the planning and investment processes of relevant sectors and territories. This document includes legal requirements to conduct risk and vulnerability assessments to (1) Consolidate the conceptual framework for adaptation to climate change in Colombia and the necessary methodologies for the evaluation of sectoral, ecosystemic and population climate risk, as well as its response capacity, for the identification of nationally appropriate adaptation measures; and (2) Design and implement the necessary methodologies for the prioritization, financing

and monitoring of nationally appropriate adaptation measures identified by stakeholders.¹⁶

CONPES 3700 also includes a subsection about Participation and Ownership that mentions: “The impacts of climate change are complex and affect society as a whole; therefore, it is essential to involve all stakeholders. The participation of communities is essential for the understanding of their vulnerabilities and the generation of adaptation capacities. The successful implementation of the Policy depends on the understanding and involvement of all social and institutional actors. In the **National System of Climate Change (SNCC)** There is Interdisciplinary Working Groups that will be responsible for ensuring that climate change issues are part of public decision-making processes and regulations in all sectors and at different territorial levels (this includes the private sector as regulated in sectoral policies).”¹⁷

Decree 1807 of 2014 considers vulnerability assessment: (1) According to the results of the detailed study of hazards for each phenomenon analyzed, the exposed elements must be identified and located on the corresponding map; (2) The characteristics of the elements exposed to the identified hazards must be established, in terms of type of element, degree of exposure, resistance offered by the element, and spatial distribution; (3) The different types of damage or expected effects on the exposed elements that may occur as a result of the natural phenomenon should be identified. This information

should be zoned on a map at the same scale as the detailed hazard map, establishing high, medium, and low vulnerability categories according to the characteristics of the exposed elements.¹⁸ Furthermore, there is an explanation about delimitation and zoning of areas at risk. Based on the delimitation and zoning of hazards, the areas with risk conditions are delimited and zoned, in order to prioritize the areas in which detailed studies must be carried out. The identification of areas at risk will be based on the analysis of the areas zoned as high hazard in the basic studies, with the available cartographic information (property or cadastral, among others) that allows for identification of the existence of exposed elements, urbanized, occupied or built-up areas, as well as those in which indispensable buildings and vital facilities are located. With this information, the maps delineate areas of climate risk.¹⁹

The **Plan Nacional de Adaptación al Cambio Climático (PNACC) (National Plan for Adaptation to Climate Change)** aims to reduce the risk and socio-economic and ecosystemic impacts associated with climate variability and change in Colombia. The PNACC will consist of four phases. The current publication is the first conceptual and methodological phase for the purpose to guide the Sectoral and Territorial Adaptation Plans. The Plan heavily emphasizes the importance of identifying hazards, the degree of exposure and factors that play an important role in the susceptibility

¹⁰ Ibid.

¹¹ Law 388 of 1997, Articles 12, 16, and 17.

¹² Law 99 of 1993, Article 1.

¹³ Law 99 of 1993, Article 5.

¹⁴ Law 99 of 1993, Article 17.

¹⁵ PNCC, Part 5.

¹⁶ CONPES 3700 (2011), p. 50.

¹⁷ CONPES 3700 (2011), p. 63.

¹⁸ Decree 1807 of 2014, Article 17.

¹⁹ Decree 1807 of 2014, Article 12.

of an area, infrastructure, population, economic sector, and/or ecosystem. Most importantly, the Plan acknowledges that the impacts of climate change mainly affect the poorest. Residents living in poverty are more likely to experience a shortage of drinking water, increase in the incidence of diseases, reduction of agriculture activity, and housing in hazardous areas. Specific climate hazards mentioned in the PNACC include increased intensity and frequency of rainfall, floods, landslides, avalanches, droughts, and surface temperatures.

Several departments launched their climate change and adaptation plans. The *Plan Integral de Gestión de Cambio Climático del Departamento de Caldas (Integral Plan for Climate Change Management in the Department of Caldas)* aims to improve resilience, reduce climate change vulnerability, and introduce adaptation strategies for the region. The Plan assesses the vulnerability and adaptive capacity for the region and determines that public health and water security are at high risk to the effects of climate change. Hazard maps and projection scenarios also identify the local climate risk of different municipalities in the department.

Law 1523 of 2012 adopts the national disaster risk management policy and establishes the **National Disaster Risk Management System**. Objectives of the National System include the “analysis and evaluation of the risk” and “monitoring and follow-up of the risk and its components.”²⁰ General principles

guiding disaster risk management include the identification of risk factors, hazards, exposure, and vulnerability, “as well as the underlying factors, their origins, causes and transformation over time.”²¹ Furthermore, risk management must also be integrated in territorial and development planning: “Different levels of government shall integrate risk analysis in the biophysical, economic and socio-environmental diagnosis and shall consider disaster risk as a conditioning factor for the use and occupation of the territory, thus seeking to avoid the creation of new risk conditions.”²² Local and regional governments must also develop an inventory of settlements vulnerable to hazards.²³ Finally, there is an emphasis on conducting inclusive and participatory disaster risk management. Article 3 states that “it is the duty of the authorities and entities of the National Disaster Risk Management System to recognize, facilitate and promote the organization and participation of ethnic communities, civic, community and neighborhood associations, voluntary organizations and public service associations. It is the duty of all persons to be part of the risk management process in their community.”

The primary objective of the *Plan Nacional de Gestión de Riesgos de Desastres (PNGRD) 2015–2025 (National Plan for Disaster Risk Management)* is to guide the “actions of the State and civil society in terms of risk awareness, risk reduction and disaster management in

compliance with the National Risk Management Policy, contributing to the safety, well-being, quality of life of the people and sustainable development in the national territory.”²⁴ Thus, one of the strategic objectives of the PNGRD is to improve knowledge of disaster risk in the national territory. In order to achieve this objective, the State and territorial entities must identify hazards, prepare hazard maps, and conduct risk and vulnerability assessments on communities, populations, and infrastructure. The PNGRD also calls for the development methodologies, guidelines and technical instruments to standardize and guide risk analysis.

The purpose of **Decree 308 of 2016** is to adopt the **National Disaster Risk Management Plan**, a development strategy for the period 2015 - 2025. The objective of this plan is to “guide the actions of the State and civil society in terms of risk awareness, risk reduction and disaster management in compliance with the **National Risk Management Policy**, which contributes to the safety, welfare, quality of life of the people and the sustainable development of the national territory.”²⁵ One of the key objectives of this decree includes improving the knowledge of disaster risk in the national territory,²⁶ which would likely involve climate risk and vulnerability assessments.

The objective of **Decree 330 of 2007, Audiencias Públicas Ambientales (Environmental Public Hearing)**, is to inform the community in general, including

public and private entities, of the existence of a project, work or activity that may generate environmental impacts and the management measures proposed or implemented to prevent, mitigate, correct and/or offset said impacts. The decree also allows hearings to receive opinions, information and documents contributed by the community and other public or private entities.²⁷

Law 164 of 1994 (Law Approving UNFCCC) is the law approving the **UN Framework Convention on Climate Change (UNFCC)** and committing Colombia to a series of climate change mitigation and adaptation goals. In agreeing to the UNFCCC, Colombia agrees to openly share all scientific, technical, legal, and socioeconomic information including relevant maps related to climate change, as well as the consequences of potential response strategies. It also agrees to “formulate, implement, publish and regularly update national and, as appropriate, regional programs containing measures... to facilitate adequate adaptation to climate change.”²⁸

Decree 2.041 of 2014 (Regulation of Title VIII of Law 99 of 1993) strengthens and clarifies some of the requirements of review processes for environmental licenses. For example, the decree focuses on the requirements and methods of assessing risk for particular projects/developments for environmental licenses rather than urban planning generally, but these risks are not explicitly tied to climate change in the legislation.

²⁰ Law 1523 of 2012, Article 6.

²¹ Law 1523 of 2012, Article 6.

²² Law 1523 of 2012, Article 39.

²³ Law 1523 of 2012, Article 40.

²⁴ PNGRD, 2.1.

²⁵ Decree 308 of 2016, Article 2.

²⁶ Decree 308 of 2016, Article 2.

²⁷ Decree 33 of 2007, Article 1.

²⁸ Law 164 of 1994, Article 4, Section 1 (B and H).

²⁹ Decree 2.041 of 2014, Article 17, Article 19 Section 4, Article 21 Section 4.

³⁰ Decree 2.041 of 2014, Article 15.

³¹ PAB, Axis V, v.1.

³² PAB, Axis I, i.2.

³³ PAB, Axis I, i.4.

³⁴ PAB, Axis IV, iv.1.

³⁵ PAB, Annex.

³⁶ Resolution 618, Preamble.

³⁷ Resolution 618, Article 2.

³⁸ Decree 2013 of 2017, Article 1.

³⁹ Decree 1203 of 2017, Article 9.

⁴⁰ Law 388 of 1997, Article 28.

⁴¹ Law 388 of

Articles 17 and 19 lay out the assessment of alternatives and environmental impact, requiring that “the different options must take into account the geographical environment, the biotic, abiotic and socioeconomic characteristics, the comparative analysis of the effects and risks inherent to the work or activity, as well as the possible solutions and control and mitigation measures for each of the alternatives.”²⁹

While Article 15 of Decree 2.041 states that communities shall be informed of the potential impacts of a project and can submit contributions to the environmental impact study, there are no real requirements for inclusion and participation, and these contributions can be denied if not considered pertinent. However, to comply with Article 76 of Law 99 of 1993, when present there must be “prior consultation with traditional indigenous and black communities,” before an environmental license can be issued.³⁰ Article 8, Section 13 requires environmental impact assessments of particular kinds of projects including infrastructure, but these assessments don’t include climate vulnerability in particular, don’t pertain to urban plans, and explicitly exclude some housing and transportation related projects.

The **Plan de Acción de Biodiversidad (PAB) 2016 – 2030 (Biodiversity Action Plan)** is formulated to implement the **National Policy for the Integrated Management of Biodiversity and its Ecosystem Services (PNGIBSE)**. The PAB lays out short-, medium-, and

long-term implementation plans (associated with 2020, 2025, and 2030) for incorporating climate change and environmental risk assessments into sectoral, territorial, and national planning and policy documents. The PAB is structured around risks to biodiversity across the country’s diverse environments, and cites climate change in tandem with human impacts as contributing toward three main areas of climate hazards: deforestation, changes to aquatic/coastal ecosystems, and desertification.³¹ As part of this incorporation plan, the PAB defines a number of specific requirements and goals for different levels of government. Local ecological structure will be assessed and incorporated into all municipal and territorial plans by 2030.³² Nationally, Colombia will “incorporate ecological criteria and sustainability indicators in policies for land redistribution and comprehensive rural reform.”³³ The country will improve the management of information and knowledge related to biodiversity in inland and marine-coastal ecosystems so that they can be included as a basis for policy-making decisions in “sectoral, land-use planning and at the national, regional and local scales, development planning, environmental planning, and land management and the life plans of indigenous and local communities.”³⁴ Management plans for ecosystems will incorporate climate change risk assessments. Axis III of the strategic plan specifically highlights how information related to biodiversity and ecosystem

services will be assessed and incorporated into the economic sector and land use planning.

The PAB lays out the context, strategic framework, stakeholder engagement processes, and implementation goals of the PNGIBSE, but excludes legally binding requirements for conducting risk or adaptation assessments. The plan highlights the need for including a diverse set of stakeholders in developing and implementing the goals of the PAB. In the Annex, seven groups of stakeholders are identified and elaborated on: “the policy makers and administrators, direct users, indirect users, regulatory bodies, control entities, knowledge generators [including indigenous and Black communities], and national and international collaborators”.³⁵

Resolution 618 of 2003, Declaración de los Estados de Alarma Ambiental, Declaration of Environmental States of Alarm designates the conditions for declaring environmental states of emergency with yellow, orange, and red alerts corresponding to increasing levels of harm or risk. The preamble dictates that environmental authorities shall employ the precautionary principle when assessing environmental damage and risk, “according to which, where there are threats of serious and irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing effective measures to prevent environmental degradation” indicating that climate change risk and hazards

would be incorporated into such declarations.³⁶ These declarations rely on standards established in national and district regulations, or international standards where these are lacking, which may also imply the application of climate change hazards and risks, though this is not explicitly stated.³⁷

Decree 1203 of 2017 details the procedures of issuing urban development licenses and the role of urban curators or other authorized municipal authorities to issue these. Decree 1203 of 2017 modifies **Decree 1077 of 2015** which regulates housing, sector, and territorial planning. Article 1 modifies Article 2.2.4.1.2.3 of Decree 1077 stating that, in the process of approving a planning license, “the competent environmental authority in the consultation process will analyze, review and verify that the environmental determinants are duly defined and incorporated in the partial plan project.”³⁸ However, this inclusion of environmental determinants does not explicitly require the inclusion of climate risk and vulnerability assessments in plans or projects. Similarly, Article 9 modifies Article 2.2.6.1.2.2.3.1, Paragraph 2 of Decree 1077 to ensure that the process for reviewing and issuing a planning license includes requirements for community notification and participation. The law describes this process as “summoning adjoining neighbors and other third parties” under the terms of the original decree, but there is no mention of including community-led vulnerability assessments in such plans or permit procedures.³⁹

03.2 IDENTIFICATION AND PRIORITIZATION OF ADAPTATION OPTIONS

The **1991 National Constitution** legally requires stakeholder engagement in the process of identifying actions to protect the environment. Article 70 suggests that every person has the right to enjoy a healthy environment” and guarantees communities’ involvement in decision-making processes that may affect them.

Law 388 of 1997 (The Law of Developing Territories) does introduce a few adaptation options for the country. Article 8 outlines the public function of municipal and district planning. It states that these governmental entities must “locate critical areas of recovery and control for disaster prevention, as well as areas for conservation and landscape recovery purposes.” Furthermore, the municipal zoning plan must have short-, medium-, and long-term execution programs of initiatives.⁴⁰ The law also emphasizes the importance of communal participation in the planning territory. Citizens should have oversight of planning activities and be able to prevent violation of established norms.⁴¹

Law 99 of 1993 (General Environmental Law) recommends a variety of options typically implemented by the **Ministry of the Environment** or **Regional Autonomous Corporations** that will allow Colombia to better adapt to climate change. These adaptation strategies include protecting biodiversity and conservation

areas,⁴² promoting defense against floods and other disasters,⁴³ and advancing the adaptation of urban areas in high-risk areas.⁴⁴ There are also provisions to protect water resources. For example, “any project that requires an environmental license and that involves the use of water... should allocate no less than 1% of the total investment for the recovery, preservation, conservation and surveillance of the hydrographic basin that feeds the respective water source.”⁴⁵ The Ministry of the Environment must evaluate the cost of medium and large infrastructure projects.⁴⁶ In addition, many of the Regional Autonomous Corporations must work to integrate traditional communities that inhabit the region into the process of conservation, protection and sustainable use of resources.⁴⁷

Law 1931 of 2018, Ley de Cambio Climático (Climate Change Law) writes that priority will be given to the implementation of climate change adaptation options that bring the greatest beneficial impact reduction for the population at the lowest cost or effort invested, and with the greatest social beneficial, economic generate.⁴⁸

Law 1931 of 2018 defines the development of ecosystem-based adaptation actions for inland, coastal marine and island ecosystems should be included in the **Comprehensive**

Territorial Climate Change Management Plans (PIGCCT). The PIGCCT should also include the management tools for protected areas, according to their management category.⁴⁹ Article 5 recommends the **Intersectoral Commission on Climate Change (CICC)** guidelines and criteria in climate change management for the coordination of actions between the national and territorial levels.⁵⁰

Furthermore, **Law 1931 of 2018** outlines the stakeholder of this process. The purpose of this law is to establish guidelines for the management of climate change in the decisions of public and private persons, the concurrence of the Nation, Departments, Municipalities, Districts, Metropolitan Areas and Environmental Authorities mainly in the actions of adaptation to climate change, as well as in the mitigation of greenhouse gases, with the objective of reducing the vulnerability of the population and the ecosystems of the country to the effects of climate change and promoting the transition towards a competitive, sustainable economy and low carbon development.⁵¹ The **National Council on Climate Change** is a permanent consultative body of the **Intersectoral Commission on Climate Change (CICC)**.⁵² In accordance with the guidelines issued by the CICC, territorial climate change plans will be formulated on a more detailed scale for districts and municipalities. It will be the responsibility of the mayors, with the technical support of the regional environmental authorities,

to formulate, implement and monitor these plans, in harmony with the respective **PIGCCT**, and in accordance with the other guidelines issued in this regard by definition within the framework of the **SISCLIMA**.⁵³

The **Política Nacional de Cambio Climático (PNCC) (National Policy on Climate Change)** introduces a plethora of prioritized actions to adapt to climate change. Territorial strategies include climate resilient and low-carbon urban and rural development strategies and ecosystem management. Particular lines of action that enhance the adaptive capacity of urban and rural developments include promoting agricultural production systems and technologies that are better adapted to climate hazards, promoting sustainable forest management, providing urban infrastructure that is resistant to flooding or sea level rise, developing incentives for efficient water use, incentivizing climate-resilient construction, developing cities in a more compact manner, and promoting complementary sources of renewable energy to ensure the reliable supply of electricity. Lines of action to achieve the management and conservation of ecosystems and their ecosystem services include promoting water regulation and flood protection services, advancing ecosystem-based adaptation measures in land-use planning, incorporating climate change impact scenarios in ecosystem management, strengthening forest governance, resolving conflicts over access to vulnerable environmental services, and evaluating and

strengthening the institutional capacity of environmental authorities.⁵⁴ Strategies are also planned to be medium- (2030) or long-term (2050) and potential financing mechanisms are outlined. Part 7 also proposes a national information strategy be formulated for climate change management. This mechanism can define a protocol for identifying climate hazard information and establish a series of adaptation indicators that can be measured and reported.

Decree 1077 of 2015 does introduce some climate adaptation strategies related to the provision of housing and public services. For example, Article 2.5.4 states that family housing subsidies may have household beneficiaries that aim to provide “structural interventions that may include vulnerability mitigation.”

Resolution 1988 of 2017 adopts important environmental goals in the field of energy efficiency. However, all of these goals involve mitigation strategies rather than adaptation strategies and are discussed in Section 4.

CONPES 3700 (2011) includes the requirement to harmonize and maximize the results of these and other initiatives. Given the complexity of these issues, it is necessary to create an articulation platform that avoids the replication of efforts and investments, supports high-level decision making and the country’s planning with criteria for both adaptation and mitigation of climate change. There are five initiatives in this CONPES with extension

explanation about the program. For example, **National Plan for Adaptation to Climate Change (PNACC)** mentioned to have a first prioritization exercise of adaptation measures at the national level for sectors, ecosystems and populations, based on multi-criteria evaluations (including cost-benefit evaluations) that take into account the particularities of each socio-economic and ecological system.⁵⁵ PNACC also mentioned design and implement the necessary methodologies for the prioritization, financing and monitoring of nationally appropriate adaptation measures identified by stakeholders, and identify and assign institutional responsibilities for coordinating and advancing the adaptation process at different scales, as well as the institutional arrangements and coordination necessary for the provision of information and reporting from local to national levels within the framework of the **SNCC** and identify natural adaptation actions, ecosystem-based adaptation and the evaluation of their cost-effectiveness.⁵⁶ Summary section mentioned that climate change adaptation and mitigation require the development of articulation strategies at the sectoral level as well as at the national and territorial levels, in order to generate shared and coordinated management, and relevant and timely information that allows for adequate decision making in order to effectively and timely counteract the underlying effects.⁵⁷

Decree 2811 of 1974 enacts the **National Code of Renewable Natural Resources and**

Environmental Protection. While this decree is primarily concerned with the sustainable management of natural resources, it does introduce specific provisions that can aid in climate change adaptation. First, Article 15 promotes the public to “formulate suggestions and take initiatives for environmental protection.” Article 69 allows the government to acquire “private property and assets of public law for the defense of natural resources,” e.g., the execution of flood control. Furthermore, when floods occur, property owners must allow the construction of necessary public works to channel the water.⁵⁸ Article 152 states that when groundwater is in danger of depletion or contamination, local authorities can suspend the extraction of the water in that basin. In regards to soil health, the decree makes it clear that it is the duty of all inhabitants to “collaborate with the authorities in the conservation and adequate management of soils,” such as through creating soil conservation districts.⁵⁹ In addition, urban development must set aside buffer zones for the planting of urban green spaces.⁶⁰ The government also has the responsibility to protect and regulate the use of hydrological resources, such as through erosion prevention and control.⁶¹ Article 322 mentions that taxes will be the primary funding mechanism for these adaptation actions.

