

Investment Grant Document

I. Basic Information for IGR

▪ Country/Region:	BARBADOS
▪ IGR Name:	Strengthening Institutional and Technical Capacity for Barbados to meet the transparency requirements of the Paris Agreement
▪ IGR Number:	BA-G1004
▪ Team Leader/Members:	Doherty Bigara Rodriguez, Jennifer (CSD/CCS) Team Leader; Blandin Andino, Lourdes Gabriela (CSD/CCS); Ceva Alvarez, Mariana Daniela (CSD/CCS); Gomez, Juan Carlos (CSD/CCS); Jainauth-Umrao, Naveen (VPC/FMP); Juan Francisco Martinez Cotrino (CSD/CCS); Lopez Solana, Fatima Alejandra (CSD/CCS); Mendoza Benavente, Horacio (LEG/SGO); Munte Kunigami, Arturo (IFD/ICS); Pelaez Restrepo, Johanna (VPC/FMP); Ramirez Ramirez, Gmelina Juliana (CSD/CSD)
▪ Taxonomy:	N/A
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	
▪ Beneficiary:	Ministry of Environment and Natural Beautification
▪ Executing Agency and contact name:	Ministry Of Environment And National Beautification
▪ Donors providing funding:	IADB/Global Environment Facility Fund(FMM)
▪ IDB Funding Requested:	US\$1,250,000.00
▪ Local counterpart funding, if any:	US\$198,000.00 (In-Kind)
▪ Disbursement period (including Execution):	36 months
▪ Required start date:	October 2022
▪ Types of consultants:	Firms and Individual Consultants
▪ Prepared by Unit:	CSD/CCS-Climate Change
▪ Unit of Disbursement Responsibility:	CCB/CBA-Country Office Barbados
▪ TC included in Country Strategy:	Yes
▪ TC included in CPD:	No
▪ Alignment to the Update to the Institutional Strategy 2020-2023:	Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability

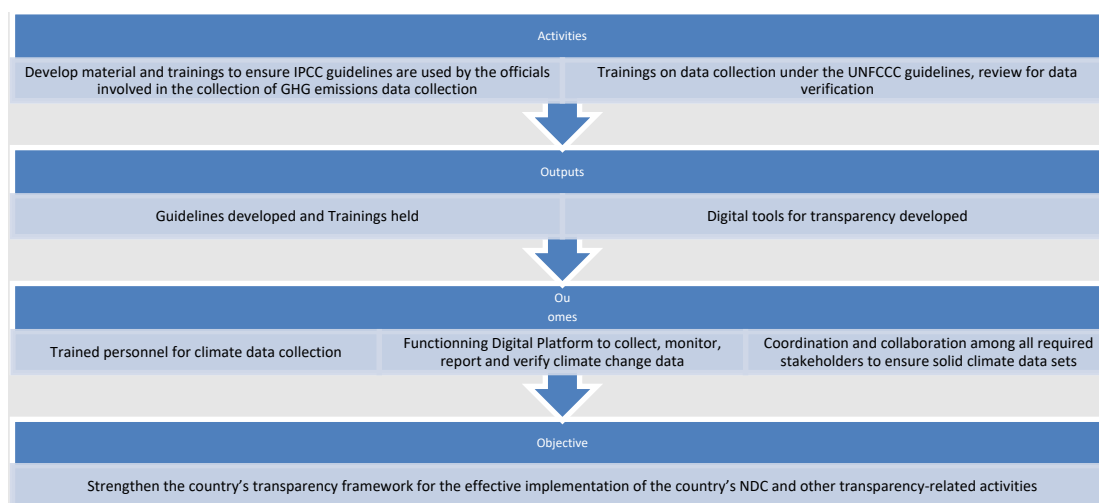
II. Objectives and Justification of the IGR

- 2.1 Barbados is a small island state located on the southern edge of the North Atlantic Hurricane Belt and is one of the southerly located islands in the Lesser Antilles Caribbean Island chain. Barbados possesses many of the economic, social, and environmental vulnerabilities that are associated with Small Island Developing States (SIDS), which include remoteness, limited resources, low-lying topography, and high vulnerability to climate change. Alike many other SIDS, Barbados is susceptible to natural disasters and extreme events such as tropical storms and hurricanes. Barbados has a population of 287,025 (2019), being one of the most populated islands in the region, with 661 inhabitants per km². Barbados' total land area is 432 km²; while its Exclusive Economic Zone is around 430 times larger, with 185,000 km². Most of the population and infrastructure is located on or near the coast.

