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Second Party Opinion

Banco de Desarrollo del Ecuador B.P.'s Green Bond Framework

May 7, 2025

Location: Ecuador **Sector:** Bank

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

See Alignment Assessment for more detail.

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Medium green

Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our Shades of Green Analytical Approach >

Strengths

The framework's eligible expenditures align with Ecuador's updated Nationally Determined Contributions. This is in line with the entity's role as financer of the decentralized autonomous governments in the country.

The bank's project categories help address the region's most material environmental challenges. The bank's focus on clean transportation and water and sewage financing is highly relevant in Ecuador. The transportation sector is one of the highest greenhouse gas (GHG)-emitting sectors. Moreover, water and sanitation still face challenges in terms of coverage, service quality, and wastewater treatment, especially in rural areas.

The entity commits to reporting on both expected and actual impacts, which is uncommon for banks. This helps provide investors with more transparency.

Weaknesses

No weaknesses reported.

Areas to watch

The framework incorporates significant investments in infrastructure construction and rehabilitation, which are exposed to physical climate risk and environmental risk from construction. While the bank has experience in this type of project and incorporates these risks on its environmental and social risk assessment, the framework lacks specific criteria for these types of risks.

Banco de Desarrollo del Ecuador B.P. could have less control over the environmental and social risks of its lending given its second floor-oriented business. The bank's funding typically goes to the municipal governments or other public entities, which then use these funds to implement specific projects.

Shades of Green Projects Assessment Summary

Over the three years following issuance of the financing, Banco de Desarrollo del Ecuador B.P. (BDE B.P.) expects to allocate all proceeds to eligible green projects, with a 36-month lookback period. BDE is not in a position to share the expected allocation to each project category since the framework intends to function as a guide for future issuances. That said, the bank's loans have historically concentrated on financing the transportation and water and sewage sectors.

We assess the framework as Medium green based on the project categories' Shades of Green detailed below, the expected allocation of proceeds, and the environmental ambitions reflected in BDE's framework.

Sustainable water and wastewater management	**Medium to Light green**
Planning and assessment of the state of water and/or wastewater resources through studies	
Research and innovations related to water quality, efficiency in water consumption, treatment, and decontamination	
Infrastructure and systems for efficient and sustainable water management	
Systems or infrastructure for mitigating risks caused by extreme hydroclimatic events	
Monitoring systems	
Initiatives and programs of sustainable nature-based water management in public companies across different economic sectors	
Drinking water supply projects	
Wastewater methane recovery and mitigation systems	
Wastewater methane harvesting solutions	

Renewable energy	**Dark green**
Projects of non-fossil renewable energy sources	
Transmission infrastructure entirely dedicated to supporting eligible electric power generation systems	
Solar and/or wind (onshore) energy projects that integrate energy generation and storage (batteries)	

Energy efficiency	**Medium green**
Lighting improvements	
Investments in energy efficiency in buildings, homes, and/or companies that produce savings of more than 20%	
Specialized services to reduce energy losses in the electricity distribution system	

Low-carbon transport	**Medium to Light green**
Construction, operation, and maintenance of direct zero-emission transportation projects	
Construction, operation, and maintenance of clean transportation infrastructure	

Sustainable management of natural resources and land use	**Dark to Medium green**
Sustainable forest management	
Conservation and restoration programs for native and exotic forests	
Management and maintenance of areas of the National System of Protected Areas, Areas of Conservation and Sustainable Use, and other nationally recognized mechanisms	
Protection and restoration of terrestrial and freshwater ecosystems, watersheds, biodiversity, habitats, and soil and their services	
Drip irrigation infrastructure	

Pollution prevention and control	**Medium green**
Facilities for the collection, classification, selection, and disposal of nonhazardous waste	
Waste collection vehicles	
Yard green waste processing facilities	
Projects to capture biogas from closed landfill facilities	

Green buildings	**Medium green**
LEED (Leadership in Energy and Environmental Design) Gold or Superior certified, and EDGE and BREEAM (Building Research Establishment Environmental Assessment Method) four stars or higher certifications	
Retrofitting existing buildings to improve the current certification level	

Adaptation to climate change	**Medium to Light green**
Create, expand, and strengthen natural heritage resilience programs/projects	
Create, expand, and strengthen water heritage resilience programs/projects	
Create, expand, and strengthen health resilience programs/projects	

Create, expand, and strengthen human settlements resilience programs/projects
Create, expand, and strengthen resilience programs/projects in strategic sectors
Reconstruction works of public service infrastructure affected by climatic events
Climate data monitoring, collection, storage, and processing systems
Climate risk and vulnerability analysis

See Analysis Of Eligible Projects for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Banco de Desarrollo del Ecuador B.P. (BDE B.P.) is a government-owned financial institution established in 1979. It primarily offers financing and technical assistance to Ecuador's 93 decentralized autonomous governments for infrastructure and public service projects. The bank's activities encompass sectors such as transportation, water and sanitation, urban development, and housing. It is headquartered in Quito, Ecuador.