Plan Nacional de Adaptación al Cambio Climático (PNACC) (National Plan for Adaptation to Climate Change) introduces important adaptation strategies to

climate change in order to influence environmental, territorial and sectoral planning processes. In general, the government will focus on providing public goods and protecting the most vulnerable population from climate hazards. The Plan identifies five strategic lines for planned adaptation paired with suggested actions that are to 1) Raise awareness about climate change; 2) Generate information and knowledge to measure climate risk; 3) Land use planning; 4) Implement adaptation actions; and 5) strengthen capacity to react. The PNACC will include short-, medium-, and long-term windows of implementation in future phases of the plan. In addition, the plan asserts how critical it is to involve communities in the territorial planning process and in the definition of adaptation measures. This will allow localities to better understand their strengths and vulnerabilities and generate buy in for proposed projects. Finally, cost management is led by the **Intersectoral Commission on Climate Change (CICC)** under **SISCLIMA**. A Financial Management Committee will provide technical feasibility and manage funding sources for adaptation projects that do not have financial resources for their implementation.

Plan Integral de Gestión de Cambio Climático del Departamento de Caldas (Integral Plan for Climate Change Management in the Department of Caldas) introduces an array of adaptation strategies for the region. Workshops were conducted with key stakeholder groups to gain a

better understanding of climate risks and areas of potential action in Caldas. Specific strategies highlighted in the Plan involve developing resilience for both rural and urban areas, mining and energy sectors, industry and infrastructure, and ecosystems. Some action items to achieve these strategies include sustainable development principles, urban green spaces, health services for vulnerable populations, resilient retrofits to infrastructure, information systems, and conservation easements.

Law 1955 of 2019, *Pacto por Colombia, Pacto por la Equidad* (Pact for Colombia, Pact for Equity) aims to “lay the foundations of legality, entrepreneurship and equity that allow achieving equal opportunities for all Colombians, in accordance with a long-term project with which Colombia reaches the Sustainable Development Goals by 2030.”⁶² This objective supplements the country’s effort to adapt to climate change. For example, the law presents articles that mandate reforestation initiatives, the establishment of agricultural insurance, and the creation of a “Master Plan for Coastal Erosion” by the National Government. The Adaptation Fund, created by the Decree-Law 4819 of 2010, is also available to fund initiatives that reduce the country’s fiscal vulnerability to disasters and climate risks.

Law 1523 of 2012 outlines the budgeting for the **Disaster Risk Management System**. Specifically, Article 48 states that “the directives, guidelines

and instructions of the Board of Directors of the National Disaster Risk Management Fund shall be taken into account in the management of the Fund.”

The ***Plan Nacional de Gestión de Riesgos de Desastres (PNGRD) 2015–2025* (National Plan for Disaster Risk Management)** introduces a plethora of methods to adapt to climate hazards. These action items fall under the strategic objectives to: 1) Improve knowledge of disaster risk in the national territory; 2) Reduce the construction of new risk conditions in sustainable territorial, sectoral and environmental development; 3) Reduce existing disaster risk conditions; 4) Ensure timely, effective and adequate disaster management; and 5) Strengthen governance, education and social communication in risk management with a differential, gender and cultural diversity approach. Specific projects, goals, responsible entities, and execution deadlines are identified for each action item. The PNGRD also recognizes the importance of stakeholder engagements and particularly emphasizes that communities at risk should contribute to the construction of knowledge and risk reduction strategies.

While **Decree 308 of 2016** does not identify or prioritize adaptation options, it does encourage timely response to disaster management.⁶³

Law 164 of 1994 approves the UNFCCC accord committing Colombia to formulating,

publishing, and monitoring many plans related to climate change mitigation and adaptation. The law notes that Colombia must “formulate, implement, publish and regularly update national and, as appropriate, regional programs containing measures... to facilitate adequate adaptation to climate change.”⁶⁴ Similarly, the law requires that Colombia develop, promote, and make available data related to climate systems and the economic and social consequences of different climate change response strategies to help minimize adverse effects on the economy from climate change related measures.⁶⁵

The **Biodiversity Action Plan (PAB)** states that the country will evaluate the potential of restoration practices in adaptation

and mitigation plans, and that the biodiversity Risk Prevention and Management Policy will integrate a BAP-related climate change adaptation frameworks.⁶⁶ The PAB enumerates several specific and measurable goals for urban areas, including the assessment and improvement of ecosystem structure and water consumption for cities of various population sizes all by certain dates, though these goals are not directly tied to climate adaptation.⁶⁷ While diverse stakeholders were consulted in creating the BAP and seven broad categories are suggested for implementation, there are no legal requirements for stakeholder engagement in developing or prioritizing adaptation options.

03.3 IMPLEMENTATION OF THE IDENTIFIED ADAPTATION OPTIONS

Law 388 of 1997 (Law of Developing Territories) introduces the idea of restrictions on land use and development in hazard prone areas. Article 8 states that the public function of municipal and district land use planning includes determining “undeveloped areas that present risks for the location of human settlements, due to natural hazards, or that otherwise present unhealthy conditions for housing”.

Law 1454 of 2011, *Ley Orgánica de Ordenamiento Territorial* (Organic Law of

Territorial Planning), does not specifically mention about the riparian or coastal setbacks, though the National Government does promote the association of the **Regional Autonomous Corporations (CAR)** to design and execute programs for environmental protection and especially for the care of water-producing areas so that with water resources, strategic ecosystems can be protected and programs to mitigate water can be developed. risk. In carrying out this task, the Regional Autonomous Corporations may

make investments outside their jurisdiction in compliance with the agreements entered into between them.⁶⁸

While **Law 99 de 1993 (General Environmental Law)** makes it clear that the Ministry of the Environment and Regional Autonomous Corporations are responsible for implementing sustainable development practices, no regulatory mechanisms have been identified in this law to ensure the success of these goals.

Law 1931 of 2018 suggests that departments with coastal territory shall include within their PIGCCT the formulation, adoption and implementation of climate change adaptation actions including, among others, those related to protection against coastal erosion and other actions associated with the protection of coastal ecosystems.⁶⁹

Law 1931 of 2018 requires the Departmental authorities must incorporate climate change management into their development plans, which in turn may be incorporated into other planning instruments available to the Department. Consequently, departmental authorities work collaboratively with **Regional Environmental Authorities**, to formulate the **Integrated Territorial Climate Change Management Plans (PIGCCT)** in accordance with their jurisdiction and will follow up on their implementation in accordance with the guidelines established in the framework of the **National System of Climate Change (SISCLIMA)**.⁷⁰ Moreover, the

municipal and district authorities shall incorporate climate change management within their plans for development and territorial ordering. They may also incorporate climate change management into other planning instruments available to the respective territorial entity.⁷¹

Part 6 of the **Política Nacional de Cambio Climático (PNCC) (National Policy on Climate Change)** introduces the idea of partial restrictions on land use and development in hazard prone areas. One line of action for the management and conservation of ecosystems and their services involves delimiting “areas likely to be flooded and/or affected by drought or sea level rise, according to different climate scenarios, and classify hazard zones according to the level of exposure of productive areas, infrastructure, housing and population.” Furthermore, the policy promotes the conservation and restoration of marine-coastal ecosystems that “provide environmental services that favor adaptation of socioeconomic systems of climate change, such as water regulation and flood protections services.”⁷²

Article 2.5.4 in **Decree 1077 of 2015** legally mandates that “housing cannot be located in high-risk areas that cannot be mitigated.”

CONPES 3700 (2011) addresses mechanisms and instruments used to reduce or foresee risk refer us to a varied set of options of both a structural engineering and environmental nature and of a non-structural nature

(regulations and planning), which must be implemented in a concerted manner by a broad set of organizational or institutional instances of the public and private, sectoral, territorial and specialized sectors.⁷³ In the Joint Program for the Integration of Ecosystems and Climate Change in the Colombian Massif initiatives have achieved important advances in adaptation through the implementation of different projects aimed at reducing the vulnerability of communities, protection of marine, coastal and high mountain ecosystems, construction or repair of road infrastructure, health and food security, among others.⁷⁴

Decree 2811 of 1974 briefly introduces the requirement of public land buffers. Article 320 states that private individuals may be subject to easements between their property and hydrological systems. In addition, Article 330 states that “buffer zones will be determined in the periphery of the park system in order to preserve it for educational and recreational purposes.”

Decree 2811 of 1974 requires the determination of intervention measures. These interventions are designed to establish the land occupation model and the restrictions or conditions for the use of the land which must be determined when feasible, through the determination of urban planning norms.⁷⁵ This law also includes the technical studies for the incorporation of risk management in territorial planning. Taking into account the principle of gradualism as provided for in **Law 1523 of 2012**, the

basic studies for the revision of the medium- and long-term contents of the territorial management plans or the issuance of new plans must be carried out, and detailed studies must be carried out during their execution.⁷⁶

Similarly, **Plan Nacional de Adaptación al Cambio Climático (PNACC) (National Plan for Adaptation to Climate Change)** proposes to ensure the adequate functioning of public infrastructure in the face of climate variability by preventing the occupation of low-lying areas or areas susceptible to flooding, erosion or marine intrusion.

Law 1523 of 2012 mentions that the “imposition of easements shall be made by means of a reasoned administrative act” under the “criteria of safety and sustainable development, avoiding the reproduction of risk situations and generating better living conditions.”⁷⁷ Furthermore, the law establishes the **National Information System for Disaster Risk Management** which integrates disaster risk information with spatial data to improve emergency responses and offer information support to risk managers.⁷⁸

The **Plan Nacional de Gestión de Riesgos de Desastres (PNGRD) 2015–2025 (National Plan for Disaster Risk Management)** briefly introduces the idea of total or partial restrictions on land use and development in hazard prone areas. A specific goal under Objective 2 is to make “necessary for all public and private entities

to internalize the concept of safe development; this implies that decisions on the location and design of their activities within the scope of their functions should be informed and consistent with the information available on disaster risk.”

Decree 308 of 2016 aims to reduce construction in areas that could create new environmental risks in order to promote sustainable development.⁷⁹

Decree 4.550 of 2009 identifies the granting of construction licenses for the adaptation, repair and/or reconstruction of buildings to their original state will not proceed, when these or part of them are located in: (1) Areas or zones of environmental protection and on land classified as protection by the land use plan or in the instruments that develop and complement it; (2) Areas declared as high non-mitigable risk identified in the land use plan and in the instruments that develop and complement it; (3) Properties affected in the terms of Article 37 of **Law 9 of 1989** or the regulation that adds, modifies or replaces it.⁸⁰

Decree 1967 of 2012 includes the legal requirement to plan the location of essential infrastructure (telecommunication). Access and use of networks and infrastructure in order to meet needs in disaster situations. The providers of telecommunications networks and services are obliged to allow access and use of their networks and infrastructure to the operator that requests it, immediately, in order to meet the needs related to the reasons for declaring a

disaster situation to guarantee the continuity in the provision of telecommunications services and networks, in accordance with the provisions of Article 82 of **Law 1523 of 2012**.⁸¹

Law 164 of 1994, accepting the UNFCCC agreement, requires Colombia to prepare climate change adaptation plans that are integrated with “plans for the management of coastal zones, water resources and agriculture, and for the protection and rehabilitation of areas... affected by drought and desertification, as well as by floods.”⁸² Though they are not explicitly tied to national or department land information systems, Article 4, Section 1 (G) and (H) promotes the integration of climate change information and vulnerabilities into national legal, scientific, and economic data to understand climate change’s social and economic impacts as well as the impacts of responses.

The **Biodiversity Action Plan (PAB)** promotes the integration of climate change risk and adaptation information with land, aquatic, and coastal ecosystem management plans for the PAB’s 2025 and 2030 medium and long term goals.⁸³ The conservation section of the PAB highlights the need to prevent or control all new development and promote sustainable urban growth approaches but does not provide policy tools or restrictions for these regulations itself.

Law 1848 of 2017 facilitates the legalization process for recognizing structures in informal human settlements by eliminating fees for related bureaucratic procedures.

The law restricts the legalization of human settlement buildings in zones of environmental protection and high-risk areas: “areas or zones of environmental protection and land classified as protected land in the Land Management Plan or in the instruments that develop and complement it,” as well as in “areas declared as high risk areas that cannot be mitigated and identified in the Land Management Plan or the instruments that develop and complement it.”⁸⁴

Law 1415 of 2010 regulates the conditions, applications, and implementation of the Rural Family Housing Subsidy for people affected by natural disasters and for housing located in high-risk areas. Article 3 requires that, if a family whose house is located in a high-risk area applies for the subsidy as a preventative measure, the funds must go toward relocation, meaning that those funds cannot be used to build or rebuild in the same high-risk area.

Resolution 618 of 2003 (Declaration of Environmental States of Alarm) establishes guidelines for environmental states of emergency, providing special totals for local authorities to employ for the most serious emergencies. For Red Alerts, Mayors may “take all the budgetary, contractual, police and administrative measures required to remedy the situation in accordance with the respective laws.”⁸⁵ Police or administrative action could include the ability

to administratively restrict new development to alleviate an immediate environmental emergency, however such a power is only inferred and is not clearly stated. While many of the enumerated conditions in the law that could trigger a state of emergency are potential impacts from climate change, the law does not explicitly refer to climate hazards or adaptation responses.

CONPES 4004 (2020) focuses on the multifaceted benefits of a more sustainable and circular water management system, including more sustainable sourcing, treatment, distribution, and waste and stormwater management. Flooding in urban areas due to greater levels of impervious surface and inadequate drain infrastructure are mentioned in the document as a problem that could get worse as climate change increases the frequency and severity of storm events. CONPES 4004 states that Sustainable Urban Drainage Systems (SUDS) will be considered and implemented by the National Planning Department (DNP) to deal with storm flooding: “the DNP, together with the Ministry of Housing, City and Territory, will publish in 2021 a methodological guide for the formulation and implementation of SUDS, in order to strengthen water management processes at the municipal level, as these types of systems allow the use and reuse of water.”⁸⁶

03.4 ADAPTATION OF SLUMS AND OTHER VULNERABLE SETTLEMENTS

Law 388 of 1997 (The Law of Developing Territories) introduces the Family Housing Subsidy, “whose purpose is to support social interest housing in all its forms, both for rural and urban areas” for those in unstable or impoverished living conditions.⁸⁷

Law 99 of 1993 (General Environmental Law) acknowledges the “right of human beings to a healthy and productive life in harmony with nature.”⁸⁸ However, there are no specific articles related to housing in the law.

Decree 1077 of 2015 allocates some funds to the updating of slums and other poor housing conditions. **The National Housing Fund (FONVIVIENDA)** manages the Low-Income Housing Subsidy that allocates funds for housing on a priority basis to independent or informal households.

Law 1523 of 2012 mandates the creation of mechanisms to prepare for the relocation of settlements such as through “use of legal instruments for the acquisition and expropriation of real estate necessary for the relocation of high-risk populations.”⁸⁹ Article 117 further specifies that projects to improve the coverage of drinking water, basic sanitation, tertiary roads, and electric power will be prioritized. In addition, Article 15 mentions free housing programs through the **Unidos Strategy**

to households living in poverty that are beneficiaries of the free housing programs.

While slum adaptation is not specifically mentioned in **Law 1955 of 2019, Pacto por Colombia, Pacto por la Equidad (Pact for Colombia, Pact for Equity)**, the Law still publishes pacts for “decent and inclusive housing” and “the quality and efficiency of public services: water and energy to promote competitiveness and well-being for all.”⁹⁰

Decree 1203 of 2017 regulates urban development licenses and the powers of urban curators through partially modifying Decree 1077 of 2015. The law modifies two articles of Decree 1077 to clarify that urban development and construction licenses, along with their environmental review processes, apply to the expansion and alteration of existing buildings and areas.⁹¹ The processes for reviewing and issuing an urban development license, including the ‘legalization’ of informal human settlements, require community notification and participation. However, this does not explicitly include women, youth, or the elderly as priorities.⁹² Article 17 does stipulate that the legalization process of informal human settlements and related territories implies the inclusion in municipal boundaries and the provision of public services related to that inclusion. However, it does not

explicitly guarantee access to water, sanitation, and electricity and does not guarantee tenure rights going forward for residents.

Law 1848 of 2017, which facilitates the legalization of human settlements and recognition of related buildings and lands, eliminates many of the fees associated with the administration of planning approval, including notary, property transfer, and registration fees.⁹³ Article 6 allows for the legal recognition of structures and settlements that were constructed outside of the typical or proper development licensing process. The law also acknowledges the special circumstances where human settlements may be allowed in otherwise environmentally protected areas. Buildings may not be constructed or legally recognized on protected land “except in the case of zones subject to special environmental management measures for the harmonization and/or normalization of pre-existing buildings within them.”⁹⁴

Law 1506 of 2012 is focused on returning utility services to residents quickly

after natural disasters, and provides for the freezing or cancellation of utility charges for domestic usage after a natural disaster. While this measure does help ensure affordability and accessibility of water, electricity, and other services after a disaster, it does not do so on an ongoing basis or through the expansion and maintenance of infrastructure for informal settlements.

Law 1415 of 2010 providing housing relocation and upgrade subsidies specifically designates that women, elderly, and disabled individuals will be given priority in family housing subsidy distribution: “preferential treatment in the granting of the Rural Family Housing Subsidy (SFVR) will be given to women heads of household and elderly or disabled persons.”⁹⁵ This subsidy and preference could apply to such individuals relocating from informal human settlements, but would not allow a replication of the prior housing conditions of the family, requiring legal construction, ownership, and utility service.

03.5 ADAPTATION OF SLUMS AND OTHER VULNERABLE SETTLEMENTS

Regarding planned relocations, **Law 388 of 1997 (The Law of Developing Territories)** requires that zoning plans include “mechanisms for the relocation of human settlements located in areas of high risk to the health and integrity of their inhabitants.”⁹⁶

Decree 2811 of 1974 requires that in areas where the risk is defined as unmitigable, the houses and buildings to be resettled must be identified in detail, in addition to the stabilization works necessary to prevent the influence of the phenomenon under study from increasing.⁹⁷

In terms of relocations due to the imposition of easements, **Law 1523 of 2012** requires that “corresponding compensation shall be fixed and the owner, possessor or holder of the property shall be notified, who may only lodge an appeal for reconsideration.”⁹⁸

Resolution 180.592 of 2012 regulates the Exceptional Subsidy for domiciliary public utilities of electric power and fuel gas. The resolution ensures that beneficiaries include those “who are affected by the events that caused the declaration of a disaster situation declared by the National Government and whose homes maintain the necessary conditions for the provision of the services, as well as those users who for the same reason have been relocated to other homes.”⁹⁹

Decree 4.830 of 2008 mentions

special attention in situations of public calamity, disaster or emergency in matters of rural social housing. When a local, regional or national situation of public calamity, disaster or emergency is declared in the terms of **Decree-Law 919 of 1989**, which deserves priority and immediate attention, the Ministry of Agriculture and Rural Development may allocate up to one hundred percent (100%) of the resources available for rural social housing subsidies, other than those destined to serve the displaced population.¹⁰⁰ Furthermore, in any case, the value of the **Rural Social Interest Housing Subsidy** may not exceed eighty percent (80%) of the value of the basic improvement and sanitation solution, on-site construction or acquisition of new housing. For these purposes, the Operating Regulations issued by Banco Agrario de Colombia SA will determine the counterpart contribution of the territorial entity.¹⁰¹

Law 1.561 of 2012 states that property shall not be developed in: (a) Areas declared as high non-mitigable risk identified in the **Land Use Plan**; (b) Protected areas or areas, in accordance with the provisions of **Law 2 of 1959** and **Decree 2372 of 2010** and other regulations that substitute or modify; (c) Areas of indigenous protection or of collective property of the black communities or other ethnic groups; (d) Quarry areas that have suffered serious physical

deterioration, until a special management of geomorphological recomposition of their soil is carried out that enables them for urban development.¹⁰²

Resolution 618 of 2003 detailing environmental emergency declarations lists conditions that could trigger a declaration, including those that might be associated with informal human settlements: “the concentration of urban or rural human population in housing conditions that are detrimental to well-being and health.”¹⁰³ Local mayors are empowered under Red Alert declarations to take “all the budgetary, contractual, police and

administrative measures required to remedy the situation.”¹⁰⁴ This could include the ability to administratively designate and set aside land for relocation in case of an environmental emergency. However, this is not clearly stated and is not tied to climate hazards or adaptation.

