



**The World Bank**

Colombia Green and Resilient DPO (P180033)

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# Program Information Document (PID)

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Appraisal Stage | Date Prepared/Updated: 18-Nov-2022 | Report No: PIDA35042

**BASIC INFORMATION****A. Basic Project Data**

Country	Project ID	Project Name	Parent Project ID (if any)
Colombia	P180033	Colombia Green and Resilient DPO (P180033)	
Region LATIN AMERICA AND CARIBBEAN	Estimated Board Date 16-Dec-2022	Practice Area (Lead) Environment, Natural Resources & the Blue Economy	Financing Instrument Development Policy Financing
Borrower(s) Republic of Colombia	Implementing Agency Ministry of Finance and Public Credit, National Planning Department		

**Proposed Development Objective(s)**

The development objective is to accelerate climate action by (i) advancing the low-carbon energy transition; (ii) promoting sustainable land use; and (iii) building resilience and adaptation to climate change.

**Financing (in US\$, Millions)****SUMMARY**

<b>Total Financing</b>	1,000.00
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**DETAILS**

<b>Total World Bank Group Financing</b>	1,000.00
World Bank Lending	1,000.00

**Decision**

The review did authorize the team to appraise and negotiate



## B. Introduction and Context

### Country Context

**1. Colombia is highly exposed to climate-related hydrometeorological hazards, which have already affected growth and poverty, and whose impacts on development are expected to be accentuated in the future.** The country ranks 28<sup>th</sup> out of 182 countries in climate risk,<sup>1</sup> and 92<sup>nd</sup> out of 182 on the Notre Dame-Global Adaptation Index<sup>2</sup> (ND-GAIN) and has one of the highest rates of disasters caused by natural and climate-induced hazards in Latin America.<sup>3</sup> Disaster and climate risks represent by far Colombia's largest contingent liability, estimated to have a potential impact of up to 4.4 percent of GDP.<sup>4</sup> These climate-related characteristics are already affecting Colombia's development: The La Niña event of 2010–2011 caused estimated damages of US\$6 billion (COP11.2 trillion) and economic losses of US\$1.1 billion (COP2 trillion).<sup>5</sup> The latest El Niño event, in 2015, was the longest since 1950, lasting 17 months and causing record high temperatures and economic impacts of about 0.6 percent of GDP.<sup>6</sup> The economic impacts of hydrometeorological events are expected to increase under future climate change, which is conservatively expected to depress real GDP annually between 0.5 and 0.9 percentage points by 2050.

**2. Recognizing the challenge climate change represents to sustainable growth, Colombia has set itself ambitious adaptation and mitigation targets and anchored them in its legal framework.** Colombia increased the mitigation target in its updated Nationally Determined Contribution (NDC) to the Paris Agreement on Climate Change to 51 percent by 2030 with respect to a business-as-usual scenario,<sup>7</sup> and a net zero target by 2050. This translates into an absolute reduction of 44 percent from 2018 levels, exceeding the ambition of regional peers. In addition, the NDC adaptation component was substantially expanded from 10 to 30 measures, defining specific adaptation priorities, and identifying six key sectors of the economy (transport, energy, agriculture, housing, health, commerce, tourism, and industry) that will include climate change considerations in their planning instruments and will be implementing adaptation actions. The Climate Action Law (Law 2169 of 2021) makes the NDC commitments legally binding<sup>8</sup> by establishing specific goals and minimum measures to achieve carbon neutrality and climate resilience. Implementing this transition is expected to not only achieve mitigation commitments and increase resiliency to climate shocks, but also to help develop local industries, reduce exposure to external shocks, and spur the creation of green jobs. This would also help Colombia move to a more sustainable development path, opening opportunities for the production and export of goods aligned with international markets demanding low-carbon products, not only benefitting the economy as a whole, but also populations that might be negatively affected by the global energy transition. On the energy side, the transition will help Colombia diversify its mining exports, reduce the volatility of energy prices, and increase productivity by reducing energy intensity.

**3. The macroeconomic policy framework remains adequate for this operation.** Colombia has solid fundamentals and macroeconomic policy institutions founded on a fully-fledged inflation targeting regime, a flexible exchange rate, and a rules-based fiscal policy. The economy has been growing vibrantly since 2021 buoyed by domestic demand, but in 2022 signs of overheating have emerged, amid increasing inflation, a current account deficit that, although declining, remains high, a steep depreciation of the currency, and increasing financing costs. In response, the government has taken appropriate policy responses: monetary policy has been tightened and a tax reform to increase revenues has been introduced. Institutions and commitment to fiscal prudence remain strong and the changes to the fiscal rule and the institution of a fiscal council approved in 2021 greatly strengthen the fiscal framework and institutions. Finally, Colombia has ample reserves, and the precautionary credit line provided by the IMF provides ample liquidity buffers to respond to external shocks.

