

**PROGRAM INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

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Operation Name	First Sustainable Development and Green Growth Development Policy Operation
Region	LATIN AMERICA AND CARIBBEAN
Country	Colombia
Sector	Public administration- Transportation (10%);Solid waste management (10%);Wastewater Treatment and Disposal (10%);Sanitation (10%);General public administration sector (60%)
Operation ID	P150475
Lending Instrument	Development Policy Operation
Borrower(s)	MINISTRY OF FINANCE AND PUBLIC CREDIT
Implementing Agency	
Date PID Prepared	August 13, 2015
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Estimated Date of Board Approval	October 2, 2015
Corporate Review Decision	Following the corporate review, the decision was taken to proceed with appraisal and negotiations of the operation.

I. Country and Sector Background

Colombia's strong economic performance has contributed to poverty reduction and shared prosperity. Over a period (2002–2012) of continuous and robust economic growth with an annualized growth rate of real gross domestic product (GDP) per capita averaging 3.2 percent, Colombia has shown significant decline in the prevalence of moderate, extreme, and multidimensional poverty. The number of poor people in Colombia declined from 19.96 million to 13.99 million between 2002 and 2013. Moreover, the Multidimensional Poverty Index (MPI) declined from 49 percent in 2003 to 27 percent in 2012. Progress is also seen with regards to shared prosperity. Colombia's less well-off people benefitted more from growth than the average person, which resulted in important improvements in shared prosperity; the income growth of the bottom 40 percent of the population reached 6.6 percent over the period 2008–2013 compared to 4.1 percent for the total population. Colombia's dependence on its unique endowment of natural wealth underscores the urgency to ensure economic growth with environmental sustainability.

Colombia's dependence on its unique endowment of natural wealth underscores the urgency to ensure green economic growth. The country faces critical environmental challenges from air and water pollution in urban areas, forest and land degradation in rural areas, and a growing vulnerability to natural disasters and the effects of climate change. Indicators suggest that Colombia's economic growth increasingly dependent on using natural resources may not be sustainable because of the country low rate of genuine savings. A measure of growth sustainability—for Colombia the genuine net savings—shows that gross national savings, after subtracting the costs of depletion of minerals, natural resources, and pollution, fluctuate around zero that is below the Organization for Economic Co-operation and Development (OECD) and the regional averages. Therefore, Colombia needs to increase the

transformation of natural capital into human and man-made capital, on the one hand, and to reduce natural resource depletion and environmental degradation, on the other.

Key economic sectors, notably transport, energy, industry and agriculture, contribute to environmental degradation in Colombia, pointing to the need for a greener growth path. Colombia's resource-use intensity is higher than OECD countries on average with pressures on natural resources exerted by industry - notably extractives, extensive livestock farming, urbanization and motorization. The transport sector accounts for 12 percent of Colombia's CO₂ emissions. Coupled with rapid urbanization, accelerated motorization has led to negative externalities such as growing congestion and road safety problems and is the main contributor to local air pollution. With respect to energy, Colombia has a relatively low per capita level of carbon emissions with 64 percent of installed capacity coming from hydropower. However, this high dependence on hydropower and the vulnerability of the power source to the effects of climate change highlight the need to expand the country's low-carbon energy offerings by developing additional alternative renewable energies such as geothermal, wind and solar. In addition to high water consumption, agricultural production accounts for 38 percent of total greenhouse gas emissions and is responsible for occupying 35 million hectares of land of which only 15 million are suited for such purposes. The industrial sector is a major contributor to organic pollution loading and deterioration of the quality of Colombia's water resources, accounting for 29 percent of the organic pollution load of untreated wastewater discharges generated in the country.

Environmental degradation imposes a significant economic and health burden on Colombia's economy, and poor people are disproportionately affected. Health damage associated with environmental problems such as urban air pollution, indoor air pollution from burning of solid fuels for household purposes, and inadequate access to improved water sources and sanitation jointly account for an economic cost of COP 14.1 trillion, equivalent to 2 percent of GDP in 2013. From a poverty-reduction perspective, improving water supply and sanitation and reducing outdoor and indoor air pollution remain high priorities. Lack of an integrated approach and inadequate intersectoral coordination, however, constrain Colombia's progress in effectively addressing environmental health problems.