Law 1415 of 2010 providing the Rural Family Housing Subsidy for housing relocation and upgrades requires relocation sites to have access to water supply, but does not require electricity, sanitation, education, or other important services in the relocation area, nor is there a requirement for the state to provide these.¹⁰⁵

03.6 SECURITY OF TENURE

Law 388 of 1997 (The Law of Developing Territories) discusses security of tenure. There are numerous articles that outline how evictions should be conducted. Article 56 is the procedure for forced alienation and states that “it shall be the responsibility of the municipal or district administration... to submit the respective land and real estate to forced alienation by means of the public auction procedure.” Furthermore, expropriation should only occur for “public utility of social interest.”¹⁰⁶ Article 62 outlines the procedure for expropriation that should be in accordance with the objectives and uses in land management plans. Article 67 ensures that owners shall be paid equal to commercial appraisal during expropriation.

Regarding the appeal process, an appeal for reconsideration of an expropriation “may be filed against the administrative decision, which must be filed within the terms provided in the Contentious-Administrative Code as from the date of notification.”¹⁰⁷

Decree 4.830 of 2008 establishes the value of the **Family Subsidy for Rural Social Interest Housing** which will be between 10 and 18 current legal monthly minimum wages, in accordance with the projects presented by the territorial entities.¹⁰⁸ This subsidy can be used for the construction or acquisition of new housing or basic improvements of the house or sanitation system.

Law 1152 of 2007, *Estatuto de Desarrollo Rural (Statute of Rural Development)* requires access to land ownership. In order to comply with the constitutional precept, it is the duty of the State to promote progressive access to land ownership for agricultural workers. The strategies, actions and decisions adopted through this law will be aimed at achieving the following objectives: (1) The reform of the agrarian social structure, through land endowment procedures aimed at eliminating, correcting and preventing the inequitable concentration of rural property, in order to improve the productive conditions of agricultural and forestry production processes; (2) Benefit from these procedures peasant men and women, indigenous communities, black communities and other ethnic minorities over sixteen (16) years of age, with scarce resources or who do not have land, smallholders, peasant women heads of household and beneficiaries of special programs established by the National Government; (3) Provide support and advice to the aforementioned beneficiaries, in the land acquisition processes that they promote, through the mechanisms of direct subsidy and free competition, for the development of profitable productive projects, and adapted to the real conditions of internal and external markets, and correlated with the policies of the Ministry of Agriculture and regional and rural development plans and programs.¹⁰⁹ Furthermore, to establish the conditions of access to the subsidy mechanism, the National Government will indicate the minimum requirements

or requirements that the rural properties proposed by the applicants must meet, in which those related to the price of land and improvements, the agrological class, the geographical location, the availability of water, the height above sea level, the topography of the terrain, climatic conditions, the proximity to areas of special management or conservation of renewable natural resources, and the marketing conditions of agricultural and/or forestry products in the region will be considered.¹¹⁰

Resolution 452 creates the Rural Property Formalization Program at the Ministry of Agriculture and Rural Development in order to promote access to land ownership and improve the quality of life of farmers. Under this virtue, it will impede and coordinate actions aimed at regulating the individual and collective tenure of rural lands, ensuring property rights and consolidating a culture of formalization of property.¹¹¹

Decree 2363 of 2015 creates the National Land Agency. Functions of the agency include directing the execution of the components of rural ownership formalization and agricultural processes carried out by the units in charge of it and approving the legal routes necessary to correct the informal and irregular situations identified in the legal characterization of the properties.¹¹²

The objective of **Law 1900 of 2018** is to promote equity in women's access to the adjudication of vacant lands national, in the allocation of rural housing, the distribution of resources for the

promotion of productive projects for the promotion of agricultural activity, as well as establishing mechanisms that guarantee its real and effective application in order to eradicate any form of discrimination.¹¹³ The law states that "Family Agricultural Units on vacant lands will be jointly awarded to spouses or permanent partners, as long as they have reached sixteen years of age, are heads of the family, share with each other the responsibilities for their children minors, or with their relatives up to the second degree of consanguinity if they look after them."¹¹⁴ Thus, women may be beneficiaries of this law.

Decree 1203 of 2017 outlines the legalization process for human settlements by modifying Article 2.2.6.5.1 of **Decree 1077 of 2015**. Through this law, the proper municipal authorities are empowered to recognize "the existence of a human settlement consisting of social housing, approves the urban plans and issues the urban regulations, in accordance with the conditions established by each territorial entity and without prejudice to criminal liability and administrative commitments of the parties involved."¹¹⁵ Though Article 17 provides for the legalization and regularization of informal human settlements and related properties, it does so "without contemplating the legalization of property rights in favor of eventual possessors," meaning it does not guarantee tenure or property rights to residents.¹¹⁶

Article 6 of **Law 1848 of 2017** provides for the legal recognition of the existence of human

settlement structures built outside the normal approval process, wherein the proper municipal authority legally recognizes and "declares the existence of architectural developments that were executed without obtaining the respective license, as long as they comply with the use provided by the urban planning regulations in force and that the building has been completed at least five (5) years prior to the request for recognition, at the time of the entry into force of this law."¹¹⁷

Law 1415 of 2010 providing the Rural Family Housing Subsidy (SFVR) for housing relocation and upgrades includes a number of regulations related to the legal processes and rights of property owners taking advantage of the subsidy. Article 2, Paragraph 3 requires that property owners who are relocating through the subsidy process must officially transfer ownership of the evicted property to the proper territorial entity to receive the subsidy. The SFVR compensates families that are forced to relocate or upgrade their homes due to a natural disaster/emergency in the following amounts: 1. New construction or acquiring new/used housing: "twenty-five (25) current legal monthly minimum wages (SMLV)", and 2. Housing upgrade at the same site: "fifteen (15) legal monthly minimum wages (SMLV)."¹¹⁸

Law 1001 of 2005 introduces crucial legislation to help occupants of informal settlements obtain property rights and proof of ownership. Article 2 states that "Public entities of the national

order will freely assign their property lands that are public assets and that have been illegally occupied for social housing, as long as the illegal occupation has occurred prior to November thirty (30), 2001. The free transfer will be made by administrative resolution in favor of the occupants, which will constitute title of ownership and once registered in the Office

of Public Instruments, it will be full proof of ownership.” Similarly, **Law 2044 of 2020** builds on this legislation. The purpose of the law is to allow residents of informal settlements to acquire property rights if they demonstrate possession for 10 or more years. Together, these laws improve the security of tenure for residents living in informal settlements.

03.7 DEVELOPMENT APPROVAL AND ADAPTATION

Law 388 of 1997 (The Law of Developing Territories) introduces elements of development approval to promote adaptation. Article 37 states that districts or municipalities may impose penalties on developers who violate public space requirements. Fines can be imposed if a development is constructed on “environmentally protected land, or located in areas classified as risk areas, such as wetlands, water bodies or geological risk areas.”¹¹⁹ The community also has a right to request the reparation of the damage caused by a development that damages the use of public space.¹²⁰ Regarding enforcement, local municipalities may cease domiciliary public utilities until the penalty fines are paid.¹²¹

Decree 2811 of 1974 requires the urban development of areas under threat condition shall be subject to the performance of detailed studies, as well as to the execution of the reduction measures (prevention and mitigation) determined

therein. For this purpose, the land use plan or the instruments that develop and complement it must, if applicable, establish differential criteria for the characterization and re-delimitation of the units of analysis in the areas that are the object of the detailed studies. As a minimum, the properties that may be affected by the occurrence of the natural phenomenon under analysis must be considered and the conditions and parameters for carrying out the studies must be indicated, in accordance with the provisions established for the processing of urbanization licenses contemplated in **Decree 1469 of 2010** or the regulation that adds, modifies or replaces it. The studies may be in charge of the manager and/or developer and/or urbanizer within the process of the intermediate planning and urban licensing instruments.¹²²

Law 1152 of 2007 mentions that the **Ministry of Agriculture and Rural Development** will be responsible for leading and

coordinating the formulation of the general rural development policy, based on criteria of productive and social ordering that allow determining the priority areas of rural development. For this purpose, it will establish the current and potential use of land, order the geographical areas according to their biophysical characteristics, their economic, social and infrastructure conditions, and define the necessary guidelines, criteria and parameters that must be considered for the preparation of Territorial Planning Plans in the rural areas of the municipalities. Likewise, the Ministry of Agriculture and Rural Development will define the agricultural frontier taking into account the definitions of the environmental or festive reserve areas and other restrictions on land use imposed by any government authority.¹²³ Additionally, the productive management that is carried out with violation of the rules on conservation, improvement and rational use of renewable natural resources and those related to the preservation and restoration of the environment contained in **Law 99 of 1993** and other relevant provisions will be a cause of extinction of the right of ownership.¹²⁴

Law 708 of 2001, Normas relacionadas con el Subsidio Familiar para Vivienda de Interés Social (Family Subsidy for Social Interest Housing), establishes standards for the Family Subsidy for Social Interest Housing. This law regulates public entities of the national order, of a non-financial nature, that are part of any of

executive, legislative, judicial, control bodies, and electoral organization as well as autonomous and independent bodies, must transfer free of charge to the **National Institute of Social Interest Housing and Urban Reform (INURBE)**. In terms of the progressivity established by the National Government, the fiscal real estate of its property, or the portion of them with a vocation for the construction or development of social interest housing projects in accordance with the regulations issued by the National Government, and without prejudice to what is established in the land use plans.¹²⁵ Furthermore, “the expiration of the term provided for in this article to carry out the transfer of the assets to INURBE will not exempt the corresponding entity or body from the obligation to make such transfer, but failure to comply will incur the legal representative of the entity or body in disciplinary offense.”¹²⁶

Decree 2.041 of 2014 which elaborates and regulates environmental review processes states that projects are subject to compliance monitoring and ongoing assessments by the relevant environmental authority based on the environmental license and/or management plan.¹²⁷ Developers who undergo environmental review must pay related fees for assessment and monitoring, but these requirements do not appear to include the costs of infrastructure associated with their developments.¹²⁸

Decree 1203 of 2017 links development approval to urban plans and zoning regulations, as

well as environmental review by relevant authorities, but these are not linked to climate risk or vulnerability assessments. The terminology for official review requires that “the competent environmental authority in the consultation process will

analyze, review and verify that the environmental determinants are duly defined and incorporated in the partial plan project,” but ‘environmental determinants’ may not necessarily include climate change hazards or risks.¹²⁹

RECOMMENDATIONS

In order to improve climate change adaptation planning in Colombia, we provide a series of recommendations based on our results from the Law and Climate Change Toolkit analysis that can be added to legislation, policies, or plans.

In regards to climate risks and vulnerability for planned areas and infrastructure, we recommend making the information represented in climate hazard maps more easily digestible and useful to decision makers and Colombian citizens. A more proactive approach to public outreach, engagement, and cartographic and geographic education should be employed to supplement the public dissemination of such maps. It is also important to ensure that maps are updated to reflect current, accurate information on a regular basis.

Building off of climate risk and vulnerability assessments, we recommend further prioritizing the plethora of adaptation strategies presented in the legislation. A cost-benefit analysis can aid in the prioritization and inform

the implementation process of adaptation strategies. Verifiable benchmarks should be established for each adaptation strategy to encourage continuous monitoring and revision of urban plans based on their abilities to implement strategies at a local, regional, and national level.

To further bolster the implementation of the identified adaptation options, we recommend establishing detailed guidelines delineating where future developments and essential infrastructure can be located. While numerous pieces of legislation do restrict development in hazard prone areas, there is limited consideration related to coastal and riparian zone setback requirements, buffer zones, and incorporating nature-based stormwater management solutions. Furthermore, evacuation routes in low-risk areas should be identified in the case of a climate hazard event.

Moving on to the adaptation of informal and other vulnerable settlements, we recommend participatory and community-led

processes to guide their infill and redevelopment. Furthermore, utility services and their affordability should be guaranteed to all after the redevelopment process. Currently, there are no laws or regulations that adequately address adaptation and improvement to informal human settlements though inclusive processes while ensuring access to clear water, sanitation, electricity, and other vital services.

Planned relocations from areas at risk of climate hazards are mandated in a few pieces of legislation. Moreover, the Rural Family Housing Subsidy (SFVR) is offered for families forced to relocate or upgrade their homes due to a disaster or impending risk of a disaster. However, we recommend providing additional assurances that families will be engaged in inclusive and proactive consultation surrounding planned relocations and guaranteed livelihood opportunities, water and food security, sanitation, and education and health facilities in their host communities. If possible, the subsidy program should be expanded since the compensation for relocation costs is limited and does not guarantee housing will be available in a lower-climate risk area even if a family is granted a subsidy. This subsidy should continue to prioritize women, the elderly, and people with disabilities who are heads of household.

Security of tenure is another important issue given the housing instability caused by climate change. Existing subsidies and policies related to housing tenure are administratively top-down.

Thus, we recommend more inclusive and participatory processes that can better identify and regularize informal land and property rights into official land information systems. Participatory processes can also help occupants of informal settlements obtain property rights and proof of ownership. In addition, legislation should guarantee compensation for those living in informal settlements that are relocated to new communities and include consultations with the families and communities that have to resettle. Finally, a variety of dispute resolution mechanisms should be incorporated into legislation to ensure resident concerns are being met.

The development approval process is a final key component to implementing climate change adaptation strategies. Development approval mechanisms like urban development or environmental licenses do not include requirements or guidelines directly related to climate change risks or hazards in Colombia. We recommend explicitly linking the development approval process to climate change adaptation strategies. For example, developers should be required to pay for public infrastructure, such as nature-based stormwater infrastructure, to mitigate any increased climate risks from the development. Outlining specific mechanisms for enforcement can further ensure requirements are brought to fruition.

04

PLANNING FOR MITIGATION

Urban plans and greenhouse gas emissions

Does your country have provisions of law or regulations that require assessment of the greenhouse gas emissions of different urban planning options?

- Do these include provisions that require the assessment of the greenhouse gas emissions associated with the existing urban form? ☒
- Do these include provisions that require the estimation of existing carbon sinks? ☒
- Do these include provisions that require the production of different planning scenarios and the estimations of the greenhouse gas emissions associated with each scenario? ☒
- Do these include provisions that require the production of different planning scenarios and the estimation of the carbon sink potential associated with each scenario? ☐
- Do these include provisions that require the assessment of the plan's ability to meet the local, sub-regional and national governments' climate change strategies and plans, greenhouse gas reduction targets and measures? ☒
- Do these include the legal requirement for urban plans to have targets to reduce greenhouse gases with measurable and verifiable benchmarks against which progress can be assessed? ☒
- Do these include the legal requirement to assess the greenhouse gas emissions associated with the urban plans? ☐

Urban form and reduction of greenhouse gas emissions from transportations and infrastructure

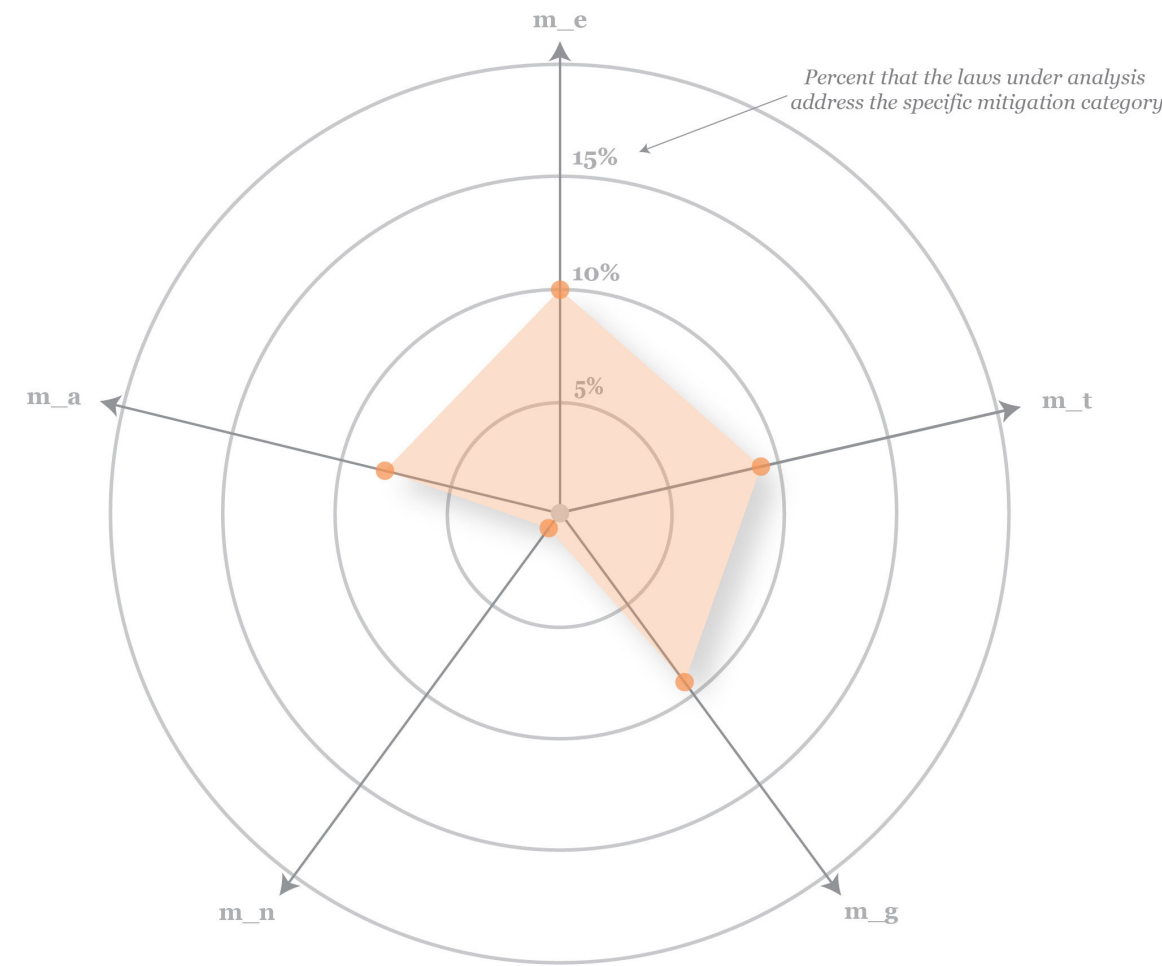
Does your country have provisions of law or regulations that promote a connected, accessible, and dense urban form that reduces car trips, promotes walkability and the efficient use of public infrastructure?