<sup>1</sup> Germanwatch (2021): Global Climate Risk Index 2021.



## Relationship to CPF

4. The proposed DPL is consistent with the World Bank Group's crisis response framework for supporting Green, Resilient and Inclusive Development (GRID), the Global Crisis Response Framework (GCRF), the latest WBG FY16-21 Country Partnership Framework, discussed by the Board on February 23, 2016,<sup>9</sup> and the most recent Performance and Learning Review (April 23, 2019).<sup>10</sup> Aligned with the GRID framework and the third and fourth pillars of the GCRF, this operation supports reforms that address immediate and long-term barriers to a growth path that will deliver a broad-based inclusive recovery. The policy measures aim to increase climate resilience, reduce GHG emissions and will generate substantial climate co-benefits. The operation supports Country Partnership Framework (CPF) Objectives 2 (enhancing capacity for natural resource management), 7 (deepened financial intermediation for productive purposes, including the energy and agriculture pillars), and 8 (improved infrastructure services and enhanced urban planning to develop competitive cities), as well as the cross-cutting peace pillar. The operation supports the adjustments to the CPF made in the Performance and Learning Review, in particular the addition of a climate change lens to all pillars of the CPF. Similarly, it is consistent with the findings of the 2022 update of the Systematic Country Diagnostic (Report No. 171460-CO), including its findings on the centrality of curbing land use change and advancing a low-carbon energy transition, increasing the sustainability and resilience of agriculture, and the importance of improving cadaster management.

## C. Proposed Development Objective(s)

The development objective is to accelerate climate action by (i) advancing the low-carbon energy transition; (ii) promoting sustainable land use; and (iii) building resilience and adaptation to climate change.

### Key Results

5. The overall result will be to accelerate climate action, specifically by (i) advancing the low-carbon energy transition; (ii) promoting sustainable land use; and (iii) building resilience and adaptation to climate change. Key results under Pillar 1 aim to contribute to Colombia's decarbonization by accelerating the low-carbon transformation of the energy and transport sectors by increasing the renewable energy capacity installed, supporting the development of a green hydrogen industry, and increasing the efficiency of the public transport fleet. Pillar 2 targets results aim to render land use more sustainable by reducing land use change, increasing the uptake of sustainable livestock systems, and

<sup>2</sup> University of Notre Dame (2021): ND-GAIN Country Index. The ND-GAIN Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. The Index is composed of two key dimensions of adaptation: i. vulnerability, which measures a country's exposure, sensitivity, and capacity to adapt to the negative effects of climate change; and ii. readiness, which measures a country's ability to leverage investments and convert them to adaptation actions.

<sup>3</sup> Colombia ranks second in the Latin America region in the hazard and exposure category. European Commission (2022): INFORM Risk Index.

<sup>4</sup> Ministry of Finance and Public Credit (2021): Medium-Term Fiscal Framework.

<sup>5</sup> Inter-American Development Bank and Economic Commission for Latin America and the Caribbean (2012): *Valoración de daños y pérdidas. Ola invernal en Colombia 2010-2011*.

<sup>6</sup> National Planning Department, Ministry of Environment and Sustainable Development and National Unit for Disaster Risk Management (2018): *Documento CONPES No. 39947. Estrategias de actuación y coordinación para reducir las afectaciones ante la eventual ocurrencia de un fenómeno de variabilidad climática: El Niño 2018-2019*.

<sup>7</sup> Government of Colombia (2020): Colombia updated NDC. Equivalent to emitting 169.4 MtCO<sub>2</sub>e by 2030.

<sup>8</sup> The goals and measures defined in the NDC are considered irreversible minimums under the principle of progression.

<sup>9</sup> Report No. 101552-CO.

<sup>10</sup> Report No. 135458-CO.



improving the rollout of the multipurpose cadaster. Finally, key results under Pillar 3 are an improved planning and response capacity to natural hazards and improved integration of disaster risk management with climate adaptation, and the strengthening of the agricultural insurance program, which is key to promoting farmers' and livestock producers' resilience to shocks.

#### D. Project Description

**6. The DPL is the first in a series of two single-tranche programmatic operations aiming to accelerate climate action and builds on a strong commitment to addressing climate change that has spanned administrations, and which is enshrined in Colombia's legal framework.** Through a comprehensive policy and legal climate change framework,<sup>11</sup> Colombia has adopted substantial national and international commitments, established an institutional architecture for climate change management, and created economy-wide mitigation instruments such as the carbon tax and provisions for an emissions trading system. The updated NDC, submitted to the United Nations Framework Convention on Climate Change on December 30, 2020, commits the government to an ambitious 51 percent reduction of GHG emissions by 2030 with respect to a business-as-usual scenario<sup>12</sup> and a net zero target by 2050, while expanding the adaptation portfolio from 10 to 30 measures. The Climate Action Law (2169-2021) enshrines these targets in law. In addition, the Ministry of Finance and Public Credit is part of the Coalition of Finance Ministers for Climate Action, and Colombia's central bank is a member of the Network for Greening the Financial System.