Colombia's high vulnerability to the effects of climate change, notably the devastating impacts of natural disasters, highlights the need for a strengthened institutional approach to disaster risk management and prevention. Floods and landslides are the most frequent disasters that afflict Colombian cities and rural areas; their frequency is expected to rise due to the effects of climate change and greater climate variability. In particular, there has been an average of more than 600 natural disaster events reported each year, making Colombia the country with the tenth highest economic risk from two or more hazards in Latin America. In other words, 64.7 percent of the population and 86.6 percent of assets are located in areas exposed to two or more natural hazards. The effects of La Niña in 2010-2011 resulted in damages equivalent to 2 percent of GDP in 2010 and losses of 0.38 percent of GDP in 2011.

As a major step in its commitment to a greener growth path, Colombia has signed the Green Growth Declaration as part of the OECD accession process. The Declaration encourages green investments and sustainable management of natural resources to simultaneously contribute to economic growth in the short term and to help build environmentally friendly infrastructure required for a green economy in the long term. Consistency of public investment with a long-term framework for generating sustainable growth is emphasized.

II. Operation Objectives

The PDO and pillars supported by this DPO series are closely linked with the green growth goals identified in the NDP 2014–2018. The PDO of this DPO series is to support the overarching green growth strategy by (i) establishing a set of policy and institutional measures for green growth in

transport, energy, environmental health and disaster risk management; and, (ii) improving environmental quality by reducing PM2.5 in air; strengthening regulatory and economic instruments for reducing water pollution; increasing capacity for solid waste disposal and enhancing waste recycling.

Pillar 1 Establish a set of policy and institutional measures for green growth in transport, energy, environmental health and disaster risk management. It focuses on key areas—transport, energy, environmental health and disaster risk management—to ensure long-term improvements in environmental degradation and the reduction of vulnerability to climate change and natural disasters. Following the programmatic approach, the reforms supported under Pillar 1 embody a progressive approach. The single prior action supported by DPO 1 is linked to four indicative triggers supported by subsequent operations in the programmatic series. This approach is aimed at deepening the reform process supported by Pillar 1 so that it adequately addresses multiple institutional facets of Colombia's green growth agenda, consolidates the reforms supported by the program, and enhances the long term sustainability of the green growth results envisaged under the Prior Action 1.

Pillar 2 seeks to improve environmental quality by reducing PM2.5 in air; strengthening regulatory and economic instruments for reducing water pollution; increasing capacity for solid waste disposal and enhancing waste recycling. The pillar will support policy actions that seek to improve pollution management by (a) promoting policies in wastewater treatment and solid waste management to keep up with the demand of growing urban areas; (b) strengthening standards and regulatory instruments related to air pollution; (c) strengthening standards, and regulatory and economic instruments related to water pollution; and (d) developing technical requirements and economic instruments to improve solid waste management. Specifically, and through the approved prior actions:

- The GoC seeks to reduce air pollution. As a first step it has issued a regulation to update the diesel quality parameters.
- The GoC seeks to reduce water pollution and protect freshwater sources from excessive demand. As a first step it has established discharge norms for treated wastewater and developed norms to enable reuse of treated wastewater by key sectors.
- The GoC seeks to reduce land pollution. As a first step has established the requirements for municipalities to formulate Integrated Solid Waste Management Plans and will establish economic incentives to minimize the amount of usable solid waste disposed in landfills, taking into account the inclusion of waste pickers as formal service providers.

III. Rationale for Bank Involvement

With the goal of reorienting growth towards conserving natural resources, improving environmental health and enhancing resilience to natural disasters and climate change, the GoC has designed a set of policy and institutional measures which makes green growth a central element of the NDP 2014–2018 'Everyone for a New Country'. The overarching nature of GoC's green growth strategy calls for actions to promote green growth across various economic sectors. Colombia's approach to greening its growth path has the broad objectives to (a) advance sustainable growth compatible with climate; (b) protect and ensure the sustainable use of natural capital and improve environmental quality; and (c) strengthen resilience by reducing vulnerability to natural disasters and climate change. This approach requires integrating environmental considerations in key sector policies and enhancing the efficiency of production activities. Recognizing that policies for green growth need to be complemented with investments in physical resources, notably infrastructure, and human resources, GoC has estimated the total investments required to implement the green growth strategy at US\$3.5 billion, and to reduce vulnerability to natural disasters and climate change at US\$2 billion.