- Do these include provisions of law or regulations that promote connectivity establishing minimum standards for streets? ☒
- Do these include provisions that promote connectivity through street design standards for walkability and cycling? ☒
- Do these include provisions that promote connectivity through plot design rules for a walkable streetscape? ☒
- Do these include provisions to promote accessibility to jobs, housing, services, and shopping by promoting mixed land use? ☒
- Do these include provisions that promote optimal urban density? ☒
- Do these include provisions that require the consideration of existing and planned transport infrastructure in the determining allowed population densities near the infrastructure? ☐

Green spaces for environmental and climate services	Does your country have provisions of law or regulations that promote a network of green spaces able to provide environmental and climate services?	
	Do these include provisions of law or regulations that establish minimum standards for green spaces?	<input checked="" type="checkbox"/>
	Do these include provisions of law or regulations that require the adequate distribution of green spaces across the city?	<input checked="" type="checkbox"/>
	Do these include provisions of law or regulations that require connecting and planning together networks of green areas and water bodies?	<input type="checkbox"/>
Neighborhood design and energy saving in buildings	Does your country have provisions of law or regulations that require neighborhood design principles to achieve energy savings in buildings?	
	Do these include provisions of law or regulations that require neighborhood plans to consider wind and sun direction when deciding the orientation and the layout of streets?	<input type="checkbox"/>
	Do these include provisions of law or regulations that require the consideration of the thermal properties of urban surfaces?	<input checked="" type="checkbox"/>
	Do these include provisions of law or regulations that require plot design to achieve optimal orientation of the buildings for the purpose of energy saving in buildings?	<input checked="" type="checkbox"/>
Development approval and mitigation	Does your country have provisions of law or regulations to ensure that planning and design standards that mitigate the emissions of greenhouse gases are enforced through the development approval process?	
	Do these include provisions that link the development approval process to legally approved urban plans and zoning regulations?	<input checked="" type="checkbox"/>
	Do these include provisions that allow local governments to charge developers, either in cash or in kind through conditions to be attached to the approval of planning applications, for infrastructure costs associated with their developments?	<input checked="" type="checkbox"/>
	Do these include mechanisms to monitor the compliance with the approved development and its conditions?	<input checked="" type="checkbox"/>
	Do these include mechanisms for enforcement in the event developments are not compliant with the submitted application and its conditions?	<input type="checkbox"/>

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04 PLANNING FOR MITIGATION



Planning for Mitigation

- m_e Urban plans and greenhouse gas emissions
- m_t Urban form and reduction of greenhouse gas emissions from transportations and infrastructure
- m_g Green spaces for environmental and climate services
- m_n Neighborhood design and energy saving in buildings
- m_a Development approval and mitigation

Climate mitigation strategy in Colombia seeks to address environmental and public health consequences stemming from global climate change through a variety of policy and planning interventions. Addressing **greenhouse gas (GHG)** emissions is a top priority for the nation in the interest of meeting the goal of a 51% reduction by 2030, a commitment made under the COP21 Paris Agreement. Policy interventions at the national, regional, and local levels have been implemented and demonstrated success in limiting greenhouse gas emissions in the past, though there is significant room for improvement. Colombia has also taken steps towards mitigating emissions through planning and development interventions by prioritizing connectivity and walkability in urban plans, increasing accessibility to and availability of greenspace, reducing and monitoring deforestation, and ensuring that planning and design standards which compensate for the emissions of GHGs are properly enforced through development approval processes (Figure 1). The following identifies specific pieces of legislation supporting these priorities and highlights areas with potential for improvement.

The following is an analysis of this set of laws through the lens of UN-Habitat’s “Law and Climate Change Toolkit,” focusing on the Planning for Mitigation subsection. Referenced legislation is featured in Appendix A. The toolkit analysis is complete for the review of laws, decrees, CONPES documents, plans, and documents related to climate mitigation. Some of the largest strengths of Colombian policies towards planning for mitigation are its attention to forestry, acknowledging the large implications of their many forests and its biodiversity; and its many policies and goals related to GHG emissions, clear goals in its reductions, and understanding of GHG mitigation in a variety of urban planning strategies. This report also highlights some of the gaps in Colombian policies in regard to planning for mitigation. The largest gaps are in its neighborhood design and energy saving in buildings strategies, and the mitigation of GHG emissions enforced through the development approval process.

Per the **Climate Change Law (2018)**, the following terms shall be defined as such:

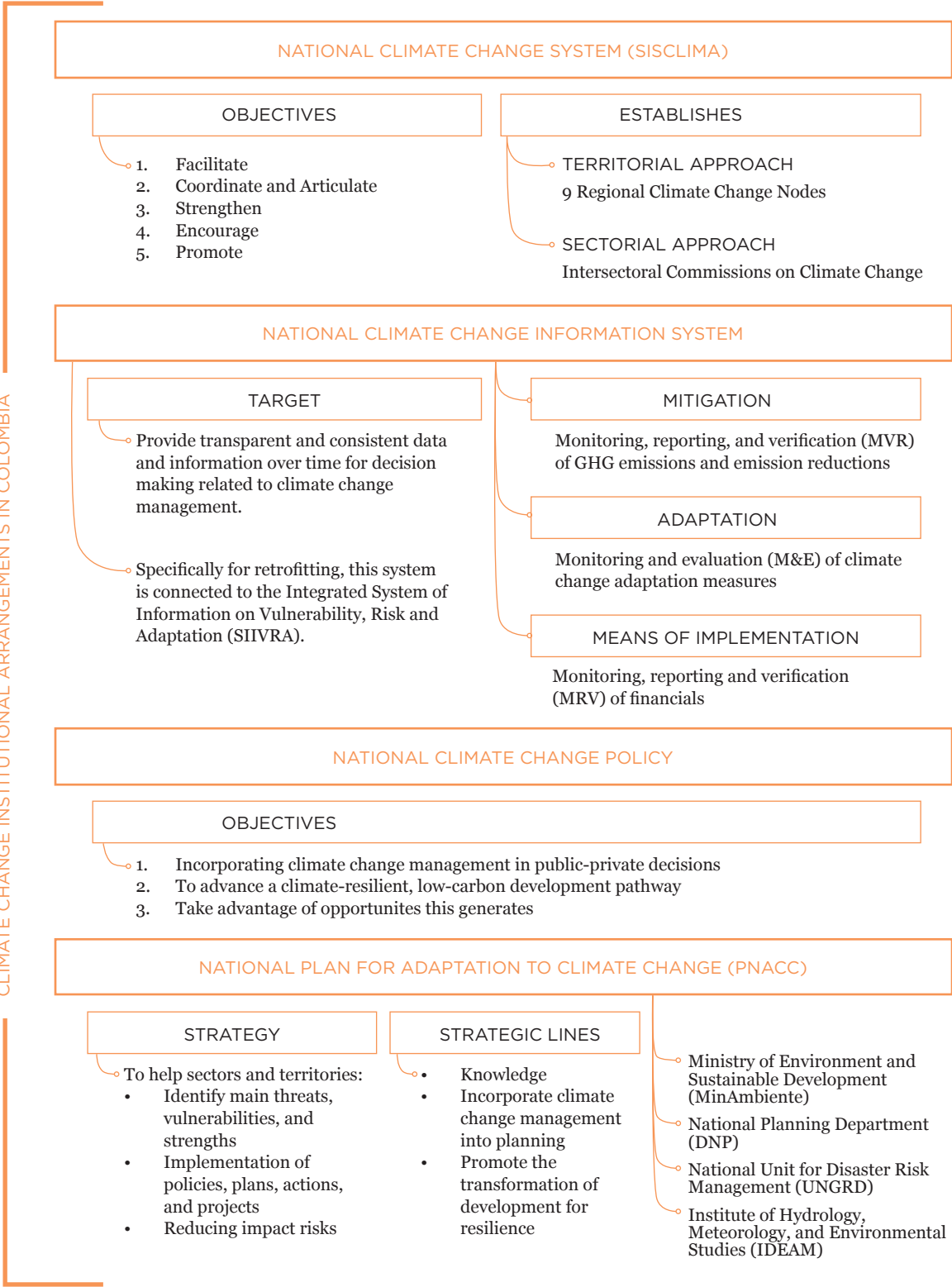


FIGURE 1 Most Relevant Institutional Arrangements for the Management of Climate Change Adaptation in Colombia

Source: Update NDC Colombia - 2020, pg. 13

Greenhouse Effect: It is the natural phenomenon by which the earth retains part of the solar energy, allowing it to maintain a temperature that makes possible the natural development of the living beings who inhabit it.¹

Greenhouse Gases (GHG): They are those gaseous components of the atmosphere, of natural or anthropogenic origin, that absorb and emit solar energy reflected by the surface of the earth, the atmosphere and clouds. The main greenhouse gases are carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and Sulfur Hexafluoride (SF₆).²

Situating GHG in Colombia, Figures 2-6 visualize carbon dioxide, nitrous oxide, and methane emissions on a per capita and per sector basis.

Greenhouse Gas Mitigation: Is the management that seeks to reduce the levels of greenhouse gas emissions in the atmosphere by limiting or reducing the sources of greenhouse gas emissions and increasing or improving the sinks and reserves of greenhouse gases. For the purposes of this law, climate change mitigation includes policies, programs, projects, incentives or disincentives and activities related to the Colombian Strategy for Low Carbon Development and the National REDD + Strategy (ENREDO +).³

04.1 URBAN PLANS AND GREENHOUSE GAS EMISSIONS

In 2015 Colombia, one of 189 countries, joined the Paris Agreement. Participation is facilitated through the country's Intended Nationally Determined Contribution (iNDC), which outlines Colombia's mitigation targets, adaptation targets, means of implementation, planning process and ambition. Since then, Colombia has submitted their updated NDC at the end of 2020. The country's updated NDC includes over 30 mitigation measures and a goal to reduce GHG emissions by 51% by 2030 (compared to its 20% reduction commitment in the original 2015 iNDC) and to be net-zero by 2050. Colombia is especially committed to its reductions because it

recognizes that it is highly vulnerable to the effects of climate change as a diverse geography and economy which are both dependent on the use of natural resources and climatic conditions.⁴ In 2010, Colombia produced an estimated 0.46% (or 224 Mton of CO₂eq) of global GHG emissions. Colombia's contribution to the global greenhouse gas emission has decreased since 2010, recorded at approximately 0.25% as of 2017 (Figure 7).

Forests are an extremely important factor for Colombia in its geography, economy, and mitigation efforts. 52% of Colombia's surface is forests, and the nation contains half of

¹ Ley 1931 de 2018, Title I, Article 3

² Ley 1931 de 2018, Title I, Article 3

³ Ley 1931 de 2018, Title I, Article 3

⁴ iNDC Colombia - 2015, pg. 1

the world’s moorlands.⁵ Further, deforestation is Colombia’s largest GHG contributor, at 16.68% of the nation’s GHG emissions (Figure 8). Taking these two facts into account, it is not surprising that Colombia focuses a lot of its climate change policies on its forests and biodiversity goals.

Colombia’s NDC Update (2020) acknowledges the importance of the country’s management of forest fires, its contribution to GHG emissions, and its heightened frequency and intensity as climate change progresses. The nation recognizes the need to strengthen its information management of GHG emissions caused by forest fires and states that risk management will be its first priority.⁶

In 2015 Colombia signed (and further endorsed in 2019), the Joint Declaration of Colombia with Norway, Germany and the United Kingdom on Reducing Deforestation and Sustainable Development (Republic of Colombia, the Kingdom of Norway, Federal Republic of Germany, United Kingdom of Great Britain and Northern Ireland, 2019). This declaration supports Colombia’s deforestation emissions reduction target of hitting a deforestation trend of 155,000 ha/year in 2022 and 100,000 ha/year in 2025 by the contribution to the country of up to \$366 million USD for these results in addition to policy milestones that address deforestation reduction.⁷

According to Colombia’s NDC Update (2020), the country expects to polish the information and data collection effort and regulate

the development of baseline and mitigation scenarios. It expects to only update mitigation scenarios and the NDC in correspondence to the Paris Agreement cycles. Each update will account for changes in factors that modify the projections and estimates from the baseline but will not use a dynamic baseline in its updates.⁸

On a global scale, the energy industry is the largest contributor to total greenhouse gas emissions.⁹ As a result, “governments have implemented reforms and policy changes to the power supply industry in an attempt to curb emissions and promote cleaner technology.¹⁰ Evidence suggests that in Colombia, “while simulation of carbon taxes shows important reductions of fossil-fueled power capacity, a feed-in tariff policy promotes clean technologies, though not significantly reducing use of fossil technologies. When applied simultaneously, policy has a greater impact on both emission reductions and the diffusion of clean technologies, while only increasing electricity prices slightly. Even when price-elasticity of demand is low, such policies may have a significant effect on the penetration of renewables and emissions.”¹¹ Greenhouse gas emissions by fuel type can be seen in Figures 9-10. Several developed and developing countries have already demonstrated success in implementing policies that increased the price of use of fossil-fuel technologies, relative to renewable energy sources.¹² However, the socioeconomic and geographic conditions require that emissions reduction policy must be specifically tailored to

each country’s unique assets and needs. In developing nations like Colombia for example, large-scale social inequity and poverty often pose economic barriers to affordability of fossil fuel-alternative resources.¹³

Law 1844 of 2017, *Ley Aprobatoria de Tratado* (Treaty-Approving Law), discusses greenhouse gas emission very broadly, on a national and international level through the Kyoto Protocol. During this discussion, it was decided that nations agreeing to the Protocol will approach greenhouse gas mitigation from a top-down to bottom-up approach; that is, each country will decide for themselves what is feasible for them to combat carbon output.¹⁴

The **Climate Change Law** also discusses GHG emissions broadly and establishes that the **CICC**

is responsible to, “generate and compile, according to definido by IDEAM, the necessary information inputs for the updating of the greenhouse gas inventories, or any other report arising from the UNFCCC, in accordance with the CICC, and report on the progress in the means of implementation in their sector with the support of their research and/or planning entities.”¹⁵

Colombia’s NDC Update (2020) states that at a national level, it still struggles with information gaps in regards to carbon pools and that require progress in coming years. It further states that Colombia recognizes biodiversity and ecosystem opportunities within urban areas for an integrated management of climate change approach. For the harvested wood products carbon pool and fire emissions, the NDC does not have an accounting rule.¹⁶