- 2.2 The Intergovernmental Panel on Climate Change (IPCC) [Fifth Assessment Report \(AR5\)](#) states that the predicted changes in climate for the Caribbean region by the end of the century include: a one to four degrees Celsius increase in atmospheric temperature with a tendency towards drier conditions in the traditional wet season (from June to November), a 12% decrease in total annual precipitation and 0.5-0.6 meters of mean sea level rise. Barbados is already experiencing the impacts of climate change. Observations confirm that air and sea surface temperatures are rising, the frequency of extreme weather events is increasing, sea levels are rising, and coral bleaching events are more frequent. The consequences of climate change will be devastating on the development and the progress that Barbados has achieved over the past 50 years. As a SIDS, Barbados needs to access considerable international finance and technical support to be able to cope and address the impacts of climate change.
- 2.3 Barbados signed on to the United Nations Framework Convention on Climate Change (UNFCCC) on 12th June 1992 and ratified it on the 23rd of March 1994. The country, which is a Non-Annex 1 Party to the Convention, became a signatory to the Paris Agreement on April 2016 and submitted its [Updated Nationally Determined Contribution \(NDC\)](#) on July 30th, 2021. During the preparation of the 2021 NDC Update (prepared with support from the IADB), its greenhouse gas (GHG) Inventory was updated based on the 2006 IPCC Guidelines, covering the 2008-2020 period. This update includes improvements of historical activity data and methodologies, especially in the energy and waste sectors (energy balances 2008-2020; residues deposited in landfills; updated Gross Domestic Product (GDP) and population; waste stream data 2010-2020). Nevertheless, a full GHG inventory remains to be completed. As stated in the 2021 NDC Update, "The government understands the updated GHG Inventory to be a prerequisite for operating a Monitoring, Reporting and Verification (MRV) system that is suitable to enable Barbados' participation in Article 6 mechanisms, allowing tracking of mitigation contributions of individual NDC-aligned projects, as well as for attracting investment in these projects".
- 2.4 As a Non-Annex 1 Party to the UNFCCC, Barbados actively participates in its discussions, and is highly committed to the international negotiations process. Like many other SIDS, Barbados is not a major emitter of greenhouse gas emissions. In 2010, Barbados' emissions contributed an estimated 1,930 gigagrams (Gg) of CO₂ equivalent (CO₂e), which represent significantly less than 0.01% of global emissions of GHG. In addition to this, international shipping and international aviation emissions were estimated to be 103 and 410 Gg of CO₂e, respectively. In the 2021 NDC Update, it is noted that total absolute emissions in the base year (2008) have been restated at 2,123 Gg CO₂e, in comparison to 2015 NDC inventory emissions at 1,816Gg CO₂e.
- 2.5 In its 2015 NDC, Barbados stated the intention to achieve an economy-wide reduction in GHG emissions of 44% compared to its business as usual (BAU) scenario by 2030. In absolute terms, this translates to a reduction of 23% compared with the baseline year, 2008. As an interim target, the intention will be to achieve an economy-wide reduction of 37% compared to its business as usual (BAU) scenario by 2025, equivalent to an absolute reduction of 21% compared to 2008. In its updated NDC, Barbados set the aspirational goal to achieve a fossil fuel-free economy and to reduce GHG emissions across all sectors to as close to zero as possible by 2030. This is supported by the recently approved [Barbados National Energy Policy \(2019-2030\)](#).
- 2.6 The Paris Agreement was a paradigm shift in global climate change negotiations and policy. Article 13 of the Paris Agreement provides for an enhanced transparency framework; Article 13.1 of the Paris Agreement states, *"In order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency*

framework for action and support, with built-in flexibility which takes into account Parties' different capacities". Currently, Barbados does not have the arrangements in place to meet the requirements of the enhanced transparency framework under Article 13 of the Paris Agreement. Fundamentally, Barbados lacks the capacity and resources to comply with the Paris Agreement. There is no established MRV system that allows Barbados to report mitigation and adaptation actions and policies effectively and comprehensively, and to monitor the financial resources that have been allocated and received to address climate change. In this context, Barbados seeks to gain access to additional international climate resources and has requested support from the IDB's under the Capacity-building Initiative for Transparency (CBIT) window of the Global Environmental Facility (GEF) to strengthen its institutional and technical capacities to meet the enhanced transparency requirements under the Paris Agreement.