Beyond incorporating green growth considerations, GoC's overarching green growth strategy seeks to achieve transformation of production and consumption processes in sectors. Fundamentally, it is a gradual transformation of production and consumption processes toward a growth trajectory that is low in carbon, reduces pollution, uses natural capital sustainably, and, is resilient to natural disasters and climate change. In this sense, achieving green growth requires not only changes in the policies, strategies and plans of all sectors but also their transformation in a well-defined direction that is verifiable and measurable. Thus, green growth goals and targets are set within sectoral goals and targets. As a result, the green growth strategy permeates the entire NDP.

Sustainable growth compatible with climate. GoC's green growth strategy aims at transforming sectors such as energy, transport, housing, water and sanitation, agriculture, industry for low carbon growth, including, for example, through development of renewable energy; promotion of multimodal transport systems, including non-motorized vehicles; promotion of sustainable construction and urban development; and more efficient use of water resources in agriculture and livestock farming.

Improving environmental quality. Improving the environmental performance of productive sectors with a view to improve their competitiveness; and actions to reduce the cost of environmental degradation and generate benefits to vulnerable population groups are among the measures being promoted by GoC to improve environmental quality.

Strengthening resilience by reducing vulnerability to natural disasters and climate change. To this end, GoC's strategy comprises strengthening resilience through better knowledge, reduction and management of disaster risks. To improve knowledge, GoC seeks to strengthen institutional capacity for monitoring seismic and volcanic threats, and threats of marine origin; and strengthen monitoring and early warning systems.

GoC is making efforts to strengthen institutions and mechanisms for intersectoral collaboration for green growth. The cross-sectoral nature of green growth inherently calls for collaboration across multiple sectors, to ensure that green growth objectives and actions of individual sectors are synergistic and not at cross-purposes. GoC's efforts to strengthen institutions and policy frameworks for intersectoral collaboration are notable, for example, in relation to improving environmental health and reducing vulnerability to natural disasters and climate change, both of which are cross-cutting topics that lend themselves readily to such collaboration.

The proposed DPO is consistent with the Bank Group CPS 2012-2016 for Colombia (Report 60620-CO) discussed by the Executive Directors on July 21, 2011. The proposed DPO is also consistent with the CPS Progress Report for Colombia (Report 83966-CO) for the period FY12-16, dated July 16, 2014. The CPS supports the NDP through a portfolio of financial, knowledge, and convening services. This DPO contributes directly to the pillars in the 2012-2016 CPS. In particular, Pillar 2: Sustainable Growth with Enhanced Climate Change Resilience.

The DPO is directly connected to a series of Bank policy and investment lending operations in Colombia. The Bank has been actively assisting the GoC with policy-based programs of reforms (First, Second and Third Programmatic Development Policy Loan for Sustainable Development - P081397, P095877, and P101310) and have been accompanied by a program of technical assistance under the Sustainable Development Investment Project (P082520). The project's activities have helped strengthen air pollution management, address key issues on the urban environmental agenda, make the initial key steps toward more effective integrated water resources management, strengthen the air and water quality networks, and improve the mechanisms for inter-sectoral coordination and the coordination between the environmental management institutions at the national and local levels. The solid waste management policy actions to be supported by the proposed DPO program continue a long-standing Bank-GoC dialogue complemented by policy support, technical assistance and investment

lending. On the disaster risk management side, the proposed policy actions capture GoC's progress towards improved risk management, notably through legislation that complements an ambitious reform initiated in 2012 with the support of a Bank-financed CAT DDO (Colombia Disaster Risk Management Cat DDO II - P126583).

Colombia is expected to continue outperforming the regional average with stable growth and sound macroeconomic indicators, but it could still be affected by adverse changes in the external environment. The country's economy is exposed to external risks such as a continued decline in oil prices cutting export and fiscal receipts and a rise in U.S interest rates increasing capital outflows. However, financial risks are diminished by the fact that most of the loans are agreed on fixed interest rates and low bank exposure to mortgage loans. On the other hand, large infrastructure projects currently under preparation can potentially lead to unforeseen public liabilities and pose additional fiscal risks. Nonetheless, contingent liability risks have been legally addressed in the new institutional framework for PPP's in 2012, and are smaller now than in the past.