Material Sustainability Factors

Climate transition risk

Banks are highly exposed to climate transition risk through their financing of economic activities, which affect the environment. Banks' direct environmental impact is small compared with financed emissions and stems mainly from power consumption (e.g., data centers). Policies and rules to reduce emissions could raise credit, legal, and reputational risks for banks with large exposures to high-emitting sectors, such as oil and gas, metals and mining, real estate, or transportation. These medium- to long-term risks are significant and will be proportional to the impact of climate change on the economy. Positively, financing the climate transition offers a growth avenue for banks through lending, debt structuring, and other capital markets activities.

Physical climate risk

Physical climate risks will affect many economic activities as climate change will increase the frequency and severity of extreme weather events. Banks have exposure to physical climate risk through their financing of a wide array of business sectors that are exposed to physical climate risks. However, while climate change is a global issue, weather-related events are typically localized, so the magnitude of banks' exposure is linked to the geographical location of the activities and assets they finance. Similarly, banks' physical footprint (e.g., branches or ATMs) may also be exposed to physical risks, which may disrupt their ability to service clients in the event of a natural catastrophe, amplifying the impact on communities. Banks may mitigate the effects of physical climate risks by financing adaptation projects and climate-resilient infrastructure, as well as by investing in solutions that support business continuity in exposed geographies. Ecuador is particularly vulnerable to physical climate risks such as heavy rains, droughts, frosts, landslides and floods due to its diverse geography, which includes coastal areas, mountains, and the Amazon rainforest.

Biodiversity and resource use

Banks contribute to significant resource use and biodiversity impact through the activities they fund or invest in. For example, the construction sector--which is a major recipient of bank financing--is a large consumer of raw materials such as steel and cement. Similarly, bank-financed agricultural activities can have material biodiversity impacts. Ecuador is one of the most biodiverse countries in the world. Climate change poses a threat to its ecosystems, leading to potential loss of species and habitat degradation.

Water

Banks may be exposed to water-related risks through their lending activities. Such exposure is more relevant when a bank's operations are concentrated in a water stressed region or when its business exhibits a higher-than-average exposure to water-intensive sectors. For instance, water and wastewater utilities face various water supply and quality challenges depending on their location and role in the water lifecycle, and agriculture is responsible for over 70% of global freshwater withdrawals. One key risk is physical water scarcity, where water availability becomes limited due to factors like droughts, population growth, and climate change. This can cause supply chain interruptions, higher costs for companies that rely on water-intensive processes,

and potential regulatory restrictions. Water pollution is another risk with significant ecological and societal impacts. Inadequate wastewater treatment can hurt economic activity through reputational damage and litigation, among other business costs. Ecuador experiences extreme weather events, such as El Niño and La Niña, which can lead to severe droughts or flooding. These events can have significant impacts on agriculture, infrastructure, and public health.

Impact on communities

The affordability and reliability of networks are under pressure from climate-related risks, exacerbating the materiality for stakeholders. Energy and water are essential services supporting human health and well-being and global economic development. Service disruptions or steep price increases are likely to be amplified by the energy transition and physical climate risks. These dynamics can affect households' purchasing power and the competitive strengths of local industries, which make this highly material for stakeholders. Additionally, for water utilities, pollution in source water can affect the availability and useability of supply. BDE is particularly exposed to communities for the role it plays on funding infrastructure projects for local governments in Ecuador.

Issuer And Context Analysis

All project categories included in BDE B.P.'s framework address the bank's exposure to material environmental factors. Expenditures include projects in categories such as renewable energy, energy efficiency, clean transportation, and green buildings aim to address climate transition risk. The framework includes projects for pollution prevention and control and sustainable water and wastewater management that also address nonclimate environmental risk.

Furthermore, funding for conservation and restoration is key to protecting increasingly scarce natural resources. In addition, the framework incorporates adaptation projects, which we consider important to bolstering Ecuador's resilience against physical risk.

The framework's eligible expenditures align with Ecuador's updated Nationally Determined Contributions, with an implementation horizon between 2026 and 2035. The country has developed a policy and regulatory framework that includes the National Climate Change Strategy, which establishes adaptation and mitigation work in key sectors such as agriculture, land use, energy, waste, and water resources. This strategy is complemented by other instruments, such as the National Development Plan, the National Adaptation Plan, and the Climate Change Mitigation Plan, which integrates climate mitigation and adaptation into the government's development planning.