¹³ Cardenas et al., 2016

¹⁴ Treaty-Approving Law, II. Background of the Treaty Negotiation Process

¹⁵ Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Chapter II, Article 7

¹⁶ Update NDC Colombia - 2020, Section 4, pg. 37

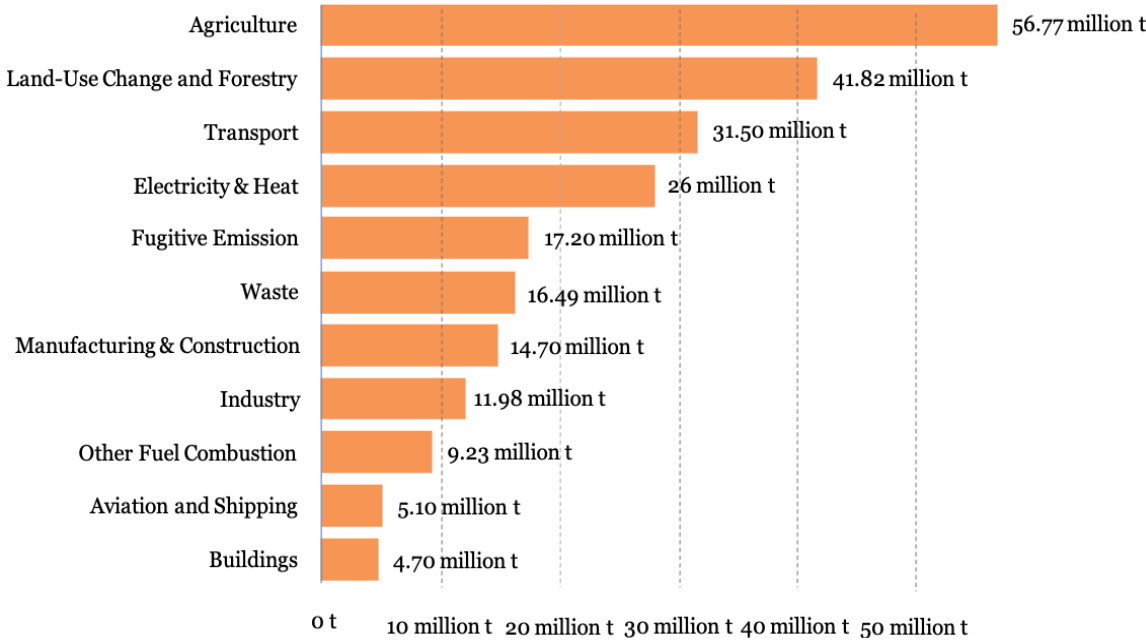


FIGURE 2 Greenhouse Gas Emissions by Sector

Source: CAIT Climate Data Explorer via. Climate Watch

⁵ CONPES 3886 de 2017, Executive Summary

⁶ Update NDC Colombia - 2020, Section 4, pg. 35

⁷ Update NDC Colombia - 2020, Section 4, pg. 35

⁸ Update NDC Colombia - 2020, Section 4, pg. 34

⁹ Cardenas et al., 2016

¹⁰ Cardenas et al., 2016

¹¹ Cardenas et al., 2016

¹² Cardenas et al., 2016

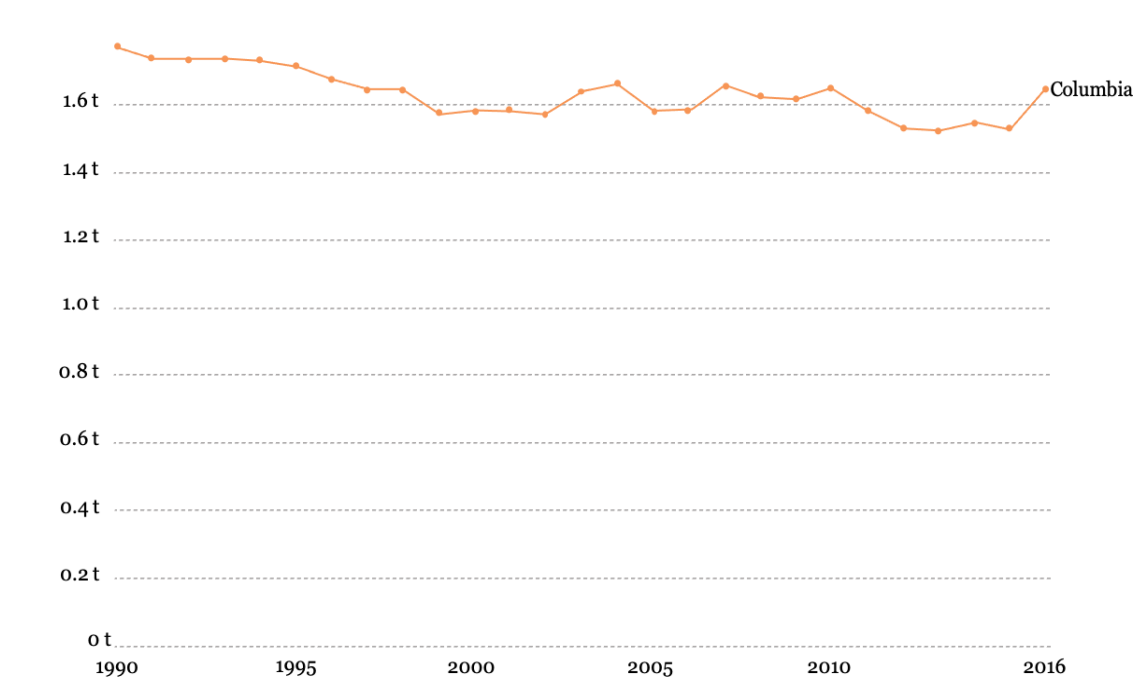


FIGURE 3 Per Capita Methane Emissions

Source: CAIT Climate Data Explorer via. Climate Watch

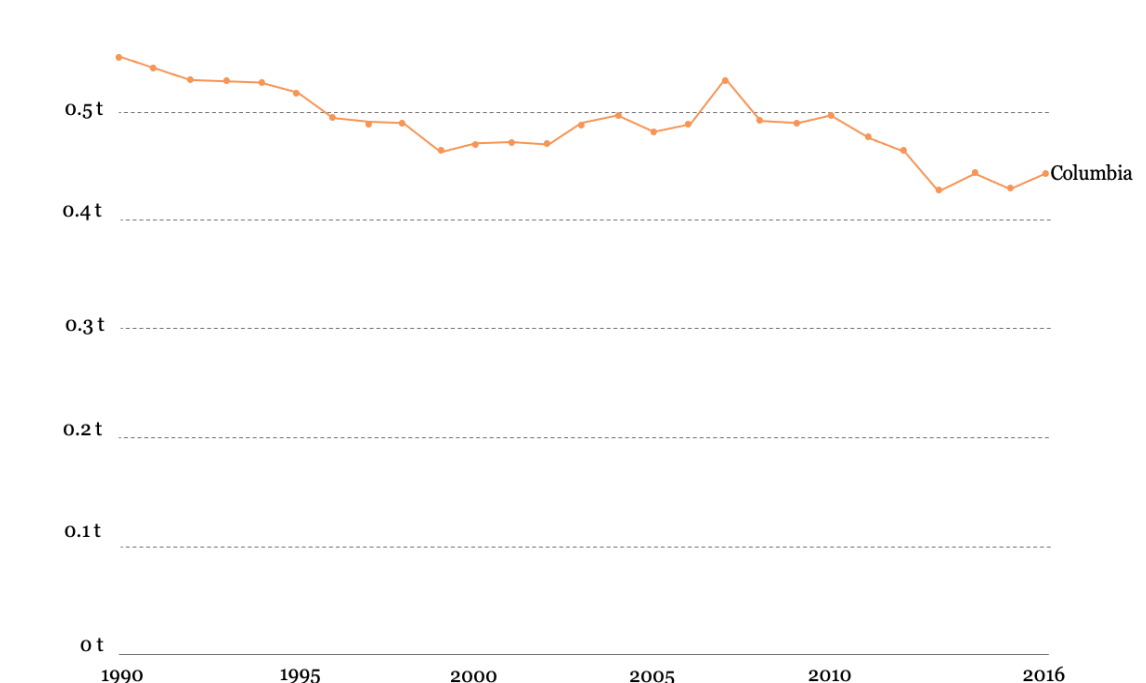


FIGURE 5 Per Capita Nitrous Oxide Emissions

Source: CAIT Climate Data Explorer via. Climate Watch

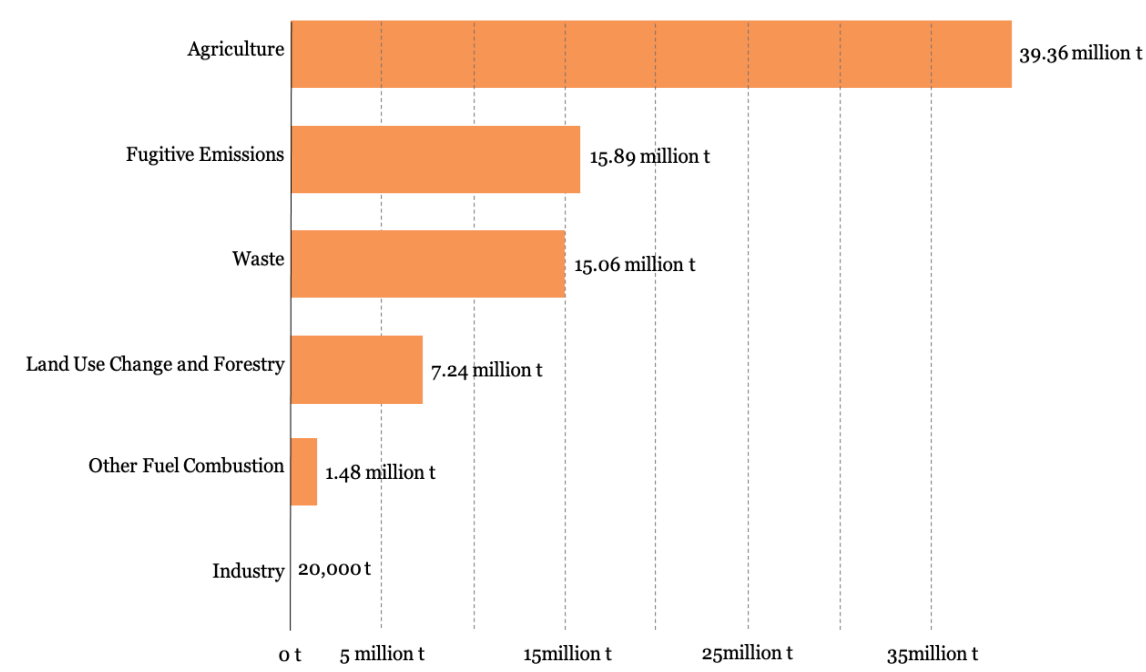


FIGURE 4 Methane Emissions by Sector

Source: CAIT Climate Data Explorer via. Climate Watch

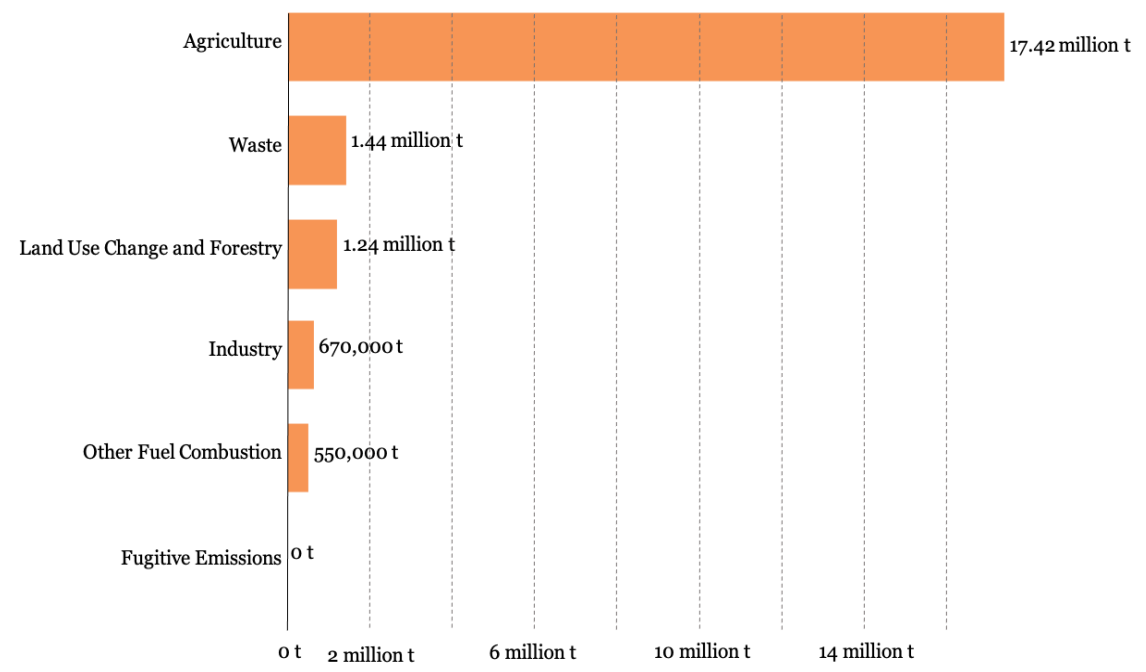


FIGURE 6 Nitrous Oxide Emissions by Sector

Source: CAIT Climate Data Explorer via. Climate Watch

The **Climate Change Law** does not explicitly connect carbon sinks to forestry, though it does establish relevant mechanisms. Policy and plan formulations are generated from instruments managed by the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), such as the National Forestry Information System (SNIF), the National Forest Inventory (IFN), and the Forest and carbon Monitoring System (SMBYC).¹⁷ Further, IDEAM will formulate official information through the SMBYC to contribute to the reduction of deforestation, fulfill UNFCCC commitments, and elaborate the Reference Levels of Forest Emissions (NRREFs).¹⁸

Similarly, the **General Environmental Law** does not explicitly recognize carbon sinks, but it establishes that one of the functions of the Regional

Autonomous Corporations is to evaluate, control and monitor renewable natural resources including the emission and gaseous substance or waste in any form, and any emissions that may cause damage to the normal sustainable development of renewable natural resources.¹⁹ These monitoring systems and mechanisms will help to estimate existing carbon sinks, even if these two laws do not explicitly express that use.

The **Climate Change Law**, the **General Environmental Law** and **Resolution 1517** have a strong focus on protecting forests and biodiversity and highlight their importance for national heritage, a strong economy, and a strong environment. Further, Resolution 1517 establishes the Manual for the Allocation of Compensation for Biodiversity Loss, which is mandatory for those using an

environmental license and for the **National Environmental Licensing Authority (ANLA)**.²⁰

The **Treaty-Approving Law** acknowledges that forests are carbon sinks and are vital to mitigating the carbon already in the atmosphere; however there is no exact estimation regarding the addition or even the existence of carbon sinks.²¹ The law does take from the Paris Agreement, which states that countries should conserve and enhance carbon sinks, including forests.²²

La Política Nacional de Cambio Climático (PNCC) (The National Climate Change Policy) outlines provisions for Colombia which assess emissions and develop mitigation measures according to the medium- and long-term development goals defined under the Nationally Determined Contribution (NDC),

a component of the 2015 Paris Agreement. Section 5 of the PNCC states that these development goals guide and enable “coordinating national, sectoral and territorial mitigation efforts. The defined goal is aligned with international goals to achieve the agreed level of warming (2°C) under a perspective of economic and social growth and international equity. The national medium-term low-carbon development goal incorporated in this policy corresponds to the progressive reduction of national greenhouse gas emissions by 20% (and up to 30% conditioned) with respect to projected emissions for the year 2030.”²³ The PNCC further expresses that due to the direct relationship between urban development and existing urban form and related regulations, resiliency planning and emissions assessments are designed to target the most influential

¹⁷ Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Article 26

¹⁸ Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Article 27

¹⁹ Ley 99 de 1993, Ley General Ambiental (General Environmental Law), Article 31 (12)

²⁰ Resolución 1517 de 2012, Article 1-2

²¹ Treaty-Approving Law, I. Explanatory Memorandum of the Bill

²² Treaty-Approving Law, III. Characterization of the Treaty:

²³ Política Nacional De Cambio Climático (The National Climate Change Policy), Section 5: General Objectives

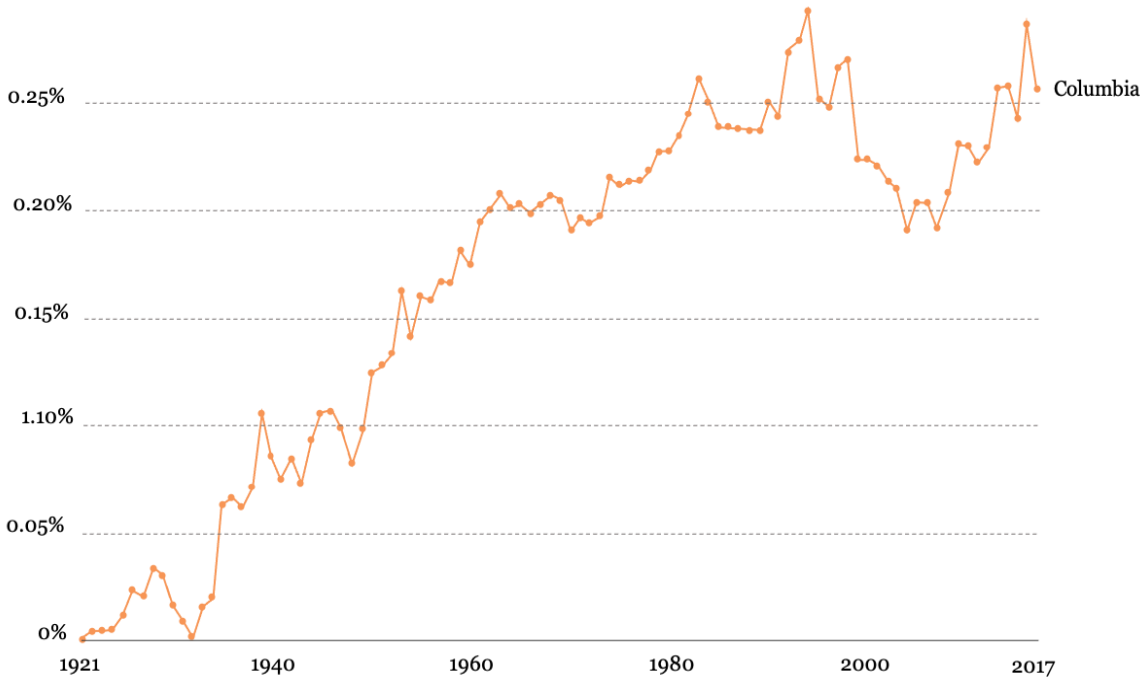


FIGURE 7 Annual Share of Global CO2 Emissions
Source: CAIT Climate Data Explorer via. Climate Watch

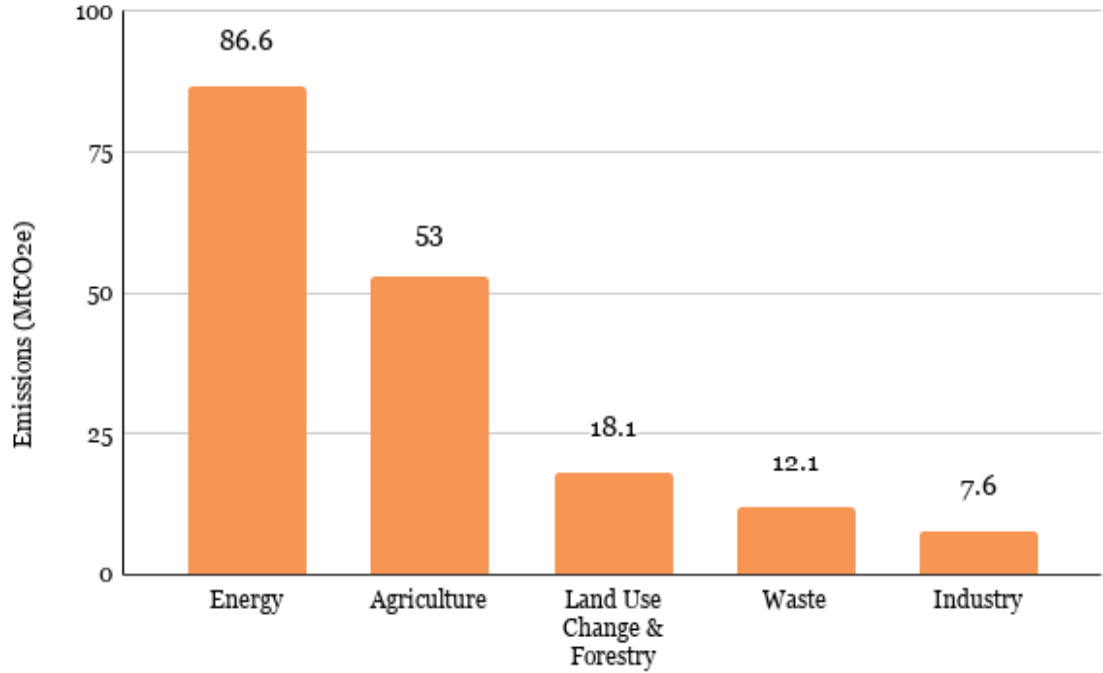


FIGURE 8 2010 GHG Emissions
Source: CAIT Climate Data Explorer via. Climate Watch

urban development bodies.²⁴ This process takes the form of “diagnosis of emissions and climate vulnerabilities of cities and the identification, evaluation and recommendation of the implementation of mitigation and adaptation measures in these bodies.”²⁵

CONPES 3886 (2017) identifies the conservation of carbon sinks as one of the three Payments for Environmental Services (PES) modalities to be focused on by the Ministry of Environment and Sustainable Development. The goal of this modality includes reducing GHG emissions, promoting healthy forests, to “generate guidelines for the promotion of a voluntary carbon market at the local level,” and to develop instruments to verify GHG emission reductions under the PES.²⁶

The transportation sector is

another significant contributor to total emissions for the nation of Colombia. According to a study of the country’s transport sector, CO₂ emissions projections were made for various scenarios spanning from 2010-2050.²⁷ In accordance with Colombia’s commitment to a 20% reduction in GHG emissions by 2013 under the COP21 NDC, the national government has begun to address transportation sector emissions.²⁸ Historically, many countries including Colombia have struggles to reduce emissions in the transport sector.²⁹ Similar to the challenges present in the energy sector, “high capital costs, rebound effects, the absence of comprehensive policies that consider these types of indirect effects, and the lack of international legally binding agreements to reduce GHGs have posed barriers to emissions assessments and reductions”.³⁰

Based on the aforementioned scenario projections, evidence would suggest that Colombia has the “potential to reduce the cumulative emissions by 8% and 18% under the BAU scenario through 2030 and 2050, respectively. Mitigation costs are high and imply annual capital costs that range from 0.5% to 4% of the national GDP. Gains in efficiency as well as synergy with other sector objectives might help justify some of the actions in financial terms.”³¹ However, from a policy standpoint, emissions reductions have proven to be a lower priority than other more pressing climate-related matters.³²

The **Treaty-Approving Law** lists projections on carbon emissions by 2030 depending on what scenarios change. There are ample tables, graphs, and charts that depict the projected trends. The law also includes what targets could look like if Colombia receives international help. The international assistance will only be available if Colombia reaches certain benchmarks in carbon sequestration, as laid out in the law.³³

CONPES 3700 (2011), *Políticas y Acciones sobre el Cambio Climático en Colombia (Policies and Actions on Climate Change in Colombia)*, includes projections provided by the IPCC (Intergovernmental Panel on Climate Change). Each scenario represents different assumptions that take into consideration climate, economic and social factors. There are also various other scenarios aside from climate

change that is included, such as sea level rise and greenhouse gas emissions by sector.³⁴ ENREDD+ also specifies reference scenarios as a result of deforestation at the national and subnational level.³⁵

There is no mention of requiring the production of different planning scenarios in estimating the carbon sink potential associated with each scenario. Colombia can be better prepared for implications of climate change if legislation included scenarios addressing carbon sink potential.

The **Climate Change Law** defines Colombia’s National Contributions to the UNFCCC as a commitment to reduce GHG emissions.³⁶ Articles 17-18 establish the **Comprehensive Sectoral Climate Change Management Plans (PIGCCS)** and the **Comprehensive Territorial Climate Change Management Plans (PIGCCT)** which are instruments for Ministries and Districts to identify, evaluate, guide, and implement GHG mitigation measures (Figure 11). Article 19 details that the National Government will establish guidelines for these plans; Municipalities and Districts are responsible for consulting them, and incorporate them within the Territorial Ordering Plans; and that public and private entities should consult these plans in accordance with their competencies.³⁷ These plans will be reviewed and updated in accordance with commitments made to the UNFCCC.³⁸ The PIGCCT alongside other subnational management plans related to climate change, act as a primary instrument for

24
PNCC, Section 6: Strategic Lines

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PNCC: Strategic Lines

26
CONPES 3886 de 2017, Pago por servicios ambientales, Policy Guidelines and National Pay-for-Performance Program, Section 5.3.1

27
Espinosa Valderrama et al., 2019

28
Espinosa Valderrama et al., 2019

29
Espinosa Valderrama et al., 2019

30
Espinosa Valderrama et al., 2019

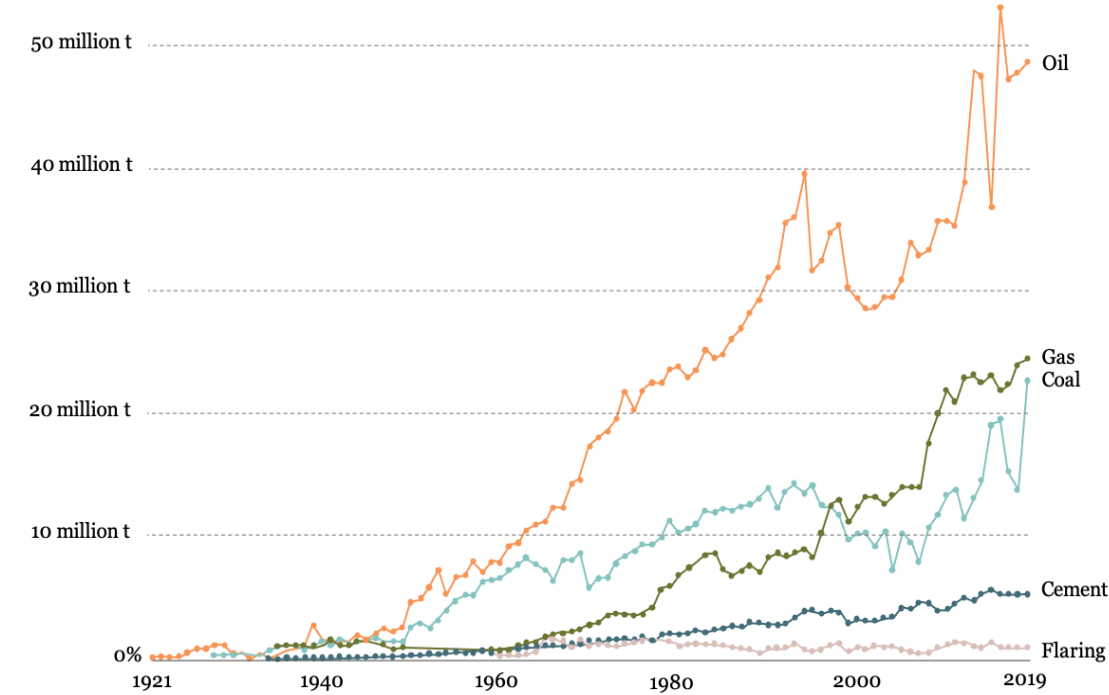


FIGURE 9 CO2 Emissions by Fuel
Source: CAIT Climate Data Explorer via. Climate Watch