Colombia has a robust macroeconomic framework that helps in weathering the main risks. The macroeconomic framework rests on three mutually reinforcing pillars: (i) a responsible fiscal policy based on a credible medium-term fiscal framework, supported by a Fiscal Rule, (ii) a monetary policy based on an inflation-targeting regime complemented by a floating exchange rate with moderate interventions, and (iii) sound macro and micro prudential policies combined with a robust financial system. In addition, the debt sustainability analysis indicates that public debt is expected to follow a declining path in the baseline case and in the alternative scenarios. The baseline scenario is largely based on the government's consolidation plans supported by the medium term fiscal framework. Because a large share of central Government debt is in local currency and on fixed terms, shocks to the interest (one standard deviation shock) and exchange rates (20 percent devaluation) have only a modest impact on the debt trajectory.

On the whole, and notwithstanding the economic risks to the near-term outlook, Colombia's macroeconomic policy framework is deemed adequate for development policy lending. Medium-term fiscal policy remains prudent, with proposed fiscal adjustments already well underway. Monetary and exchange rate policies are also supportive of macroeconomic and financial stability, though downside risks remain significant. A sharper-than-expected decline in commodity prices would tighten the fiscal position; and, a large income shock could reverse social gains and erode efforts to reduce poverty. Nevertheless, Colombia's economy is well positioned to weather these shocks. At the same time, the country could benefit from positive shocks that are not accounted in the baseline scenario, those include a faster than expected implementation of the peace agreement or an acceleration of the infrastructure investment program.

IV. Tentative financing

Source:	(\$m.)
Borrower	0
International Bank for Reconstruction and Development	700
Borrower/Recipient	
IBRD	
Others (specify)	
	Total

V. Tranches (if applicable)

(\$m.)

First Tranche
Second Tranche
Etc.
Total

VI. Institutional and Implementation Arrangements

MHCP will be the borrower. The DNP will be responsible for coordinating actions among the concerned agencies (MADS, MT, MVCT, UNGRD, MME and MSPS). Article 145 of Law 1753 (2014-2018 NDP) establishes that DNP will be the technical coordinator of “free availability loans” in Colombia. Colombia’s DNP will be responsible for coordinating the overall implementation of the proposed operation and for reporting progress and coordinating actions.

The program outcomes will be monitored through the measurement of the progress towards the achievement of results indicators included in the policy and results matrix. This measurement seeks to assess progress towards the implementation of the policy and institutional measures supported by the proposed DPO series and will be evaluated following the disbursement of the loan. The timing of the disbursement of DPO 2 and DPO 3 will depend upon the government’s ability to provide the Bank with satisfactory evidence that the prior actions have been met. Although all these conditions for DPO1 approval have already been addressed during project preparation, the DNP will have the responsibility of presenting the information related to the policy actions implementation in a timely manner and in a format satisfactory to the Bank

VII. Risks and Risk Mitigation

The overall risk of the operation is Moderate. The operation is subject to the following risks:

Political and governance. The transition process to a new administration, expected to take place in 2018, may pose political risks to the continuity of the reforms supported by this DPO series, as the champions of these reforms are likely to change. But the transition period is also a window of opportunity to take stock of the important achievements supported by the government and by this program, and to begin dialog on a long-term strategy for making further progress in the areas where the reforms have already occurred and for beginning to address the remaining critical environmental priorities. The Bank team plans to mitigate this risk by starting a renewed comprehensive dialogue on environmental issues with the GoC as soon as the new administration is in place. In addition, decentralization in Colombia involves nuances of evolving power relationships between the different levels of government and their stakeholders, and urban authorities may be hesitant to implement national policies that do not adapt to their local contexts or are opposed by interest groups. This DPO will promote policy dialogue and coordination between-DNP sector ministries with regional and local governments to develop the relevant regulations related to the proposed policy actions.

Macroeconomic. The government faces significant fiscal pressures associated with increasing expenditures on several ongoing commitments in security, infrastructure, and agriculture. The main sources of revenue in the oil and mining sectors remain susceptible to macroeconomic fluctuations. This risk is mitigated by the fact that the country’s macro resilience is based on solid initial conditions and policy buffers to respond. The reforms supported by this DPO will contribute to the country’s already strong economic growth.