**7. The proposed DPL supports policy reforms that aim to set Colombia's development trajectory on a more sustainable and resilient pathway through the following pillars: (i) advance the low-carbon energy transition; (ii) promote sustainable land use; and (iii) build resilience and adaptation to climate change.** The Program highlights policy reforms in sectors that are critical to Colombia's climate low-carbon development and adaptation agendas, and which the administration is committed to accelerate. In addition, the program contributes to the provision of global environmental public goods of critical importance. Pillar 1 contributes to implementing the NDC's mitigation priorities in the energy, and transport sectors. The Pillar will do this by (i) advancing critical regulation and securing the resources to support Colombia's "Energy Transition Law", including consolidating the adoption of non-conventional renewable energy (NCRE), energy efficiency and low-carbon hydrogen; (ii) accelerating the modernization of the power sector to further increase its resilience; and (iii) enabling continued access to public transport and downstream fleet renewal. Pillar 2 contributes to implementing mitigation priorities in the land and land use sector. The pillar will do this by (i) defining sustainable agricultural activities in *páramos*, (ii) promoting sustainable livestock systems, and (iii) improving the conditions for an accelerated roll-out of the multipurpose cadaster. Pillar 3 contributes to implementing NDC adaptation actions, including integrating disaster risk management and climate adaptation, and adaptation in the agriculture sector. It does so by (i) improving disaster risk reduction, preparedness, and response and integrating this with climate adaptation efforts, and (ii) building resilience among farmers and producers through the introduction of agricultural insurance.

**8. The proposed indicative triggers for the operation show a sustained public commitment to continued advancement on the green and resilient agenda.** Indicative Trigger 1 supports regulation to enhance energy efficiency and electricity sector resilience, reservoir standards, or programs supporting a just energy transition for workers and vulnerable communities, by the Ministry of Mines and Energy, the Institute of Planning and Promotion of Energy Solutions in Non-Interconnected Zones, the Energy and Gas Regulatory Commission, and/or the Energy and Mining Planning Unit. Indicative Trigger 2 supports regulations to support energy efficiency and the production and use of low-carbon energy fuels, certification, and other measures to improve the enabling environment for investments in these sectors, such as

<sup>11</sup> Key elements include the National Policy on Climate Change, the National Climate Change Adaptation Plan, The Low-Carbon Development Strategy, the National Plan for Risk and Disaster Management, and the National Climate Change Law (Law 1931-2018), among others.

<sup>12</sup> Equivalent to emitting 169.4 MtCO<sub>2</sub>e by 2030, or an absolute reduction of 44 percent from 2018 levels.



through resolutions from the Ministry of Mining and Energy, Energy and Gas Regulatory Commission, and/or the Energy and Mining Planning Unit. Indicative Trigger 3 supports reforms, such as regulations by the Ministry of Mines and Energy, the Institute of Planning and Promotion of Energy Solutions in Non-Interconnected Zones, the Energy and Gas Regulatory Commission, and/or the Energy and Mining Planning Unit, to streamline processes and support the development of offshore wind and geothermal electricity production. Indicative Trigger 4 supports regulations that will operationalize the government's fleet replacement fund, created by Law 2169, which will allow public transport operators to access government-backed financial instruments and speed up fleet replacement for electric buses. Indicative Trigger 5 supports reforms, such as regulations of the Ministry of Environment and Sustainable Development, Ministry of Agriculture and Rural Development, and related institutions, and/or decrees, to further address sustainable management and/or land use change in sensitive ecosystems such *páramos*, wetlands and/or forests. Indicative Trigger 6 supports the development of a CONPES for sustainable livestock production. Indicative Trigger 7 supports articles of the National Development Plan Law strengthening: (i) the Agustín Codazzi Geographical Institute, as the authority in charge of the cadaster; and (ii) the National Land Agency, for carrying out at scale titling of small- and medium-sized rural properties and resolving land disputes, giving priority to areas such as those covered by the peace agreement. Finally, Indicative Trigger 9 supports regulation to target subsidized agricultural insurance to vulnerable groups.