31
Espinosa Valderrama et al., 2019

32
Espinosa Valderrama et al., 2019

33
Treaty-Approving Law, IV. Importance for Colombia

34
Policies and Actions on Climate Change in Colombia, I. Introduction “Scientific Evidence and GHG Emissions Track Record”

35
Policies and Actions on Climate Change in Colombia, III Objectives

36
Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Article 15

37
Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Article 17-19

38
Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Article 20

carrying out NDC goals. Between 2015 and 2020, territories have shown “significant progress in the planning and implementation” towards realizing mitigation and adaptation measures.³⁹

The **Treaty-Approving Law** includes implementation strategies and benchmarks to re-evaluate Colombia’s progress in decreasing greenhouse gas emissions. These reassessments occur every 5 years, which helps to ensure that progress is being made. Progress will also be accounted for publicly, which helps to keep accountability and support.⁴⁰ The law also lists many different plans at all levels of government to assist in mitigation carbon output; 12 territorial plans, 8 formulations, and 2 sectoral plans for climate change adaptation are currently being used.⁴¹

The Policies and Actions on Climate Change in Colombia establishes the ECDC (Colombian Low Carbon

Development Strategy) to allow the country to identify greenhouse gas mitigation potential and what measures to take while considering economic growth and output.⁴² Additionally, national policies and interventions developed through this document will be evaluated periodically and systematically throughout its implementation plan. This allows for various plans to be catered specifically for ever-changing factors and scenarios to help ensure that the plan can be carried out with maximum efficacy.⁴³

While specific local, and sub-regional climate strategies are not directly mentioned, the PNCC does establish provisions that identify a framework for the long- and medium- term green growth objectives previously mentioned. The objectives outlined in this framework reflect the goals of the National Development Plan

(NDP) 2014-2018. In summary, the NDP aims to (i) [move] towards sustainable and low-carbon growth and low-carbon growth; (ii) protect and ensure the sustainable use of natural capital and improve environmental quality and governance quality; (iii) achieve resilient growth and reduce vulnerability to disaster risks and climate change.”⁴⁴

The **System of Cities Policy** requests that the Ministry of Environment and Sustainable Development establish the main ecological structure for environmental planning and its uses to be utilized as a national reference to better help planning across plans.⁴⁵

The **Climate Change Law** establishes that Departments are responsible for implementing GHG mitigation measures in, “transport and infrastructure, agriculture development, energy, housing and sanitation, as well as trade, industry and tourism, all in accordance with their competencies and according to the guidelines of the PIGCCS defined by the respective ministries.”⁴⁶ The law further establishes that municipalities and districts will do the same.⁴⁷ Article 12 of the *Climate Change Law* encourages the promotion of renewable energy and energy efficiency as included in *Law 1715 of 2014*, as a way to help mitigate GHGs, to be included in national, department, district and municipal development plans.⁴⁸ The *Climate Change Law* states that National Communications shall be used as means for climate change management, national GHG inventories, biennial update

reports (BUR) and all other reports and reports that replace them.⁴⁹ Chapter II: Information Systems for Climate Change of the *Climate Change Law*, outlines several tools and systems to be used to monitor and measure GHG emissions, such as the Forest and Carbon Monitoring System (SMBYC), as established in Article 27. Article 26 of this chapter identifies the National Registry for the Reduction of Greenhouse Gas Emissions (RENARE) as a key instrument for managing information on GHG mitigation and is a tool against which progress can be assessed. Article 31 of the *Climate Change Law* establishes that an annual report will be given by the Ministry of Environment and Sustainable Development summarizing the National Program of Transable Quotas for the Emission of Greenhouse Gases (PNCTE). It also states that the Ministry of Environment and Sustainable Development will be charged with the regulation of measuring GHG emissions, monitoring compliance with efforts, and that GHG emissions, reductions, and removals need to be verified by a third party.⁵⁰

The Policies and Actions on Climate Change in Colombia includes the PNACC , which is the National Plan for Adaptation to Climate Change. The PNACC initiates a systematic way of recording the progress of plans made through it. It also consolidates conceptual frameworks; identifies design, implementation strategies, main climate risks, adaptation strategies at the national level, and other factors that need to be prioritized on the national level.⁵¹

39 Update NDC Colombia - 2020, pg. 6

40 Treaty-Approving Law, III. Characterization of the Treaty

41 Treaty-Approving Law, IV. Importance for Colombia

42 CONPES 2700 de 2011, II. Diagnosis: “Colombian Low Carbon Development Strategy – ECDBC”

43 CONPES 2700 de 2011, V. Guidelines

44 Política Nacional De Cambio Climático (The National Climate Change Policy), Section 4: Conceptual Framework of the Policy

45 CONPES 3819 de 2014, Sistema de Ciudades (System of Cities Policy), Section VIII

46 Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Title II, Article 8, Paragraph 2

47 Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Title II, Article 9, Paragraph 1

48 Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Title II, Article 12

49 Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Title III, Article 14

50 Ley 1931 de 2018, Ley de Cambio Climático (Climate Change Law), Title IV, Article 31

51 CONPES 2700 de 2011, III. Objectives: “National Plan for Adaptation to Climate Change – PNACC”

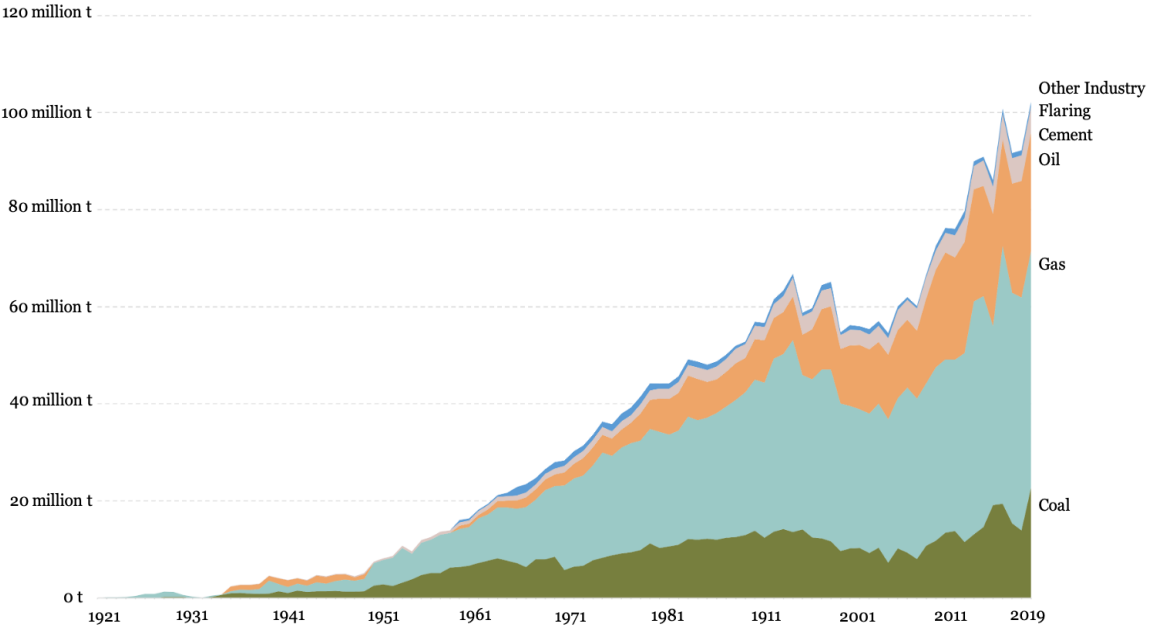


FIGURE 10 CO2 Emissions by Fuel Type
Source: CAIT Climate Data Explorer via. Climate Watch

04.2 URBAN FORM AND REDUCTION OF GREENHOUSE GAS EMISSIONS FROM TRANSPORTATION AND INFRASTRUCTURE



Source: <https://www.minambiente.gov.co/index.php/gestion-territorial-de-cambio-climatico/aproximacion-a-territorio-planos-territoriales-de-cambio-climatico>

CONPES 3819 (System of Cities Policy) introduces a System of Cities for Colombia and through its analysis, concludes that Colombia is a country of cities, though does not yet reap the benefits of urbanization and its competitiveness and sustainability are reduced. This is largely due to an absent decentralization process to recognize differences and synergies; and a lack of sufficient policies to endorse clarity and coordination among cities.⁵²

CONPES 3718 (2012), Política nacional de espacio público (National Public Space Policy) identifies several quantitative and qualitative deficits in public space and problem areas pertaining to public space in Colombia. These include lack of provisions with clear standards for public space. Several case studies of interventions are represented in CONPES 3718, however, regulations or laws for Colombia are not mentioned.

The **System of Cities Policy** highlights that physical connectivity is insufficient between cities and that there is significant lag in national road infrastructure. Not only is the road network incomplete, it is also disjointed without a clear territorial planning goal.⁵³ This policy proposes Integrated Regional Transportation Systems to improve connectivity between municipalities.⁵⁴

Law 1811 of 2016, Ley de Uso de la Bicicleta (The Law of Bicycle Usage), includes many provisions promoting walkability and cycling. To encourage cycling, bike racks are encouraged to support cyclists.⁵⁵ The Integrated Mass Transportation Systems, Integrated Public Transportation Systems, Strategic Public Transportation Systems and Integrated Regional Transportation Systems will work to establish adequate parking formations for bicycles in order to allow cyclists to seamlessly park and connect with different forms of transit. This increases navigation and connectivity.⁵⁶ The law also seeks to guarantee the safety and comfort of pedestrians within the system, although it is unspecified as what tactics may be used.⁵⁷ The law also stipulates that if there are less than 120 parking spots for cars, there needs to be at last 12 spaces for bicycles within the same parking lot. These spots need to be created and available within 2 years of the creation of the facility.⁵⁸ Lastly, the National Road Safety Plan that is produced by the national government is to have provisions encouraging bicycle use overall.⁵⁹

Decree 1077 of 2015, Sector Vivienda, Ciudad y Territorio (Housing, City and Territory Sector), quotes from Article 1 in Decree 3500 of 2007, which states that the creation of pedestrian-accessible areas are necessary

⁵² CONPES 3819, Sistema de Ciudades (System of Cities Policy), Section IV.A

⁵³ CONPES 3819, Sistema de Ciudades (System of Cities Policy), Section IV.B

⁵⁴ CONPES 3819, Sistema de Ciudades (System of Cities Policy), Section VI.A

⁵⁵ The Law of Bicycle Usage, Article 4 Paragraph 4

⁵⁶ The Law of Bicycle Usage, Article 4

⁵⁷ The Law of Bicycle Usage, Article 4 Paragraph 1

⁵⁸ The Law of Bicycle Usage, Article 6

⁵⁹ The Law of Bicycle Usage, Article 16 Paragraph 1

and that they are to be away from other forms of motorized traffic.⁶⁰ The decree itself mentions that bike paths are an integral part of the urban fabric. They are to be independent and away from the sidewalk and roadway. The decree stipulates the minimum width of bike lanes, which is 1.2m in each direction. Bike lanes should be at least 0.6m away from lanes of motorized traffic and from other obstacles.⁶¹ This decree also quotes from Article 3 in *Decreto 798 de 2010*, which states that bike paths are to be specifically set aside from other forms of traffic lanes and that these lanes should only be used for cyclists.⁶²

TOD NAMA (Transit-Oriented Development Nationally Appropriate Mitigation Actions)’s National Policy Roadmap for Colombia mentions provisions promoting non-vehicular connectivity by integrating access to sustainable transportation options such as designating walking paths and cycling lanes.⁶³ The *Findings* section of the Roadmap also provides examples of existing policies that the new proposed policy is fully aligned with, and to support the idea that this is a priority for Colombia.⁶⁴

Law 1955 of 2019, Pacto por Colombia, Pacto por la Equidad (Pact for Colombia, Pact for Equity) also discusses the prioritization of non-motorized transportation and mobility for all land use plans adopted by municipalities. These are classified as sustainable and safe mobility plans and prioritize modes of transportation such as walking,

cycling, and public transit using low or zero-emission energy and technology.⁶⁵

Similarly, within the scope of Vision Colombia 2019, **CONPES 3718** gives priority to pedestrian and non-motorized transportation options under the ‘Building Friendly Cities’ strategy. Building Friendly Cities “proposed the design of strategies to guarantee in cities: (i) improve the quality of life of its inhabitants, (ii) adapt the spaces where citizens live and interact, (iii) build friendlier cities, ordered under a planned urban development model, with adequate public space, and with inclusion towards the disabled population, (iv) articulate all mobility components such as urban mass or collective transportation, private transportation, bicycle paths, pedestrian ways, alternative systems.”⁶⁶

The Housing, City and Territory Sector specifies how sidewalks are to be built to promote pedestrian-friendliness and walkability. The parameters are that sidewalks should be leveled, continuous, and free of obstacles. Hard, non-slip surfaces are to be used as paving.⁶⁷ The decree also stipulates the requirements needed to ensure a continuous sidewalk surface in the event of a change in level roadway crossing, such as tunnels, stepped baths, and bridges.⁶⁸ If sidewalks are included in a motorized vehicle lane, then it is required that different textures are to be used to protect pedestrians and delineate the sidewalk from traffic.⁶⁹ The decree goes into great detail on sidewalk standards as well as engineering standards.⁷⁰

The “Building Friendly Cities” strategy referenced in **Law 1955 of 2019, Pacto por Colombia, Pacto por la Equidad (Pact for Colombia, Pact for Equity)**, also promotes connectivity through plot design rules for a walkable streetscape.

The proposed policy changes within the **TOD NAMA’s** Roadmap promote accessibility to housing services, employment, and amenities and services by seeking to develop neighborhoods in close proximity to public transit. Under this framework, neighborhood design also prioritizes accessibility to public and greenspace, mixed-use and low-impact development, and calls for a reduction of inefficient passenger-oriented transport to reduce emissions and overall environmental impact.⁷¹

The **General Environmental Law** establishes one of the functions of the Regional Autonomous Corporations is

to establish general norms and maximum densities for suburban and rural areas to adhere to, in order to help protect the environment and natural resources.⁷² However, there are no provisions that define or help outline what optimal urban density might be.

The **System of Cities Policy** establishes the System of Cities which uses four criteria:

1. Functional relationships among the municipalities
2. Population size
3. Political-administrative function of the municipalities
4. Strategic importance of the municipalities in the regions

These criteria are used to systematize 56 cities, and these include density indicators, however defining an optimal urban density, or promoting it, is not a provision of the System of Cities.

04.3 GREEN SPACES FOR ENVIRONMENTAL AND CLIMATE SERVICES

The **General Environmental Law** establishes that one of the functions of the Ministry of the Environment is to manage and protect the areas of the National Natural Park System.⁷³ Further, the law establishes biodiversity encouragement and requirements. While there is a heavy emphasis on protecting forests and their biodiversity in various ways, it does not establish minimum standards for green spaces, nor have a focus

on urban green spaces.

CONPES 3919 (2018), Política Nacional de Edificaciones Sostenibles (National Sustainable Building Policy) specifies Colombia’s goal of having 10m² of green space per inhabitant. More so, the broader goal is to have 15m² of green space per inhabitant. Currently, Colombia has an average of 2.6m² green space per resident.⁷⁴

⁶⁰ Housing, City and Territory Sector, Pedestrian Circulation Road

⁶¹ Housing, City and Territory Sector, Article 2.2.3.5.2.3

⁶² Housing, City and Territory Sector

⁶³ TOD NAMA National Policy Roadmap for Colombia, Findings

⁶⁴ TOD NAMA National Policy Roadmap for Colombia, Findings

⁶⁵ Pact for Equity, Subsection 5, Article 1

⁶⁶ National Public Space Policy, Introduction

⁶⁷ Housing, City and Territory Sector, Section 1, 1.1

⁶⁸ Housing, City and Territory Sector, Section 1, 1.2

⁶⁹ Housing, City and Territory Sector, Section 1, 1.6

⁷⁰ Housing, City and Territory Sector, Section 1, 1.1-18; Article 2.2.3.5.2.2.2

⁷¹ TOD NAMA National Policy Roadmap for Colombia, Introduction

⁷² Ley 99 de 1993, Ley General Ambiental (General Environmental Law), Article 31 (31)

⁷³ Ley 99 de 1993, Ley General Ambiental (General Environmental Law), Article 5

⁷⁴ National Sustainable Building Policy, IV: Diagnostics

CONPES 3718, *Política nacional de espacio público (National Public Space Policy)* references an EPE index of 15m² of public space, including green areas, parks, plazas, and squares per inhabitant in Colombia.⁷⁵ This standard, established by

Decree 1504 of 1998, *Ley de Ordenación del Territorio (Land Use Management Law)*, was designed “For purposes of guaranteeing the planning and management of public space in the POTs, and fundamentally to monitor the quantitative and qualitative deficit of public space in the cities.”⁷⁶

CONPES 3718, *Política nacional de espacio público (National Public Space Policy)*, does not include provisions or regulations pertaining to the distribution of greenspace across urban areas however, the policy does recognize this as a deficit and that access to greenspace and open space in the denser urban areas is limited.

Decree 1504 of 1998, *Ley de Ordenación del Territorio (Land Use Management Law)*, addresses this deficit and outlines regulations for proper distribution of greenspace in Colombia in the form of guidelines for regulating public space in land management

plans. Chapter 2 of the policy states that “the creation of the general inventory of the constituent elements of the public space in the urban area...” and “the definition of the coverage of public space per inhabitant and the qualitative and quantitative deficit, existing and projected” should be considered in the regulation of public space to best meet community needs.⁷⁷

The **System of Cities Policy** does not specifically call for the distribution of green spaces, but does recommend the implementation of public-private partnerships to implement and upkeep public spaces and urban attractions in the Cities System.⁷⁸

While the various laws and regulations do not include language requiring green areas and water bodies Parques del Río, a current project at the Medellín River can act as a model for the integration of green and blue spaces. Over 71,000m of public space and 2,600 new trees with sidewalks, playgrounds, and picnic areas. One of the goals of the project is to have the park area be owned by the people, in usage and in presence.⁷⁹ The completion of Parques del Río allows residents to cross the Medellín River on foot or by bicycle, connecting the city center to the periphery.⁸⁰

04.4 NEIGHBORHOOD DESIGN AND ENERGY SAVING IN BUILDINGS

Resolution 549 of 2015 establishes the following definitions:⁸⁵

Sustainable Construction: Sustainable construction is understood as the set of passive and active measures, in the design and construction of buildings, that make it possible to achieve the minimum percentages of water and energy savings specified in this resolution, aimed at improving the quality of life of its inhabitants and the exercise of environmentally and socially responsible actions.

Active Measures: These include the use of mechanical and/or electrical systems to create comfortable conditions inside buildings, such as boilers and air conditioning, mechanical ventilation, electrical lighting, among others.

Passive Measures: These are measures that are incorporated into the architectural design of buildings and seek to take advantage of the environmental conditions of the surroundings, maximizing the sources of thermal control, ventilation and energy reduction to create comfortable conditions for the occupants. They do not involve mechanical or electrical systems.

Passive strategies consider climate, location, landscape, orientation, shape, solar shading, material selection, thermal mass, insulation, interior designing, and the location of openings to manage solar access, daylighting, and ventilation.

While this section focuses on assessing some passive design strategies for buildings to save energy, **Resolution 1988 of 2017** includes actions and measures to develop the **Program of Rational and Efficient Use of Energy (PROURE)**, including energy efficiency in lighting, exhaust fans, sustainable construction, and improved wood stoves. This also includes an overall 2022 (5 years) energy savings target in the residential sector of .73%.⁸¹

Resolution 549 also includes measures for both passive and active sustainable construction including minimum percentages

of water and energy savings. For active measures, contractors need to submit a self-declaration of savings percentages to their respective utility company. Passive measures require the project designer/architect to certify under oath the application of measures aimed at achieving the minimum savings percentages.⁸²

Resolution 1988 of 2017 resolves that requests concerning energy efficiency to opt for the exclusion of Sales Tax (IVA) should be presented before the National Authority of Environmental Licences (ANLA) and must include the measure of use of thermal paints and other means of environmental

⁷⁵ National Public Space Policy, Section 3.b. Effective Public Space

⁷⁶ National Public Space Policy, Section 3.b. Effective Public Space

⁷⁷ Land Use Management Law, Chapter 2, Article 8

⁷⁸ CONPES 3819, Sistema de Ciudades (System of Cities Policy), Section VIII

⁷⁹ Mercado, 2019

⁸⁰ Mercado, 2019

⁸¹ Resolución 1988 de 2017, Article 2

⁸² Resolución 549 de 2015 (Resolution 549), Chapter 1, Article 2

conditioning through passive design for buildings.⁸³ While they do not give guidelines on where or when to use these thermal paints, it is acknowledged that they should be an action item.