- 2.7 **Objective.** The main objective of this Investment Grant (IGR) project is to strengthen the country's transparency framework through the design and implementation of a fully functional and harmonized domestic MRV system for the effective implementation of the country's NDC and other transparency-related activities.¹
- 2.8 As part of the GEF process, below is a description of the logical framework behind the activities to be developed under this project to ensure we provide the required inputs for the creation of a transparent and solid digital platform that will monitor, report and verify key climate data and track the achievements set under the NDC targets.



- 2.9 This IGR operation is consistent with the IDB's Update to the Institutional Strategy (AB-3190-2) and is aligned with the development challenge of *productivity and innovation*, as it: (i) promotes the adoption of new technologies given the creation of a digital platform dedicated to enhance climate governance; and (ii) supports efforts to increase transparency and integrity of the country's climate data², which in turn increases resource mobilization, as it helps create solid baselines and adequate monitoring systems to report on the achievements of the national climate change

¹ <https://www.ipcc.ch/assessment-report/ar5/>

² Yogesh K. Dwivedi, Laurie Hughes, Climate change and COP26: [Are digital technologies and information management part of the problem or the solution?](#) An editorial reflection and call to action, International Journal of Information Management, Volume 63, 2022, 102456, ISSN 0268-4012.

agenda³. The project is also aligned with the cross-cutting themes of: (i) *climate change and environmental sustainability*; and (ii) *institutional capacity and the rule of law*, as strengthening institutional capacities in terms of transparency and reliability of the collection and reporting of the country's climate data, enables the country's government to better enforce its climate legislation, as well as achieve its objectives defined in the context of the Paris Agreement. Additionally, the operation is aligned with the Corporate Results Framework 2020-2023 (CRF) (GN-2727-12), as it intends to provide relevant Barbadian institutions with tools and knowledge that will facilitate the implementation of standardized methodologies for the accounting and reporting of national and subnational climate related data. The project is also aligned with the IDB Integrated Strategy for Climate Change Adaptation and Mitigation (GN-2609-1) and its Action Plan (GN-2609-3). The project is aligned with the IDB Group Country Strategy with Barbados 2019-2023 (GN-2953-1) as it allows to build capacity building to factor in climate impacts within the decision-making process.⁴

- 2.10 The project also promotes the IDB's subregional initiative of smart and resilient investments for the Caribbean through its environmental pillar of providing support to Caribbean countries to define sustainable development pathways for their transformation in a smart and resilient manner. The project is also linked and consistent with the country's [Second National Communication](#), as well as with its Updated Nationally Determined Contribution. The CBIT proposal is aimed at solving several challenges faced during the preparation and the report of the national GHG emission inventories, such as data quality management, improved use of the 2006 IPCC methodology, and institutional arrangements. The project will monitor gender parity in trainings and workshops, as well as level of hierarchy to assess women empowerment.
- 2.11 Lastly, the project is consistent with the [Barbados National Climate Change Policy Framework](#), the [Barbados National Energy Policy 2019-2030](#), and the Medium-term Growth and Development Strategy (MGDS) 2013-2020. It is also aligned with: (i) the Government's flagship Roofs to Reefs Programme (R2RP), a holistic, integrated, national initiative based on the principles of sustainable development and climate change resilience; (ii) the Blue Economy Framework and Action plan; and (iii) the Integrated Resources and Resilience Plan (IRRP) for Barbados.

III. Description of Activities/Components and Budget

- 3.1 **Component 1. Improvement of Barbados' GHG Inventory (US\$511,364).** This component will focus on working with data providers and key stakeholders to enhance activity data in different sectors and thus the completeness and the quality of the GHG inventory in Barbados. The first exercise will entail a preliminary stakeholder mapping to have a list of all public, private, civil society actors to include in the project. The exercise will also allow to better understand the gender participation and required empowerment actions to undertake.
- 3.2 It will be designed to address the barriers for improved reporting of emissions and removals, in the following sectors: (i) Land Use, Land-Use Change and Forestry

³ Calabrese, Mario, Antonio La Sala, Ryan Patrick Fuller, and Antonio Laudando. 2021. Digital Platform Ecosystems for Sustainable Innovation: Toward a New Meta-Organizational Model? Administrative Sciences 11:119. <https://doi.org/10.3390/admsci11040119>.