Eligible projects under the framework must be at least aligned with one of the government programs and existing alliances with multilateral banks, contributing to the bank's commitment, within its financing activities, to the public sector's national efforts on sustainable development.

The bank does not measure its financed carbon emissions. Scope 3 emissions can be difficult to track given BDE B.P.'s funding typically goes to the municipal governments or other public entities, which then use these funds to implement specific projects.

On the other hand, the bank has an environmental policy that follows international practices to assess and manage projects' environmental and social risks, including physical climate risk. The policy mirrors performance standards established by international organizations such as the International Finance Corp., the Inter-American Development Bank, and the European Investment Bank. Nevertheless, BDE B.P. could have less control over the environmental and social risks of its lending given its second floor-oriented business.

BDE B.P.'s framework has numerous linkages that significantly affect communities. While the green financing primarily focuses on environmentally related projects, it also addresses critical social needs that are vital in Ecuador. For example, the climate adaptation category includes resilient programs aimed at strengthening essential social infrastructure, such as health centers, housing, and schools.

Alignment Assessment

This section provides an analysis of the framework's alignment to Green Bond principles.

Alignment Summary

Aligned = ✓ Conceptually aligned = o Not aligned = ×

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

✓ Use of proceeds

We assess all the framework green project categories as having a green shade, and the issuer commits to allocate an amount equal to the net proceeds issued under the framework exclusively to eligible green projects within the next 36 months after issuance and include a lookback period of the same length. Please refer to the Analysis Of Eligible Projects section for more information on our analysis of the environmental benefits of the expected use of proceeds.

✓ Process for project evaluation and selection

BDE B.P. has a Green Bond Commission comprising the members from the credit committee to identify, evaluate, and approve projects according to the established eligibility criteria. The credit committee will meet at least every 30 days. In addition to alignment to the eligibility criteria, the framework states that eligible projects must be framed in existing programs structured by the bank and in line with government priorities. The bank has an Environmental and Social Risk Management System to identify and manage environmental and social risks by categorizing them according to their impact level and implementing appropriate mitigation measures. The framework's exclusion criteria reference the International Finance Corp.'s exclusion list, including activities such as weapons and munitions, alcoholic beverages, adult entertainment, tobacco, and gambling.

✓ Management of proceeds

BDE' B.P.'s treasury will be in charge of managing and tracking allocated and unallocated funds. Unallocated funds will be allocated in subaccounts and kept in cash or invested in short-term, highly liquid, and credit-rated instruments until fully allocated to eligible projects. Additionally, the bank's operations management will use its traceability tool for annual monitoring of the subaccount. The company commits to replacing projects that cease to comply with the framework's eligibility criteria within 12 months following their removal from the invested pool.

✓ Reporting

BDE B.P. commits to report annually on the allocation of the net proceeds and on the financed projects' impact, until the instrument reaches full maturity. Reporting will be available on the bank's website. Allocation reporting will include the total amount of instruments outstanding, a brief description of the projects, and the breakdown of allocation of net proceeds by eligible category. The bank expects to report based on ICMA's Harmonized Framework for Impact Reporting, including actual and expected impact of the financed projects, which we view as above banking sector practices. Indicators include allocation of proceeds, but also expected environmental improvements, including annual GHG emissions avoided and areas of restored mangrove ecosystems. It is positive that the bank commits to receiving an external assurance on the allocation and impact reporting through full allocation.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "Analytical Approach: Shades Of Green Assessments".

Overall Shades of Green assessment

We assign the framework a Medium green shade based on the project category shades of green detailed below, the expected allocation of proceeds, and BDE B.P.'s environmental ambitions.

Medium green

Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our Shades of Green Analytical Approach >

Green project categories

Sustainable water and wastewater management

Assessment

Medium to Light green

Description

Eligible expenditures include financing and refinancing of loans and investments related to planning, constructing, improving, reconstructing, installing, operating, maintaining (preventive and corrective), expanding, adapting, monitoring, and evaluating for efficient water and wastewater management and water supply security, including the following:

- Planning and assessing the state of water and/or wastewater resources through studies, physicochemical, biological, and ecosystem analyses at the basin or economic sector level to ensure sustainable investments in infrastructure and the conservation of key aquatic and wetland habitats, essential for the livelihoods of indigenous peoples and communities.
- Research and innovations related to water quality, efficiency in water consumption, treatment, or decontamination.
- Infrastructure and systems for efficient and sustainable water management. This includes the construction, reconstruction, improvement, or expansion of infrastructure for the management of water resources and the provision of water or sanitation services, in line with the requirements and objectives of the current National Development Plan. This includes sewerage networks (with household connections), pumping stations, transport systems and wastewater treatment plants in their different stages (primary, secondary and/or tertiary), and adequate wastewater disposal systems. Also in this category is conservation of water resources, including the protection of water catchment areas, conservation of watersheds, and the prevention of pollution that affects water supplies, including nature-based solutions.
- Systems or infrastructure for mitigating risks caused by extreme hydroclimatic events, such as river and/or pluvial floods, or prolonged droughts. This includes the construction, reconstruction, improvement, expansion, or adaptation of reservoirs for the control of extreme water-related weather events, as well as improvements, maintenance and adaptations of drainage systems and stormwater networks,

pumping stations, and stormwater tanks.
- Monitoring systems, including smart grids, drought early warning systems, flood early warning systems, and water quality control processes.
- Creating, expanding, and/or strengthening initiatives and programs of sustainable nature-based water management in the economic and public enterprises sectors to apply circular economy or clean production measures ensuring more efficient management of water and wastewater resources.
- Drinking water supply projects that include the construction, improvement, reconstruction, or expansion of drinking water supply infrastructure, such as water catchments, treatment facilities, drinking or non-potable water pipeline networks, and distribution networks, including pumping stations, backup tanks, and household connections.
- Wastewater methane recovery and mitigation systems, including anaerobic sludge digesters, biogas capture systems in existing open-air anaerobic lagoons, new aerobic treatment plants or covered lagoons, and simple degassing devices in the discharge of effluents from municipal anaerobic reactors.
- Wastewater methane harvesting solutions, including gas digesters for combined heat and power, gas digesters for electricity, or heat only.

Analytical considerations

- As a form of natural capital, water is necessary for economic activity, thriving ecosystems, and public health. Therefore, water supply systems are important for securing a future where all stakeholders have reliable access to sufficient water of adequate quality. These systems are energy-intensive and, if not sufficiently managed, can generate significant waste, exacerbate water stress for others, and pose disruptions to hydrology and aquatic ecosystems.
- The bank has identified several types of projects that span various shades of green. Our Medium to Light green assessment reflects the diverse environmental benefits and risks associated with this comprehensive portfolio of projects. Additionally, the bank does not specify quantitative thresholds within its eligibility criteria, which limits the comparability of the benefits and how they could mitigate other environmental impacts, such as disruption and emissions during construction and embodied emissions.
- Ecuador is highly exposed to the effects of climate variability and climate change. According to data from the World Bank, 65 major disasters were recorded in the country from 1900 to 2009, with 60% caused by hydrometeorological phenomena. This also stems from the country's vulnerability to the El Niño-Southern Oscillation. The country has made strong progress toward guaranteeing access to water and sewage across regions since 2010. According to data from the 2022 census, 84.2% of the population has access to water services and 65.8% of people have access to sewage. Still, inequalities persist across provinces and between rural and urban populations.
- Eligible projects include research and planning of hydric resources (natural water sources), innovation for improvements in the quality of water, monitoring systems, and early alert systems for droughts, given their relevance to promoting better management of water across the country.
- Wastewater systems reduce pollution, enable resource recovery, and enhance ecosystem and public health. As a result, they are a key component of a low-carbon, climate-resilient future. The primary benefits they provide include improving water quality, which has important cumulative effects on a watershed; relieving water stress; and, depending on the system, providing a source of nutrient and energy recovery. However, these systems are energy-intensive and, if not sufficiently managed, can produce significant solid waste and methane emissions.

Renewable energy

Assessment	Description

Dark green	Eligible expenditures include the financing and/or refinancing of loans and investments related to the following:
	• Feasibility and pre-feasibility studies, emissions estimation, construction, equipment, operation, and maintenance of projects of non-fossil renewable energy sources in the following types of investments:
	  o Wind energy,
	  o Photovoltaic solar energy,
	  o Solar thermal energy,
	  o Hydroelectric power plants (less than 25 megawatts),
	  o Bioenergy, and
	  o Geothermal energy.
	• Transmission infrastructure entirely dedicated to supporting eligible electric power generation systems eligible under this general framework.
	• Investments in solar and/or wind (onshore) energy projects that integrate energy generation and storage (batteries).