The **National Sustainable Building Policy** includes requirements for sustainable building development. These guidelines are an inclusive

planning process; equity and accessibility components; location components; mobility components; environmental management and resilience; efficient use of water; efficient use of energy; adequate management of materials and resources; and determinants of indoor environmental quality. Here, location and climate factors are included. Building orientation is considered here as well.⁸⁴

04.5 DEVELOPMENT APPROVAL AND MITIGATION

The **General Environmental Law** states that decision-making for construction of “works and activities that significantly affect the natural or artificial environment” will be primarily guided by environmental impact studies.⁸⁶

The **General Environmental Law** establishes that one of the functions of the Ministry of the Environment is to “issue and update the zoning statute for the proper use of the territory for its proper ordering and national regulations on land use with regard to its environmental aspects and set the general guidelines for the ordering and management of hydrographic basins and other areas of special handling.”⁸⁷

Law 1715 of 2014, Ley de Fuentes de Energía no Convencionales (Law of Non-Conventional Sources of Energy), puts in place the approval process of payment exemptions that is overseen by the

Ministry of Mines and Energy, or any other entities that have the authority and power to oversee processes such as these.⁸⁸

The **PNCC** broadly alludes to regulations linking the development approval process to legally approved urban plans and zoning regulations at the local level. Section 8 of the Climate Plan discusses the formulation and administration of comprehensive territorial climate change management plans. According to the PNCC, territorial climate plans are to be designed in coordination with existing local development planning instruments and under the guidelines of the Ministry of Environment and Sustainable Development.”⁸⁹

The **PNCC** also addresses the importance of planning instruments at the territorial level being incorporated into territorial reference plans to best assess emission sources and sites highly susceptible to exposure,

“vulnerability of agricultural producers and land adaptation infrastructure to priority climate hazards for the territory, and an identification and evaluation of individual and joint adaptation and mitigation measures in the short, medium and long term for the corresponding decision-makers.”⁹⁰

The **National Sustainable Building Policy** specifies the various incentives plans and tax exemptions that are available to developers if they are meeting what LEED, EDGE, HWE, and SAC stipulate in their sustainable development outlines and regulations. While there are incentives in place, developers still have to pay out of pocket, to some degree, for their developments. Credits are applied for developers who have certain certifications. There are also incentives in place for rural housing to implement and secure the acquisition of rural land.⁹¹

Decree 1504 of 1998, Ley de Ordenación del Territorio (Land Use Management Law), offers provisions granting municipalities the power to issue a license and fee to developers requesting to develop on land previously classified as public space or having beneficial use to the public. A feasibility study and environmental impact assessment must be conducted prior to the approval of said development in addition to an evaluation of the consistency of the works with land use plans and the instruments that develop them.⁹²

The **Law of Non-Conventional Sources of Energy** discusses how different sectors under **PROURE**, when implementing specific objectives, should contain a list of measures and instruments. This is to track the implementation based on certain objectives that are found under PROURE.⁹³ The agreements between developers and PROURE are to be binding in regards to energy efficiency and demand response, and can be changed at any time.⁹⁴

Section 9: Monitoring and Evaluation of the **PNCC** provides a framework for measuring and evaluating the success of the goals outlined in the National Climate Change Policy. To do so, each actor is required to partake in all of the following steps and provide necessary information and reports pertaining to growth and development⁹⁵:

1. *A report on the national inventory of anthropogenic emissions by sources and anthropogenic removals by sinks of greenhouse gases [...];*⁹⁶
2. *Information necessary to monitor progress in the implementation of and compliance with its nationally determined commitment [...]. Each Party should also provide information relating to climate change impacts and adaptation efforts under Article 7, as appropriate. [...]*⁹⁷
3. *Developing country Parties should provide information on the financial, technology transfer and capacity-*

90
PNCC, Section 6: Strategic Lines

91
National Sustainable Building Policy, 5.3.3

92
Land Use Management Law, Chapter 3, Article 20

93
Law of Non-Conventional Sources of Energy, Article 28a

94
Law of Non-Conventional Sources of Energy, Article 28b

95
PNCC, Section 9: Monitoring and Evaluation

96
PNCC Section 9: Monitoring and Evaluation

97
PNCC, Section 9: Monitoring and Evaluation

83
Resolución 1988 de 2017, Article 2, Paragraph 4

84
National Sustainable Building Policy, 3.1: Buildings and Sustainable Development

85
Resolución 549 de 2015 (Resolution 549), Chapter 2, Article 7

86
Ley 99 de 1993, Ley General Ambiental (General Environmental Law), Article 1

87
Ley 99 de 1993, Ley General Ambiental (General Environmental Law), Article 5

88
Law of Non-Conventional Sources of Energy, Article 13

89
PNCC, Section 8: Institutional Articulation Structure

*building support requested and received [...]*⁹⁸

4. *The information communicated by each Party as requested in paragraphs 7 and 9 of this Article shall be subject to technical review by experts in accordance with decision 1/CP.21.*⁹⁹

Information gathered during this process should be used to influence Colombia’s **Nationally Determined Contribution (NDC)** report, which must be updated every five years, as directed by the Paris Agreement.¹⁰⁰

CONPES 3718, *Política nacional de espacio público (National Public Space Policy)*, also includes mechanisms for monitoring and controlling public space in territorial entities.¹⁰¹ Respective evaluation tools for their relevant domains are developed by the MVCT, and the Ministry of Culture.¹⁰²

RECOMMENDATIONS

While the laws, decrees, and policies discussed above are extensive, there is room for improvement to allow Colombia to be even more climate change ready.

One of the most prominent areas of improvement would be to include various scenarios to estimate the potential of impacts on climate change based on the availability of carbon sinks. As Colombia has increased their commitment to reduce greenhouse gas emissions by 51% since 2015, the reservoir of carbon sinks is more vital for the nation to be on track to reach this goal. Carbon sinks can be defined as any green areas that have the ability to sequester carbon, such as urban trees, forests, and parks. Colombia can greatly benefit from determining how the nation’s carbon output can decrease based on the amount of carbon sinks available. As mentioned previously, Colombia noted in its NDC Update (2020) that at a national level it struggles with information gaps in regard to carbon pools that require progress in coming years. This information would support the modeling of scenario- and sector-specific emissions projections and offer an indication of the level of sequestration necessary to meet the emissions reduction goal of 51%. While additional green spaces are always encouraged, these scenarios would assist in determining what the optimal amount of carbon sinks would be when considering the availability of urban space, resources, and

capacity to create these spaces. Further, Colombia recognizes the opportunity within urban areas for an integrated management of climate change approach through biodiversity and ecosystem services, that while recognized, have yet to be implemented.

Another area of improvement would be to institute laws that mandate the assessment of greenhouse gas emissions associated with developments found in urban plans. While Colombia tracks the emission of greenhouse gas by type, sector, and per capita as seen in the various figures above, there are no provisions mandating that emissions from development be tracked on a standardized timeline or the explicit greenhouse gases that should be monitored. Uniformity in data collection would assist in creating a foundation that can be used for empirical comparisons as well as possibly assisting in applying for grants and funds to further mitigate carbon output. These mandates can also assist communities in appropriately planning for how Colombia can mitigate carbon emissions given their current conditions and capacity.

The next area improvement would be to plan existing transportation infrastructure around areas of urban density to allow populations to access the greater regional area. There are many benefits in being able to access transit; amenities, opportunities, and employment are made available to those that

⁹⁸ PNCC, Section 9: Monitoring and Evaluation

⁹⁹ PNCC, Section 9: Monitoring and Evaluation

¹⁰⁰ PNCC Section 9: Monitoring and Evaluation

¹⁰¹ National Public Space Policy, Section: General Objectives

¹⁰² CONPES 3718, Section 5: General Objectives

can use transit. Not only are residents able to get around within their own town, but they are able to cross jurisdictional boundaries and reach other opportunities that are not available in their community. Creating transit infrastructure allows for greater connectivity between people, goods, and ideas. Though regional transit may be hard to implement, urban plans should still weave in the possibility and the benefits of transit at any scale. Transit should be considered in areas that have the space and the greatest potential of usage and benefit, which would look different for every community.

Another area of improvement would be to create mandates requiring the connection of green spaces such as parks and urban forests to blue spaces, like waterways, ponds and rivers. Again, Colombia has many policies regarding its forestry protection, use, and management, but little that discusses urban forestry, or an integration of urban life into the forests that make up half the country. Having provisions that require this connectivity can create many benefits. Cities and communities will have a standard to follow when implementing these types of spaces, creating greater regional cohesion and continuity. Greenbelts can be developed to encourage sustainable and proper usage of these spaces, which would increase green areas. There are many health benefits to increasing the access to green and blue areas. These benefits include greater opportunities for physical fitness, mental and spiritual wellness, as well as access to nature areas.

A number of policies aim to regulate neighborhood design principles to achieve energy savings in buildings, though the majority of the policies target active design measures or more generic strategies such as stating a need for “sustainable construction.” An area for improvement is for policies that make provisions similar to those recommended in the toolkit, such as neighborhood plans that consider wind and sun direction when deciding the orientation and layout of the streets; consideration of thermal properties of urban surfaces (specifically recognizing application of thermal properties, such as reducing the urban heat island effect, or a need for high-albedo roof surfaces); and regulation of plot design to achieve optimal orientation of buildings.

The last area of opportunity that Colombia can benefit from would be to create a system where developers of greenhouse gas mitigation initiatives can be held accountable for noncompliance at the time of the development’s approval process. As we have seen, many of the laws, legislations, and decrees encourage the development of green energy development. These laws also allow the space of tax exemptions and other subsidies provided by the government to encourage green energy development. Adding systems in place to keep these developments accountable and to ensure compliance would greatly bolster the rate of green energy development, even possibly closing the loop in the approval process.

05

ECONOMIC AND FINANCIAL INSTRUMENTS

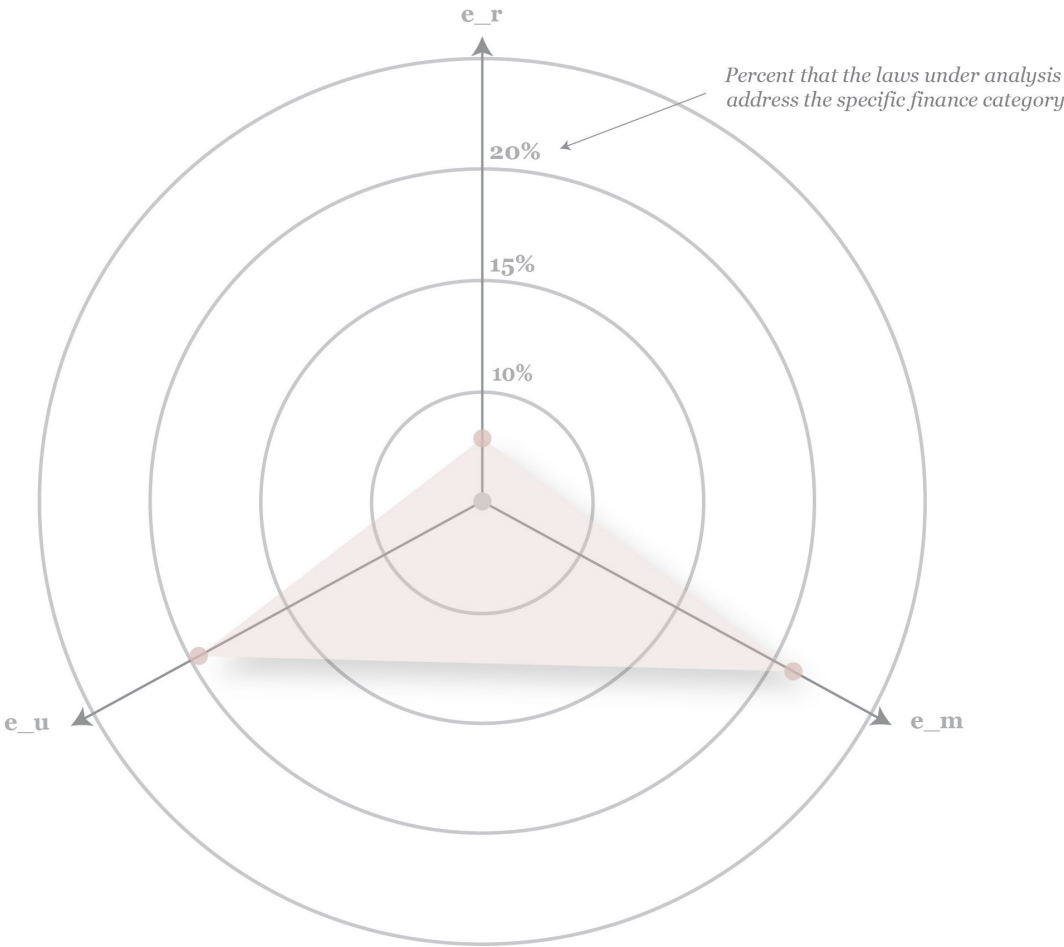
Resources for urban planning and climate change	<div>Does your country have provisions of law or regulations that create a flow of resources to finance climate change mitigation and adaptation in urban planning?</div> <div><div>Do these include provisions that establish earmarked intergovernmental fiscal transfers & to local governments for climate change mitigation and adaptation in urban planning?<input checked="" type="checkbox"/></div><div>Do these include provisions that give local governments the responsibility to collect locally generated revenues?<input checked="" type="checkbox"/></div><div>Do these include provisions that give local governments the authority to decide how to spend locally generated revenues?<input checked="" type="checkbox"/></div><div>Do these include provisions that require local governments to earmark resources for urban planning and climate change?<input type="checkbox"/></div><div>Do these include provisions that create enabling environment that facilitate mobilization of investment capital?<input checked="" type="checkbox"/></div><div>Do these include provisions that allow local governments to receive a public credit guarantee by the national government?<input checked="" type="checkbox"/></div><div>Do these include provisions that create frameworks for public private partnerships?<input checked="" type="checkbox"/></div></div>
Incentives for mitigation and adaptation in urban planning	<div>Does your country have provisions of law or regulations that create incentives to achieve climate change mitigation and adaptation objectives in urban planning?</div> <div><div>Do these include economic incentives to support climate change mitigation in urban planning?<input checked="" type="checkbox"/></div><div>Do these include non-economic incentives to support climate change mitigation in urban planning?<input checked="" type="checkbox"/></div><div>Do these include economic incentives to support climate change adaptation in urban planning?<input checked="" type="checkbox"/></div><div>Do these include non-economic incentives to support climate change adaptation in urban planning?<input checked="" type="checkbox"/></div></div>
Incentives that promote unsustainable urban land uses change	<div>Does your country have provisions of law or regulations with incentives that promote unsustainable urban land uses?</div> <div><div>Do these include economic incentives that promote unsustainable urban land uses?<input checked="" type="checkbox"/></div><div>Do these include non-economic incentives that promote unsustainable urban land uses?<input checked="" type="checkbox"/></div></div>

5.1

5.2

5.3

05 ECONOMIC AND FINANCIAL INSTRUMENTS



Economic & Financial Instruments

- e_r Resources for urban planning and climate change
- e_m Incentives for mitigation and adaptation in urban planning
- e_u Incentives that promote unsustainable urban land uses

This section examines Colombia’s national laws and policies in relation to Economic and Financial Instruments for Climate Change. This includes a review of the country’s legal framework and the incorporation of outside literature to develop a comprehensive understanding of the economic and financial instruments in Colombia.

As Colombia continues to position itself as a leader in climate change action, the country has taken steps to build a national climate change system based on multi-governmental coordination and financial incentives. Colombia looks to support its climate financing efforts by “raising both public and private sources” and obtaining international funding.¹ The nation’s financial strategy has been geared toward climate mitigation through incentivizing energy efficiency projects. As of 2012, Colombia was only spending 0.0002 percent of its GDP on

climate change investment and the country lagged behind its peer Latin American nations in clean energy investment. Colombia also remains reliant on fossil fuel extraction and mining as key drivers of the national economy. The country has yet to actively reconcile its reliance on the non-renewable natural source sector and its commitments to climate action.²

The following sections summarize Colombia’s legal framework for climate finance to better direct future policy initiatives. It is important to note that Colombia’s climate financing strategy has been difficult to evaluate due to the overlapping and heavily revised legal framework revolving around climate action, as well as a lack of specific financial and economic strategies in some areas, but we hope that this analysis will help the development of future policy initiatives.

¹ Marcela Jaramillo, “The Coordination of Climate Finance in Colombia,” (Dec 2014), p. 1.

² Jaramillo, “The Coordination of Climate Finance in Colombia,” p. 5.

05.1 RESOURCES FOR URBAN PLANNING AND CLIMATE CHANGE

3 Law 1931 of 2018, Article 17.
4 Law 1931 of 2018, Article 18.
5 Law 1931 of 2018, Article 12.
6 Law 1931 of 2018, Article 17.
7 Law 1931 of 2018, Article 23.
8 Law 1931 of 2018, Article 29.

Law 1931 of 2018, *Ley de Cambio Climático* (Climate Change Law), establishes economic and financial instruments needed for climate change management, adaptation, and mitigation. The law creates the **National Council on Climate Change**, comprehensive climate change management plans, the **National Information System on Climate Change**, and the **National Program of Tradable Quotas for the Emission of Greenhouse Gases (PNCTE)**.

The **National System of Climate Change (SISCLIMA)** makes it clear that various policies and other mechanisms will be coordinated from a national level across territories and ministries. The use of **Comprehensive Sectoral Climate Change Management Plans (PIGCCS)**³ and **Comprehensive**

Territorial Climate Change Management Plans (PIGCCT)⁴ to coordinate consistent efforts across territories and ministries further supports vertical inter-institutional and financial resource coordination.

Law 1931 of 2018 encourages the “promotion of non-conventional renewable energy sources” as one of the tools for “the mitigation of greenhouse gases.”⁵ Colombia maintains contributions to the **United Nations Framework Convention on Climate Change (UNFCCC)** and the **Sectoral Change Management Plans (PIGCCS)** are the mechanisms to provide guidelines “on the financing of defined GHG mitigation and adaptation measures.”⁶ The **National Department of Planning** will also be responsible for the creation of guidelines and formulating the strategies for public investment in climate change projects at the national, territorial entity, environmental authority level.⁷

Law 1931 of 2018 defines specific economic and financial instruments beginning with GHG emission trading quotas. Article 29 defines GHG Emission Quotas as a “negotiable right that authorizes its holder to emit one ton of CO₂ or other Greenhouse Gas (GHG) for an amount equivalent to one ton of CO₂.”⁸ The quotas can be redeemed during a set period of time or traded and auctioned through the **National**

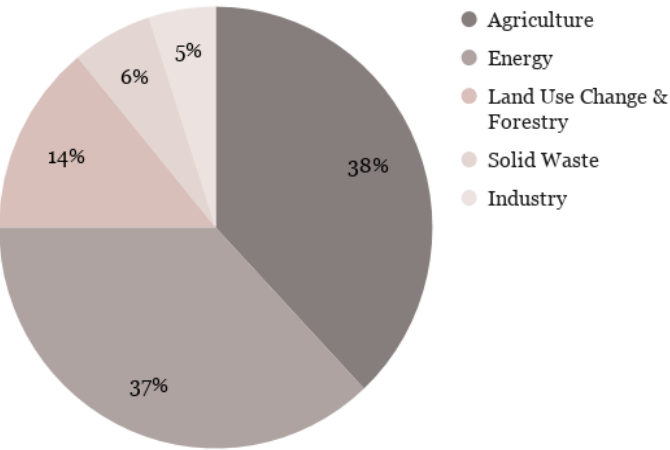


FIGURE 2 Greenhouse gas emissions by sector in Colombia, 2004

Source: The Coordination of Climate Finance in Colombia

Program of Tradable Quotes (NTP) for the **Emission of Greenhouse Gases (PNCTE)**.⁹ The NTP will also certify that all existing incentives to reduce GHG emissions are up to national standards, with the Ministry of the Environment and Sustainable Development responsible for carrying out these obligations.¹⁰ The nation has established a three-year implementation program for this legal provision.