⁴ This operation is not reflected in the CPD, nonetheless remains of high priority for CBA, CCB and the GEF, as expressed in emails included in Convergence.

(LULUCF); (ii) Energy, including stationary combustion sources, transport, and fugitive sources; (iii) industrial process and product use; (iv) agriculture; and (v) waste, to improve the accuracy of the data collected, use of emission factors, verification of the results and uploading the information for all GHG emissions data to be centralized. Sources of information and quality of data are a major challenge which will be the main focus of this component. Given the existence of CBIT-AFOLU and the CBIT Forest, among other global initiatives, the project will seek to identify lessons learned and best practices from them all, especially in sectors relevant for the country. This component will support the capacity building of institutions and public servants, and other stakeholders in Barbados, to adequately prepare the data, of GHG Inventories, and the generation and collection of data. In this component all sector census and surveys will be designed and conducted to improve existing data. Data collection activities and surveys in the energy and industrial processes sectors will also be conducted. Through this component local emission factors will be developed to improve the overall accuracy of the emission calculations within the inventory. There will also be training of individuals from various institutions on the IPCC GHG guidelines. All outputs will consider the conclusions from the NDC update process and will also include the acquisition of goods and services to continue with the mitigation outputs delivered. This will be based upon the recommendation of the firms and can include, but will not be limited to: laptops, GHG emissions software's, emissions quantification material, screens, gear, etc.

- 3.3 This component will have key outputs as it will develop guidelines to collect data but also ensure their verification for solid data sets that can be monitored over time and showcased in a transparent manner. Trainings and workshops will be key to ensure national ownership of all groups involved in the different emission sectors and will require the development of a variety of materials to ensure their appropriation of the knowledge required. This component will also ensure that the data gaps identified in the GHG inventory of Barbados are filled with solid data, a crucial step for the country as it seeks to develop a carbon market mechanism.
- 3.4 **Component 2. Improvement of the MRV system and strengthening Barbados Transparency Framework for compliance with the Paris Agreement (US\$363,636).** This component will focus on improving existing data sets, and help to establish a fully functional MRV system, building on previous MRV activities. The MRV system will provide information and monitor climate change mitigation, adaptation activities, and technology transfer elements as indices of resilience building, as well as track climate financing in Barbados. The project will work to design effective reporting guidelines and accounting procedures that meet the enhanced transparency framework for action and support established in Article 13 of the Paris Agreement. This component will put in place the institutional arrangements and capacities to allow Barbados to collect, document, store and communicate climate transparency data in a central information management system. Guidelines and protocols for data input will be developed, along with a national transparency process to ensure there is an effective tracking of the country's NDC progress. An electronic platform/tool will also be developed to allow tracking emissions and NDC targets (including mitigation and adaptation goals), and support received. Training sessions will be carried out for relevant ministries, relevant governmental organizations, and NGOs responsible for providing data on the climate change information systems and various new tools to be developed. This component also includes the establishment of a national transparency working group (a sub-committee of the climate change working group) to lead the work on transparency and to improve government agency coordination. For this component to be sustainable, the firms will also recommend the goods and services to be acquired

under this IGR for a solid MRV system, including MRV tools, computer science hardware and software, etc.