Analytical considerations

- Renewable energy projects such as solar photovoltaic and concentrated solar power, wind, and hydroelectric are key elements in limiting global warming to well below 2 degrees Celsius, provided their negative impacts on the local environment and physical risks are sufficiently mitigated. Additionally, the framework incorporates projects related to the transmission and distribution of energy produces by sources in the category, which will help further diversify energy sources in Ecuador's electric grid.
- The company's investments in wind, solar, geothermal, bioenergy, and hydropower support the Paris Agreement modeled pathways and are considered Dark green in our analysis. Hydropower financing should operate with life-cycle emissions of less than 100 grams of CO_2 equivalent/kilowatt-hour (g CO_2e/kWH) and less than 25 megawatts, mitigating other environmental risks. Currently, hydropower accounts for approximately 70% of the country's energy generation and over 90% of its electricity production. We believe that eligible projects within this category will help further diversify Ecuador's strong renewable energy matrix.
- Managing geothermal energy from high temperature fields results in some GHG emissions due to the chemical composition of the geothermal steam that stems from the cooling of magma. However, the emissions are minimal compared with those from conventional power production. The framework incorporates eligibility criteria for greenhouse gas limits of 100 g CO_2e/kWH, as well as a commitment to use renewable gas for its operations.
- Bioenergy, derived from organic materials, provides a renewable energy source that can help reduce reliance on fossil fuels, thereby decreasing GHG emissions and mitigating climate change. It can enhance waste management by converting agricultural residues, forestry byproducts, and organic waste into energy, thus reducing landfill use and promoting a circular economy. The framework incorporates GHG emission reduction of at least 80% as well as emission thresholds of 100 g CO2e/KWh and exclusions for the souring of biomass or biofuel. In Ecuador, the primary feedstock for bioenergy production is sugar cane bagasse.
- The company will address the project's physical and/or biodiversity risks through its internal environmental and social risk analysis. Additionally, the framework offers eligibility criteria for mitigation of lifecycle emissions, zero deforestation commitments, end of life criteria, and waste management criteria for eligible projects under the category.

Energy efficiency

Assessment	Description
Medium green	Eligible expenditures include loans and investments to improve energy efficiency in buildings, homes, and industries, including: • Lighting improvements--for example, replacement with LED technology or new technologies; • Investments in energy efficiency in buildings, homes, and/or companies that produce savings of more than 20%, including retrofitting, thermal insulation, and/or HVAC air conditioning system upgrade; and • Construction, equipment, or contracting of specialized services to reduce energy losses in the electricity distribution system.

Analytical considerations

- Energy efficiency measures are necessary to transition to a low-carbon economy, but their climate benefits and risks vary. Exposure to climate risk arises, for example, when these activities take place in high-emitting sectors or lock in high-energy processes or fossil fuel use.
- Energy efficiency offers cost-effective actions to reduce GHG emissions, according to the International Energy Agency's report on global developments in energy efficiency. The IEA 2021 report underscores the significance of the Net Zero Emissions by 2050 Scenario, projecting a 35% improvement (reduction) in the global economy's energy intensity by 2030.
- We assess energy efficiency projects as Medium Green. We expect these projects to reduce energy use through equipment and energy management control systems. We view positively that the issuer commits to a quantitative threshold of at least 20% energy efficiency improvement. However, there are limited considerations around rebound effects, which means an increase in energy use following efficiency improvements.
- Investments to increase efficiency of transmission and distribution networks are relevant in Ecuador given that the average energy loss rate in the country is close to 15%, according to the World Bank. Although the bank does not specify particular efficiency improvements, we perceive the lock-in risks to be low, given the substantial proportion of renewable energy sources in Ecuador's electricity grid.

Low-carbon transport

Assessment	Description
Medium to Light green	Eligible expenditures include the financing and/or refinancing of loans and investments related to the following: • Construction, operation, and maintenance of direct zero-emission transportation projects, including their key components and supporting infrastructure in the following types of investments: o Metro lines: new lines, o Electric buses, o Trams, o Trains, o Bike paths, o Charging infrastructure, including heavy-duty vehicles adapted for the transport of components necessary for wind projects, and

    - Acquisition of electric vehicles or vehicles that promote the transition to a reduction in carbon emissions, with emissions of less than 75 g CO_2/passenger-kilometer.

- Construction, operation, and maintenance of clean transportation infrastructure, including:
    - Infrastructure necessary for clean transport such as electric charging points and improvements in connection to the electricity grid;
    - Infrastructure and equipment (including fleets) for active mobility (walking, cycling, e-bikes, and e-scooters); and
    - Infrastructure that is predominantly used for low-carbon transportation.