Law 344 of 1996 creates the Environmental Compensation Fund to “finance the operating, investment and debt service budget of the Autonomous Regional and Sustainable Development Corporations.”¹¹ The law is part of a legislative series meant to decentralize resources in Colombia and transfer national income from the energy sector towards local development, with a particular focus on investments “for the protection of the environment.”¹² These projects will be authorized by the Ministry of the Environment based on their environmental impact.

Resolution 1259 of 2015 establishes the guidelines and strategic actions for the **National Development Plan** and establishes the national REDD+ strategy as a “tool to ensure the conservation and sustainable use of forests and [national] participation in carbon market mechanisms and gas emission.”¹³ REDD+ is an initiative designed at reducing carbon emissions, deforestation, degradation, and conservation. Article 4 describes the framework that project developers need to submit for the REDD+ program,

including the specific project details and estimated and verified emission reductions. However, since the passing of Resolution 1259 of 2015, Colombia has been struggling to manage increasing rates of deforestation due to the expansion of landholdings and existing economic incentives to further expand the agriculture and forestry sectors.¹⁴ Despite a record of many REDD+ projects registered in Colombia, it remains unclear whether these projects have been successfully implemented.¹⁵

Law 141 of 1994 creates the **National Royalties Fund (NRF)** to collect royalties from non-renewable natural resource extraction (oil, coal, nickel, iron, copper, gold, silver, platinum, salt, limestones) as part of Colombia’s strategy for managing natural resources. Law 141 of 1994 was the Colombia’s first attempt at creating a new economic structure around the country’s natural resources following the nation’s claim of ownership of subsurface and renewable resources in the 1991 Constitution.¹⁶ Financial resources from the NRF are delivered to territorial entities through local investment projects, and are allocated in accordance with the relative environmental, social, and economic impacts of the projects. Specific environmental designations for the distribution of royalty funds are given to certain geographic or ecological areas, such as the Amazon; Choco and the archipelago of San Andres Providencia and Santa Catalina; the recovery and conservation of watersheds; decontamination of the Bogota River; and the preservation of other natural

9 Law 1931 of 2018, Article 30.

10 Law 1931 of 2018, Article 32.

11 Law 344 of 1996, Article 1.

12 Law 344 of 1996, Article 24.

13 Resolution 1.259, Article 1.

14 Torsten Krause, “Deforestation and Extravisim in Colombia,” *Journal of Political Ecology*. Vol 27 (2020), p. 407.

15 Krause, “Deforestation and Extravisim in Colombia,” p. 407.

16 Carlos Alberto Barreto Nieto, Jose Linares, and Rosa María Arment, “Natural resource royalties and local development in Colombia,” *Universidad Catolica de Colombia*. (2011), p. 2.

resources. The **National Royalty Commission** is also created to manage the Royalty Fund. A majority of the funds will be allocated to municipal development with “priority for those aimed at environmental sanitation” and essential public services.¹⁷ The specific allocations to direct beneficiaries was modified

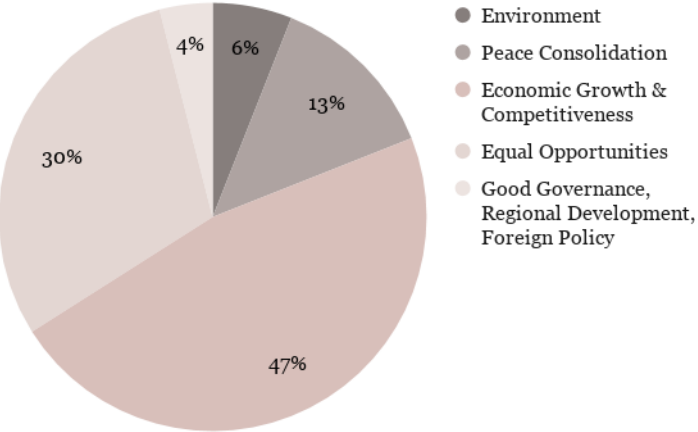


FIGURE 3 Multi-year Investment Plan, 2011-2014
Source: The Coordination of Climate Finance in Colombia

by **Law 756 of 2002**, while the list of organizations responsible for collecting royalties were modified by **Decree 1600 of 2006**.

CONPES 3934 (2018) establishes Colombia’s **Green Growth Policy** aimed at promoting green-focused economic development while lessening the country’s reliance on unsustainable practices, including its reliance on the exploitation of non-renewable resources. The Green Growth Policy includes a five axis program aimed at stimulating “an increase in productivity and economic competitiveness by 2030.”¹⁸ The goals of the program include promoting economic opportunity through sustainable

practices, preservation of the natural environment, green technology, and multi-level governmental coordination. The Green Growth Policy was designed to address **Colombia’s Sustainability Pact** within the **National Development Plan (2018-2022)** and in its international climate change commitments.

CONPES 3934 addresses some of the shortcomings of Colombia’s prior climate change strategy, including its system of economic and financial instruments. For example, the policy notes that the country has been hindered in its existing efforts due to “underdeveloped local markets for [green] products and services,” a lack of knowledge that green technology and sustainability can have on the business sector, the lack of current dedicated financing towards sustainable businesses, and “low institutional organization and articulation for the promotion of green and sustainable businesses.”¹⁹

CONPES 3934 also looks to respond to some of these sustainable shortcomings in the country’s current economic model by evaluating specific industrial sectors. Beginning with the bioeconomy, the policy includes incentives to generate new biotechnological industries including the generation of 500 bioproducts by 2030. The policy looks to add incentives for sustainable practices within both the forestry and energy industries as well. For water efficiency, the policy addresses the “lack of economic instruments

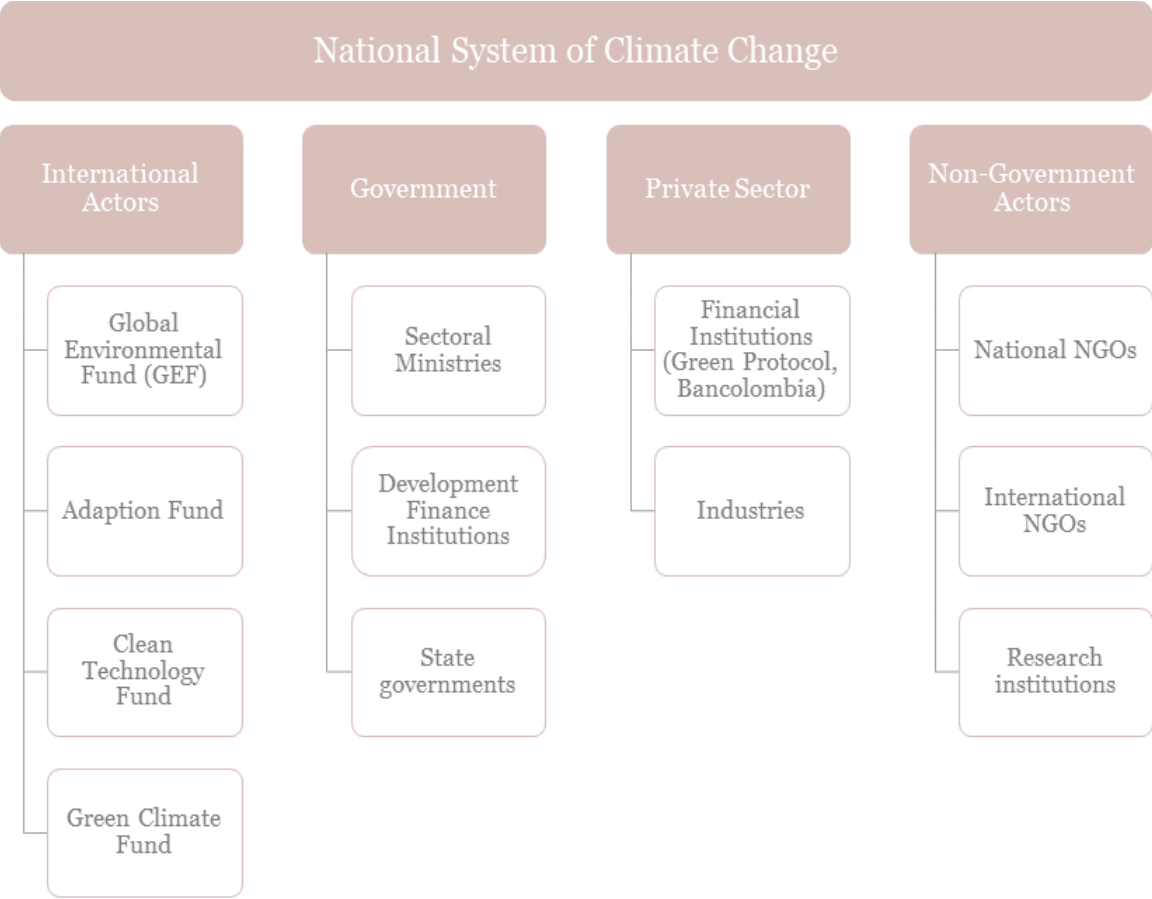


FIGURE 4 Key national actors in climate finance investment in Colombia
Source: The Coordination of Climate Finance in Colombia

that generate enough incentives towards technology adoption and good practices,” and the absence of long-term financial schemes. Other policy initiatives include incentives for new sustainability technology, increasing the demand for the green energy market, and the electrification of all passenger and freight vehicles.²⁰

In addition, the Green Growth Policy looks to strengthen inter-

governmental coordination and bolster the financial mechanisms for promoting climate change adaptation and mitigation, including strengthening the capacities of the **Financiera de Desarrollo Nacional (National Development Financer)** to promote green growth investments by the private sector and leverage private capital.

¹⁷ Law 141 of 1994, Article 15.

¹⁸ CONPES 3934 (2018), p. 28.

¹⁹ CONPES 3934 (2018), p. 52.

²⁰ CONPES 3934 (2018), p. 52.

05.2 Incentives for Mitigation and Adaptation in Urban Planning

Law 1819 of 2016 (Carbon Tax Law), Part IX, introduces the **National Carbon Tax**. According to Article 22, the carbon tax falls on the carbon content of all fossil fuels used for combustion. In the case of natural gas, the tax will only be incurred on the sale of carbon to the hydrocarbon refining and petrochemical industries. The tax is not due to corporations who certify to be carbon neutral, in accordance with the regulations issued by the **Ministry of the Environment and Sustainable Development**. In Article 235-2, income exempt from taxable

reduce the amount of the country's load of plastic waste.

Decree 926 of 2017 mentions that the national carbon tax is an additional and cost-effective tool to contribute to the reduction of greenhouse gas (GHG) emissions. Decree 926 of 2017 establishes the rules and conditions that allow certain entities to offset their carbon tax obligation under the Carbon Tax Law.

Chapter III of **Law 1715 of 2014** is dedicated to incentives for investment in projects of non-conventional energy sources. Article 11 mentions incentives in taxpayer's net income involved in research, development and investment in the field of electric energy production with **FNCE (Non-Conventional Sources of Energy)** and efficient energy management. Those who directly invest are entitled to deduct up to fifty percent (50%) of the total investment made for a period not exceeding fifteen (15) years. Articles 12 through 14 describe other incentives for developing or maintaining non-conventional energy sources such as VAT tax incentives, exemption from import duties, and accelerated depreciation applicable to equipment, elements, machinery and other domestic or imported inputs. Chapter IV mentions incentives that will be provided for energy from forest biomass, however, it is not explicitly clarified.

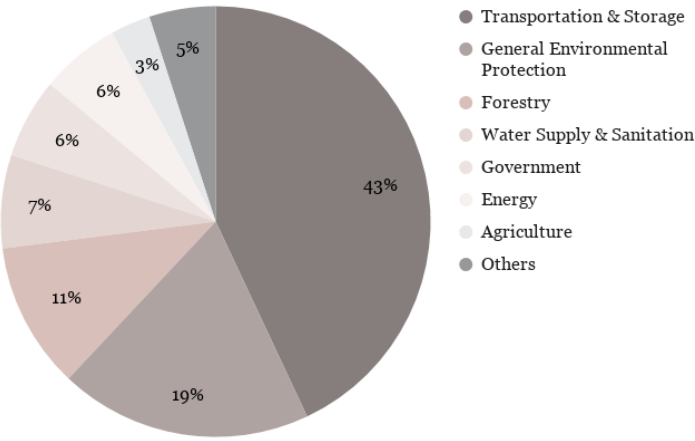


FIGURE 5 Share of ODA commitments to Colombia with climate change objectives, 2002-2011
Source: The Coordination of Climate Finance in Colombia

year 2018 mentions generating companies that sell electrical energy generated based on wind energy, biomass or agricultural, solar, geothermal or marine waste are incentivized. Article 512-15, also introduces a national tax on the consumption of plastic bags to

Law 99 of 1993, Ley General Ambiental (General Environmental Law), Article 42 states that any activity that causes environmental damage or has harmful consequences will be charged remuneration rates and the resources from the collection of remuneration rates will be used for investment projects in decontamination and monitoring of the quality of the respective resource and for “protection and renewal of the respective natural resource”²¹. Article 43 states the fees set for the use of water: a collection will be set up with “rates set by the National Government

that will be used to pay the costs of protection and renewal of water resources.”²² Any project that utilizes water taken from natural sources and requires an environmental license must set aside a minimum of one percent (1%) of the total investment for the recovery, preservation, conservation and surveillance of the hydrographic basin which also provides for the ten percent (10%) of funds that environmental authorities can utilize for the maintenance of watersheds, moors and other water bodies.

²¹ Law 99 of 1993, Article 42.

²² Law 99 of 1993, Article 43.

05.3 Incentives that Promote Unsustainable Urban Land Uses

Law 141 of 1996 creates the **National Royalty Fund (NRF)** for the management of royalties from the production of non-renewable natural sources. Despite adjustments made to the specific percentage allocation of royalties by both **Law 756 of 2002** and **Decree 1600 of 2006**, the fundamentals of the royalty system established in Law 141 of 1996 remain. In short, the national government collects rent payments from the natural resource industrial

sectors for the use and extraction of the country's natural resources. The royalties are then redirected into local development through the **National Royalty Fund**.²³ The goal of Law 141 of 1996 is to balance the country's reliance on natural resources as an economic driver, the ecological repercussions of resource exploitation, and using the revenue collected from natural resources to reinvest back into local communities.

²³ Carlos Alberto Barreto Nieto, Jose Linares, and Rosa María Arment, “Natural resource royalties and local development in Colombia,” *Universidad Católica de Colombia* (2011), p. 2.

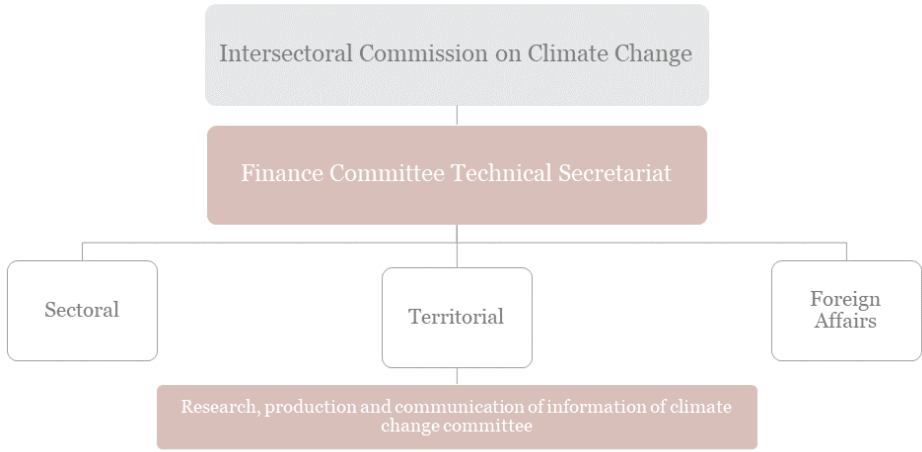


FIGURE 6 SISCLIMA structure
Source: The Coordination of Climate Finance in Colombia

RECOMMENDATIONS

Colombia has made important steps in creating a climate change financial and economic instruments framework through the **SICLIMA** and the **Green Growth Policy**. Colombia’s legal framework could benefit from more directly addressing section 5.1 of the Climate Change Toolkit. As shown in Figure 1, less than 10 percent of the legislation analyzed addresses the questions regarding fiscal transfers, local governments ability to collect local revenue, and local governments spending authority on climate change and urban planning. Colombia should also look to expand their national investment in Climate Change, as Figure 3 shows, only 6% of the National Investment Plan for 2010-2014 was spent on the environment and sustainability.²⁴ The Country currently has a strong system of financial incentives for climate mitigation and green growth, but the country could strengthen its financial instrument

portfolio through supporting greater coordination across levels of governments, giving regional level governments greater ability to lead climate mitigation and adaptation financing, expanding opportunities for public-private partnerships, strengthening community engagement, and providing better incentives for the private sector.

It is also in the country’s interest to create a governmental agency out of the National Planning Department responsible for managing the Country’s international climate change obligations as well the international funding sources available to local ministries. The Country should also explore expanding the private sector’s role by encouraging more climate-related investment and expand the use of private financial institutions to assist the government in its sustainability efforts. With the creation of subnational bodies

and NGOs, Colombia should also look to increase their authority to directly authorize funding incentives for climate mitigation and adaptation.

As pointed out in Section 5.3, Colombia also does have incentives that promote unsustainable practices in **Law 141 of 1996**. The law has been criticized for too closely intertwining the nation’s reliance on natural resources with the country’s local economic development initiatives. While providing a literal direct payment to many Colombian households, much of the funding for specific projects is legally required to be spent on essential services before environmental protection and sustainability. In addition, Colombia’s continued reliance on non-renewable natural resources as an economic driver runs counter to studies on dependence on natural resources for economic growth.²⁵ Reliance on natural resources can slow economic growth, stagnate innovation, and generate a “false sense of security.”²⁶ Ultimately, this royalties program is based on the continued utilization of natural resources, and covers a too narrowly defined geographic area.

Colombia’s continued reliance on fossil fuels runs counter to its goals of being a climate leader. Colombia is a major producer of oil, gas, and is the world’s sixth largest exporter of coal.²⁷ Coal mining represents 1.3 percent of the country’s gross domestic product and production is expected to produce 40 million more tons in 2025 than produced in 2017.²⁸ While Colombia has promised to bring down its coal production, their financial

strategies around fossil fuels may be too focused on making coal, oil, and hydrocarbon fracking more efficient, compared to lessening the country’s overall economic reliance on fossil fuels. Law 1819 of 2016, Article 365 mentions Incentives for investments in hydrocarbons and mining, which provides **Tax Refund Certificates (CERT)** to taxpayers who increase said investments. CERTs will be granted to those who look out for new hydrocarbon reserves. In Article 485, the government is incentivizing oil and gas companies by paying back a portion of their sales tax. Existing opposition to fossil fuel extraction has been recently more tied to concern over water quality and availability rather than climate change concerns.²⁹

Regarding legislation and national strategies, Colombia can further focus on national frameworks to diversify its energy sector and be able to reorganize the existing link between economic development and the National Royalty Fund. In the words of scholars Claudia Strambo and Ana Carolina González Espinosa: “in Colombia, the link between fossil fuel (and other non-renewable resources) extraction and development has been the core principle around which the government has built its narratives to legitimize the expansion of fossil fuel production and large-scale extractive industry.”³⁰ Colombia must refocus personal income and economic growth within a greener energy sector to maintain its international commitments to climate change action.

²⁴ Jaramillo, “The Coordination of Climate Finance in Colombia,” p. 4.

²⁵ Nieto, Linares, and Arment, “Natural resource royalties and local development in Colombia,” p. 7.

²⁶ Nieto, Linares, and Arment, “Natural resource royalties and local development in Colombia,” p. 7.

²⁷ Claudia Strambo and Ana Carolina González Espinosa, “Extraction and development: fossil fuel production narratives and counternarratives in Colombia,” *Climate Policy*, (2020), p. 931.

²⁸ Strambo and González Espinosa, “Extraction and development: fossil fuel production narratives and counternarratives in Colombia,” p. 934.

²⁹ Strambo and González Espinosa, “Extraction and development: fossil fuel production narratives and counternarratives in Colombia,” p. 939.

³⁰ Strambo and González Espinosa, “Extraction and development: fossil fuel production narratives and counternarratives in Colombia,” p. 934., 940.