- 3.5 **Component 3. Knowledge management and capacity building on transparency of climate change action as established in the Paris Agreement (US\$261,364).** Capacity building is a core element of this project to strengthen Barbados' compliance with the transparency arrangements under the UNFCCC, while recognizing the circumstances, context, and necessities of Barbados. A series of trainings and capacity building events focused on relevant stakeholders will be carried out to ensure the long-term success of the project. This component will thus design knowledge products and training materials on transparency for climate action (guidebooks, manuals, reference materials) focused on the different stakeholders (i.e., government agencies, private sector, and civil society). The Government of Barbados has worked to meet other transparency arrangements, such as GHG Inventories, submission of national communications, along with the promotion of climate action through national policies and a number of other climate related projects. A climate change knowledge platform will be created to promote accessibility for better transparency of climate action, including transparency arrangements under the UNFCCC, guidelines and protocols developed through Component 2, as well as training and dissemination material. The future Barbados Climate Change Knowledge Platform will support all agencies in accessing climate change information. This will enable stakeholders to continue to use data to feed their sectorial and national decision-making processes, beyond the project lifetime. Workshops will be carried out to improve the understanding of transparency within the framework of the Paris Agreement, and the domestic actions which will be required. The knowledge products generated as a result of this operation will be owned by the Beneficiary, which will grant a license to the Bank under the terms established by the Bank. For this component to be sustainable, the firms will also recommend the goods and services to be acquired under this IGR as well as the materials to be bought for future knowledge fairs and workshops that will allow to enhance the human capital capacities overtime. The goods can include computer hardware and software, printed publications, communications material, etc.
- 3.6 **Project Administration (US\$113,636).** Project administration resources will finance activities required for coordination and execution of the project, including hiring a project coordinator.
- 3.7 The total cost of this project is US\$1,448,000. The Global Environment Facility (FMM) will provide resources in the amount of US\$1,250,000. The remaining US\$198,000 will be financed by the beneficiary –the Ministry of Environment and Natural Beautification (MENB)– as an in-kind contribution (project personnel, non-expendable equipment, and facilities). The GEF CEO Document outlines the costs of the activities within each component as below.

Indicative Budget (US\$)

Activity/Component	IDB/GEF	Local Counterpart ⁵	Total
Component 1. Improvement of Barbados' GHG Inventory	511,364	73,638	585,002
Component 2. Improvement of the MRV system and Strengthening Barbados Transparency Framework	363,636	52,362	415,998
Component 3. Knowledge Management and Capacity Building on transparency of climate change action	261,364	54,000	315,364

⁵ The MENB will contribute counterpart financing for the duration of the project, allocated for project personnel, non-expendable equipment, and facilities.

Project Administration (PMC)	113,636	18,000	131,636
Total	1,250,000	198,000	1,448,000

IV. Executing Agency and Execution Structure

- 4.1 The executing agency will be the Ministry of Environment and Natural Beautification (MENB). The executing capacity of the MENB with similar projects has been proven. The MENB will be responsible for the execution of the project and the management of the activities on the ground.
- 4.2 An institutional capacity analysis will be conducted on the MENB using the Bank's methodology- Institutional Capacity Assessment Platform, ICAP, to determine the gaps to be filled, if any, during the execution of this project. The MENB is the official focal point of the Donor, Global Environmental Facility, GEF, and therefore has extensive knowledge regarding their procedures and has been the executing agency of at least 10 projects in the past 5 years with GEF resources.
- 4.3 The Unit of Disbursement Responsibility (UDR) will be in the IDB's Country Office in Barbados (CCB/CBA), and all reporting will be performed in coordination with the Climate Change Specialist (CCS). The executing agency will hire a project coordinator, in agreement with the Bank, whose main duties and responsibilities will be: (i) ensure that the project is executed according to GEF guidelines; (ii) ensure that contracting of all consultant services is done according to applicable Bank policies and procedures; (iii) coordinate work with the participating institutions; (iv) convene and organize working group meetings; (v) coordinate, stimulate and strive to complete work as per the project schedule; and (vi) ensure that all reporting (financial and progress reports) to the Bank is performed in a timely manner.
- 4.4 The consulting and non-consulting services to be hired under this operation have been included in the Procurement Plan (Annex IV) and will be executed in accordance with the Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank (GN-2349-15) and with the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-15).
- 4.5 The project will be linked to the CBIT Global Platform and will share information on lessons learned from the project implementation phase. The project will work with Climate Initiative Caribbean Cooperative MRV Hub (CCMRVH). This project assists the Caribbean region to efficiently develop GHG inventories, mitigation projections, and track their NDCs. The CCMRVH pools experts from participating countries to establish regional MRV institutional arrangements and products.
- 4.6 Barbados is currently working with United Nations Development Programme to prepare a project proposal to submit to the GEF for resources to prepare its Third National Communication and First Biennial Update Report, and this present proposal will be directly linked to this work. Barbados prepared an NDC update developed with support from the IDB, and the present proposal will be linked directly with the implementation, monitoring, and reporting of this updated NDC.
- 4.7 The project will also be linked to the GEF funded Strategic platform to promote sustainable energy technology innovation, industrial development, and entrepreneurship, implemented by the United Nations Industrial Development Organization in Barbados.