Analytical considerations

- Mitigating GHG emissions from transportation will be crucial to meet global decarbonization goals considering that the transport sector accounts for 23% of global energy-related GHG emissions, according to the Intergovernmental Panel on Climate Change (IPCC). Fossil fuel-powered vehicles and vessels also create air pollution, such as nitrogen oxides and sulfur oxides. The decarbonization of all modes of transport will require a significant expansion of low-carbon transport infrastructure.
- In infrastructure projects, value chain emissions and environmental impacts can be significant and should be carefully managed--for example, by choosing low-carbon construction materials. Physical climate risks also are a material consideration for all infrastructure projects.
- According to the National Energetic Balance, during 2023 the transport sector accounted for 51.7% of the country's GHG emissions, which mostly come from fossil fuel vehicles. We believe investments in clean, public transport is very important to reduce the sector's emissions. Public transportation is the main means of transportation for Ecuadorians (50.68%), followed by walking (25.33%) and particular vehicles (21.68%), according to the latest data from the National Institute of Statistics and Census.
- We view electric vehicles, zero emissions transportation, and related infrastructure as aligned with a Dark green shade. Expenditures under this category will be allocated to modernize and expand public transportation. Measures to improve accessibility to the transportation infrastructure and to increase the use of public transportation are part of the IPCC's decarbonization pathways. Nonetheless, the overall category receives a Medium to Light green shade, given that the framework also includes other types of transportation, which we view as supporting a near-term climate transition, but not fully aligned with a low-carbon, climate-resilient future.
- The framework's eligibility criteria specify emissions thresholds for hybrids of 75 g CO_2/passenger-kilometer, in line with The International Council on Clean Transportation guidelines. However, a maximum emissions threshold does not necessarily safeguard against high fossil fuel consumption of hybrid vehicles. Although hybrid modes of transportation involve combustion of fossil fuels and associated emissions, they represent initial steps to transition toward electric modes of transportation, including supporting behavioral change where charging infrastructure is less well developed. Still, the lock-in risk from this type of projects limits our assessment to a Light Green shade.
- Projects involving micromobility have clear environmental benefits and are in line with the country's efforts to create alternative mobility solutions, including bike lanes, electric bikes, and safe spaces for transit. Given the positive effects these projects have by incorporating electric and non-polluting solutions and the potential contribution they could have on reducing traffic within the cities, we consider them as having a Dark green shade.
- Eligible projects under the category include the construction, operation, and maintenance of infrastructure. We view this as enabling infrastructure given the framework's commitment to prioritize this infrastructure to low-carbon transportation.

Sustainable management of natural resources and land use

Assessment	Description
Dark to Medium green	Eligible expenditures include the financing and/or refinancing of loans and investments related to construction, operation, maintenance, expansion, training, and adaptation for the promotion of land use, preservation of biodiversity, and management of areas under a conservation mechanism recognized by Ecuador, including the following: • Sustainable forest management: Commercial management of natural forests in a sustainable manner for timber production that are certified by the Forest Stewardship Council (FSC) or by the Programme for the Endorsement of Forest Certification (PEFC) and that have a sustainable management plan; • Conservation and restoration programs for native and exotic forests; • Management and maintenance of areas of the National System of Protected Areas, Areas of Conservation and Sustainable Use, and other nationally recognized mechanisms; • Protection and restoration of terrestrial and freshwater ecosystems, watersheds, biodiversity, habitats, and soil and their services; and • Drip irrigation infrastructure.

Analytical considerations

- Healthy ecosystems and biodiversity are an important part of a low-carbon, climate-resilient future, providing natural resources, water and soil management, and pollination services. Protecting or restoring biodiversity also often creates climate co-benefits, such as carbon sequestration or adaptation solutions. Well-designed projects can reduce threats such as unsustainable resource extraction, climate change risks, land use change, pollution, and invasive species.
- Eligible projects related to financing sustainable forest management will follow FSC or PEFC certifications. The FSC certification focuses on sustainable forest management, while the PEFC has a larger emphasis on the supply chain. At the same time, certification systems vary significantly in stringency, can contain loopholes, and in many cases cannot adequately address larger systemic issues. That said, implementing internationally recognized certifications is an effective way to ensure that a wide array of environmental risks is managed for each project. For these reasons, we assign these projects a shade of Medium green.
- Eligible projects for conservation and sustainable management will focus on the protection of natural resources within protected areas. Conservation of biodiversity, natural ecosystems, and habitats can have substantial benefits for climate-change mitigation and adaptation due to critical ecosystem services, including carbon sequestration, local climate regulation, soil stabilization, and storm surge protection. We assign these projects a shade of Dark green.

Pollution prevention and control

Assessment	Description
Medium green	Eligible expenditures include loan and investment financing and refinancing related to: • Construction, operation, and maintenance of facilities for the collection, classification, selection, and disposal of nonhazardous waste to prepare it for reuse and/or recycling; • Acquisition, operation, and/or maintenance of waste collection vehicles, provided that they comply with the transport criteria defined in this framework;

- Yard green waste processing facilities to produce compost for use in agricultural, municipal, or consumer fields with an environmental management instrument, if applicable; and
- Projects to capture biogas from closed landfill facilities.