## E. Implementation

### Institutional and Implementation Arrangements

**9. The Ministry of Finance and Public Credit and the National Planning Department are responsible for collecting and monitoring information related to program implementation and progress toward the achievement of results for this DPL.** The Ministry of Finance and Public Credit and the National Planning Department are further responsible for coordinating with the agencies involved in the reform program supported by this DPL. The Ministry of Finance and Public Credit and the National Planning Department have long-standing experience collecting and monitoring information in the context of DPLs. Monitoring and evaluation of the operation will also be carried out through ongoing policy dialogue and technical assistance programs.

## F. Poverty and Social Impacts, and Environmental, Forests, and Other Natural Resource Aspects

### Poverty and Social Impacts

**10. This DPF supports actions that are expected to have positive effects on poverty reduction and distributional outcomes over the medium to long term.** Prior Actions 1 to 3 are expected to have medium- to long-term positive poverty and distributional effects since they are expected to promote energy security,<sup>13</sup> mitigating the impact of climate-related disasters on electricity output. In addition, a strengthened regulatory framework and fiscal incentives for boosting renewable energy sources can also generate new jobs, while the overall decarbonization path will lead to labor market transitions, with expected positive effects on poverty reduction. Colombia's framework for managing the use of eminent domain, which may be used following policies under Prior Action 2, is considered sufficient to manage attendant social risks. Policies under Prior Action 4 promote sustainable public transport, with expected positive poverty and inequality reduction impacts in the medium- to long-terms improving access to and the quality of public transport, which is disproportionately used by poor segments of the population. Prior Action 5 is expected to have positive social and distributional effects by boosting formal economic activities for those who protect and make sustainable use of sensitive

<sup>13</sup> Paredes, J. and Ramírez, C. (2017): Variable Renewable Energies and Their Contribution to Energy Security: Complementarity in Colombia. Inter-American Development Bank; and Goodarzi, M., Vagheei, H., and Mohtar, R. (2020): The impact of climate change on water and energy security.



areas. The measure is also expected to protect natural capital and water resources, with positive effects for adaptive capacity. Prior Action 6 is expected to have positive distributional impacts by promoting market sustainability, resilience to climate events that tend to disproportionately affect the most vulnerable groups, and the productivity, leading to downstream income gains in rural communities. Prior Action 7 is expected to have positive social and distributional impacts by narrowing high inequalities in land ownership and increasing its productive and sustainable use. Similarly, Prior Action 8 strengthens the government's capacity to respond to shocks, with expected positive effects on mitigating the impacts on the less well-off. Finally, Prior Action 9 aims to mitigate the impact climate shocks have on rural areas by protecting the economic performance of communities through an agricultural insurance scheme, and hence is expected to have positive distributional impacts.

#### Environmental, Forests, and Other Natural Resource Aspects

**11. The Prior Actions supported through the Colombia Green and Resilient DPL are likely, in aggregate, to have a positive impact on Colombia's environment, forests, or other natural resources.** Future investments under two of the policy areas supported by the operation (Prior Actions 2 and 3) may result in potential negative environmental effects, however the national legal framework incorporates the necessary mitigation measures for their adequate management. In the case of Pillar 1, Prior Actions 1 and 4 are expected to lead to reduced GHG emissions and a range of co-benefits for public health from cleaner air, and reduced environmental and noise pollution, especially in urban centers. Prior Actions 2 and 3 have the potential to result in a negative impact on the environment. However, the national legal framework incorporates the necessary mitigation measures for their adequate management. In Pillar 2, Prior Action 5 introduces guidelines for the development of low-impact and environmentally sustainable agricultural activities in *páramos* with likely positive impacts on natural resources due to improved conservation resulting from limiting activities that may cause a risk to the ecosystem. Prior Action 6, related to using climate-smart livestock techniques is expected to contribute to GHG emission reductions, while also having beneficial effects for water management, biodiversity, and soil quality. Likewise, Prior Action 7 is expected to have a positive impact on the environment through the accelerated roll-out of the cadaster that can support a reduction in the rate of deforestation. Finally, for Pillar 3, it is expected that long-term indirect positive impacts will accrue to Colombia's environment from Prior Action 8 because of the integration and coordination of the DRM management system with environmental policy, including owing to supported climate adaptation and nature-based resilience efforts, while Prior Action 9 is expected to have neutral effects.

#### G. Risks and Mitigation

**12. The overall risk level for this DPL is assessed as Moderate.** This is based on a moderate rating for macroeconomic risk, political and governance risk, and institutional capacity for implementation and sustainability risk, and a low rating for sector strategies and policies, technical design of project or program, fiduciary, environment and social, and stakeholders risk categories.

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**APPROVAL**

Task Team Leader(s):	Julian Lee, Manuel Luengo
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**Approved By**

Country Director:	Mark Roland Thomas	21-Oct-2022
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