Institutional capacity for implementation and sustainability. Given the multi-sectoral nature of the program’s reforms, coordination among the several ministries and other entities is a potential risk for this DPO. This risk will be mitigated by the identification of a coordination unit, the DNP, which will

ensure broad discussion of the issues among the national ministries, subnational entities and the stakeholders, enhancing the credibility, sustainability, and effectiveness of policy actions.

Sector strategies and policies. Policy measures address a number of sensitive reform areas such as air pollution, solid waste management, disaster risk management, and wastewater treatment. This may bring variable and uneven progress in achieving prior actions and timely completion of triggers. Risk mitigation measures include close monitoring of progress by the DNP, the coordination unit, and constant engagement with the various sectors at the senior management level.

Technical design of project or program. Exogenous (political, stakeholder, and institutional) factors could potentially risk the technical design of the operation. To address the changing political environment, only actions and triggers which are fully country-owned and grounded in solid dialogue were selected. In addition, the multi-sectoral nature of the program called for the identification of a narrow menu of key prior actions and triggers without compromising the reform content of the operation.

Environment and social. Overall, the measures supported by the DPO will have net positive environmental impacts. The DPO-supported measures are also likely to lead to net positive social effects, including for poor and vulnerable groups.

VIII. Poverty and Social Impacts and Environment Aspects

Poverty and Social Impacts

To meet the requirements of OP 8.60, the Bank prepared a Poverty and Social Impact Analysis (PSIA) applying methodologies to assess the distributional impact of policy reforms on the well-being of different stakeholder groups, with particular focus on the poor and vulnerable. Overall, the specific policy reforms supported by this DPO are expected to have significant and positive poverty alleviation and social development impacts in Colombia. In general, improvements in environmental sustainability are expected to benefit the poor who are most impacted by common environmental problems. The costly problems associated with environmental degradation are urban air pollution, inadequate water supply and sanitation, and natural disasters (such as flooding and landslides)—all of which are addressed by this DPO. Therefore, it is expected that, as a whole, the policy and institutional measures supported by the DPO will enhance the environmental and health conditions that allow for more productive workdays and a better life for the poor.

Minor regressive effects found by the PSIA due to the incorporation of fixed fees across income groups may be addressed through the incorporation of standard compensation mechanisms. The PSIA provides recommendations to incorporate social and distributional considerations into the proposed DPO that will be considered by the GoC during implementation of DPO1. The PSIA will help the GoC to ensure that the policies supported by DPO2 and DPO3 will benefit the most vulnerable groups by providing policy advice and suggesting areas of further research for medium term engagement.

Environment Aspects

As part of the preparation of the DPO, the Bank has conducted a policy strategic environmental analysis (policy SEA). The analysis acknowledges the government's efforts and commitments to improved environmental management that can be evidenced by the 2014–2018 NDP, which includes an overarching strategy for green growth (pillar 1) as well as by the policy actions included under pillar 2. The purpose of the policy SEA is to determine whether specific country policies supported by the DPO are likely to cause significant effects on Colombia's environment, forests, and other natural resources. For those policies with likely significant effects, the policy SEA assessed Colombia's systems for reducing such adverse effects and enhancing positive effects, drawing on relevant country-level and

sectoral environmental analysis. The policy SEA also assessed if there were significant gaps or shortcomings in these systems.

Based upon the policy SEA performed, there are no significant negative effects on the environment, forests, and other natural resources. The overall net effect of the policy actions supported by this DPO is expected to be positive. Related indicative triggers reinforce this positive effect. The significance of effectively implementing these policy actions would translate into a reduction in the health costs associated with air, water, and soil pollution, as well as with natural disasters, Colombia's environmental priorities. Moreover, the programmatic DPO would play an important role in continuing to help mainstreaming of environmental considerations in key sectors such as water, transport, energy and disaster risk management in Colombia and in the country's overall approach to sustainable development. Although a few potential negative environmental effects associated with some of the policy actions were found, none of these are significant. The GoC is aware of the results and recommendations of the assessment. Although no significant gaps or shortcomings in the systems for managing these effects have been found, the GoC will consider the suggestions and recommendations included in Annex 5 during implementation of DPO 1. The GoC and the Bank will also include these issues in the policy dialogue during DPO 2 preparation.

IX. Contact point

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