Analytical considerations

- Waste management is an important pollution prevention measure that can prevent harm to human health and local ecosystems from waste streams. Recycling, if done properly, increases the useful life of materials, thereby reducing carbon and other air pollutants' emissions, energy, and natural-resource use.
- Waste prevention and reuse solutions are the preferred solutions under the waste management hierarchy because they have the lowest negative environmental impact among waste management options, followed by recycling, energy recovery, and finally disposal. Waste collection and sorting projects can increase recycling and reuse rates, thus diverting waste from less environmentally beneficial disposal solutions.
- Waste management is an important pollution prevention measure that can avoid harm to human health, the environment, and local ecosystems. Waste-to-energy projects may provide a disposal solution for waste that cannot be recycled, reused, or avoided, and is preferable to landfilling. The framework includes eligibility criteria for biogas capture projects that includes gas capture of at least 75% and the commitment to use the gas for electricity or to be fed into the natural gas grid or be used as fuel. We assess these activities as Medium green.
- Waste recovery projects are key pollution-prevention measures and help avoid harm to human health and local ecosystems. Recycling and reuse programs can reduce GHG emissions, energy use, and natural resources use. They also contribute to lower GHG emissions throughout the value chain--recycling avoids carbon emissions that usually result from the use of new materials to make new products, and emissions from waste in landfills.
- The framework includes projects related to waste collection vehicles that align with its clean transportation criteria. While we view this as a positive, we think it could be a limitation given the particular needs of the sector and the limited clean transportation options.
- Ecuador's updated Nationally Determined Contributions include the need to have an integrated management of waste that incorporates the active capture of methane in landfills, separation at the source, and the use of organic waste with a circular economy approach. These types of projects are incorporated within the framework.

Green buildings

Assessment	Description
Medium green	Eligible expenditures include the financing and/or refinancing of loans and investments for the modernization of buildings with a minimum of 20% energy savings, demonstrated by the following certifications or their equivalents: • LEED Gold or Superior, EDGE, BREEAM certifications; and • The costs associated with retrofitting existing buildings to improve the current certification level or achieve one of the certification standards recognized by this framework within three years.

Analytical considerations

- The IEA emphasizes that reaching net-zero emissions in buildings demands major energy efficiency strides and fossil fuel abandonment. All properties need to demonstrate high energy performance, with new developments also focusing on

reducing emissions from construction materials. Additionally, addressing physical climate risks is essential to improving climate resilience across all buildings.

- We assign a Medium green shade to this project category, given the bank's criteria for the eligibility of projects, which are focused on renovation of buildings only and include achieving at least 20% energy savings. We believe that these requirements, along with the issuer's policies and the project selection process, ensure that financed buildings deliver environmental benefits, particularly in terms of improved energy efficiency.
- The framework does not include criteria to address emissions related to building materials for eligible buildings. However, given that projects are limited to retrofitting of existing building and do not allow for the acquisition of new buildings, embodied emissions are less material. Furthermore, heating is not common in buildings in Ecuador.
- For modernization of existing properties, we view positively that the bank commits to achieve minimum levels of certification (LEED Gold or Superior, EDGE, BREEAM excellent or higher). Certifications address several environmental topics and involve third-party verification. However, this does not necessarily guarantee a low-climate impact or highly energy efficient building because they differ considerably in their requirements for energy efficiency, embodied emissions of construction materials, and climate resilience, particularly in points-based certification systems.
- Their robustness depends on a variety of factors, such as levels achieved and type of certification. Generally, a higher level of certification means more sustainable strategies implemented or considerations in the design, construction, and operation of a building, but not necessarily confirms certain percentage of saving or commitment.
- The existing properties are exposed to physical climate risks. BDE B.P's portfolio is subject to physical climate risk assessments, as described in previous sections, which allows the bank to monitor key risks related to its portfolio of eligible projects. However, it is unclear whether such analyses are performed at the asset level.

Adaptation to climate change

Assessment	Description
Medium to Light green	Eligible expenditures include financing and refinancing of loans and investments related to planning, constructing, operating, maintaining, expanding, training, adapting, researching, evaluating, and monitoring for climate change adaptation, considering the following: • Create, expand, and strengthen natural heritage resilience programs/projects, including establishing conservation areas, management plans, good practices, monitoring, and land use; • Create, expand, and strengthen water heritage resilience programs/projects, including resilient infrastructure against droughts, floods, management of forms of protection and preventive guarantees, improving sedimentation, and/or regressive erosion problems; • Create, expand, and strengthen health resilience programs/projects, including strengthening health response capacity against climate-sensitive diseases, vector control, early warning systems against floods and droughts, and mapping of threats and vulnerabilities; • Create, expand, and strengthen human settlements resilience programs/projects, including construction of infrastructure to control rainfall, landslides, and floods; • Create, expand, and strengthen resilience programs/projects in strategic sectors (hydroelectric power plants and projects, road infrastructure), including reforestation and restoration, cleaning of ditches, sewerage, causes and streams, maintenance of roads and road drainage, and slope stabilization; • Reconstruction works of public service infrastructure affected by climatic events; • Climate data monitoring, collection, storage, and processing systems; and • Climate risk and vulnerability analysis.