- 4.8 Yearly evaluations will be done to assess stakeholder's involvement in the execution of the project, including key ministries to be involved, from data collection roles to monitoring and verification.
- 4.9 Regarding the project's monitoring and evaluation—in line with GEF and IDB policies, a mid-term and final evaluations will be carried out, including adaptive management recommendations, as well as a progress assessment of the GEF-7 Core Indicators. The indicator associated to this CBIT proposal is "Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment" (indicator number 11 from the GEF) and may not have a direct impact of reduction of GHG emissions but given its focus on enhancing the quality and transparency of the GHG emissions inventory at a national level it will provide strategic insights for mitigation actions and potential development of a carbon trading scheme.
- 4.10 As all other GEF projects, the project team must submit a PIR (Project Implementation Report) update annually for each year of implementation, within 75 calendar days after the end of each GEF's fiscal year. The first PIR is due within 75 days after the project has completed its first full fiscal year under implementation. Before this first PIR, GEF Agencies update the date of first disbursement in a dedicated module of the GEF Portal. The annual monitoring reports and annual reports on the progress of the Results Matrix, Procurement Plan and the Annual Operating Plan will be drafted by the Ministry of Environment and Natural Beautification (includes the costs to be foreseen in the MENB) and submitted to the IDB for review, with at least three weeks to review and verify the information. The project management cost includes the costs to be foreseen in the monitoring and evaluation requirements as they will be developed by the team MENB will hire to support the implementation of the project.
- 4.11 **Special conditions precedent to first disbursement** include: (i) evidence has been presented to the satisfaction of the Bank that a representative working group has been established to follow up the project as the coordination of multisectoral stakeholders is adamant for a smooth execution; and (ii) terms of reference for the procuring of the project coordinator have been presented to the satisfaction of the Bank.

V. Major Issues

Project Risk	Rating	Mitigation Action
Coordination		
Transparency and reporting based on multiple stakeholders	High	During the project's execution, engagement with government/ministries throughout the project will require sharing information and identifying all confirmed sources to continue tracking of national mitigation and adaptation actions. This will be achieved through a working group dedicated to the follow-up of the Paris Agreement commitments. Component 3 will also target decision-makers for knowledge and awareness.
Technical		
Limited capacity from MENB regarding digital technologies for enhanced governance and transparency	Medium	The project will provide training to MENB and other relevant stakeholders to improve capacity and knowledge as it relates to distributed ledger technology.
Coordinate harmonization of ITE technologies applied across the government ministries, agencies, and departments.	Medium	Early engagement of government entities responsible for technology, innovation and the strategic implementation of IT solutions and enhanced collaboration across government ministries, agencies, and departments, to streamline the use of ITE technologies, through project meetings.

Project Risk	Rating	Mitigation Action
Execution threats from natural disasters, climate change impacts and unexpected events (COVID19)	Medium	<p>Given the vulnerability of the island to climate change recent natural disasters (hurricanes, volcano ashes, etc.) it is important to underline that they could jeopardize the holding of certain workshops or stakeholders' engagement meetings. Based on the lessons learned from COVID19, online options will always be included as well as other potential solutions to limit the impacts on the execution.</p> <p>Additional opportunities identified by the GoB are:</p> <ul style="list-style-type: none"> - modernization our tourism offering, including digital banking options, and understanding of clients' needs to better cater to their interests and ensure the market's resilience - digitization opportunities in both the public and private sector - COVID19 has proven the importance of having good connectivity and adequate platforms to conduct education programs and efficient businesses, and underlining the importance of provision of digital services as an opportunity - The country has also assessed its vulnerability over its overreliance on certain sectors and need to value their natural assets, including rethinking special protection areas, energy transition, and ways of lessening human impact is a priority now.

VI. Exceptions to Bank policy

6.1 There are no exceptions to Bank policy.

VII. Environmental and Social Strategy

7.1 In accordance with the Environmental and Social Policy Framework (ESPF), the operation was classified as Category "C" as it is expected to cause minimal or no negative environmental or social impacts.

Required Annexes

[Request from the Client - BA-G1004](#)

[Results Matrix - BA-G1004](#)

[Terms of Reference - BA-G1004](#)

[Procurement Plan - BA-G1004](#)

- [Gender Annex](#)
- [ESPF Filters: E&S Screening Filter and ESRR Report](#)
- [CEO Approval Entry](#)
- [CEO Approval](#)