Analytical considerations

- Climate scientists have been clear that some climate change will take place, even in the most-optimistic scenarios. This makes it crucial to plan for and mitigate potential risks to reduce the financial and environmental effects. Implementing adaptation solutions can also reduce resources and emissions linked to rebuilding damaged assets. Eligible projects under the category are key to promote climate resilience and adaptation in Ecuador. However, they involve a wide variety of eligible projects, some of which are exposed to risks associated with construction, which limits our assessment of this category to Medium to Light green.
- Eligible projects under the framework include climate-resilient infrastructure, safe water management to guarantee access in adverse weather conditions, infrastructure to guarantee resilience in strategic sectors, strengthening of conservation programs, reconstruction of public service infrastructure affected by climate change, and infrastructure to control rainfalls, landslides, and floods. We believe these projects will help make communities in Ecuador more resilient to climate-related hazards.
- The issuer has selected projects related to constructing adaptation measures, such as flood defenses, which are particularly important in the highland areas due to the increased surface runoff from snow melt and extreme rainfalls on degraded forest ecosystems. We assign these projects a Medium green shade. On the other hand, early warning systems help companies and communities identify and limit damages caused by climate hazards, and nature-based solutions typically have the strongest impact due to their biodiversity co-benefits. We assign a Dark green shade to those projects.
- Eligible projects under the category include reconstruction works of public service infrastructure affected by climatic events, for which we lack enough visibility of potential environmental risks. Any reconstruction must reduce vulnerability to future climate risks and increase the adaptive capacity of communities and ecosystems. The designs are expected to incorporate climate scenarios projected in the climate risk and vulnerability analyses, appropriate materials, community participation, and the efficient use of natural resources.
- Although these projects can promote long-term sustainability, they may also result in significant CO_2 emissions from construction materials and may perpetuate fossil-fuel dependency, such as through the financing of adaptation measures to roads. These factors limit our assessment of this project to Light green.

S&P Global Ratings' Shades of Green

Assessments	Dark green	Medium green	Light green	Yellow	Orange	Red
Description	Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects	Solar power plants	Energy efficient buildings	Hybrid road vehicles	Health care services	Conventional steel production	New oil exploration

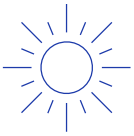
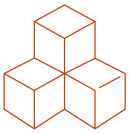
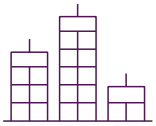
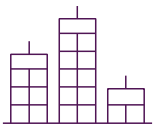
Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

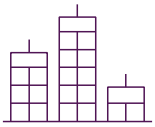
LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Mapping To The U.N.'s Sustainable Development Goals

Where the financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not affect our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs			
Sustainable Water and Wastewater Management	 **6. Clean water and sanitation***	 **9. Industry, innovation and infrastructure**	 **13. Climate action**	
Renewable Energy	 **7. Affordable and clean energy***	 **9. Industry, innovation and infrastructure***	 **13. Climate action**	
Energy Efficiency	 **7. Affordable and clean energy***	 **11. Sustainable cities and communities**	 **13. Climate action**	
Low-Carbon Transport	 **3. Good health and well-being**	 **5. Gender equality**	 **11. Sustainable cities and communities***	 **13. Climate action**

Sustainable Management of Natural Resources and Land Use	 **3. Good health and well-being**	 **6. Clean water and sanitation**	 **9. Industry, innovation and infrastructure**	 **13. Climate action**
Pollution Prevention and Control	 **11. Sustainable cities and communities***	 **13. Climate action**		
Green Buildings	 **8. Decent work and economic growth**	 **9. Industry, innovation and infrastructure**	 **11. Sustainable cities and communities***	 **13. Climate action**
Adaptation to Climate Change	 **11. Sustainable cities and communities**	 **13. Climate action***		

*The eligible project categories link to these SDGs in the ICMA mapping.

Related Research

- Analytical Approach: Second Party Opinions, March 6, 2025
- FAQ: Applying Our Integrated Analytical Approach For Second Party Opinions, March 6, 2025
- Analytical Approach: EU Taxonomy Assessment, Oct. 31, 2024
- Analytical Approach: European Green Bond External Reviews, Oct. 31, 2024
- FAQ: Applying Our Analytical Approach For European Green Bond External Reviews, Oct. 31, 2024
- Analytical Approach: Shades Of Green Assessments, July 27, 2023

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