

INTER-AMERICAN DEVELOPMENT BANK
IDB LAB

REGIONAL

**EcoMicro 2.0 Climate Resilience through Deep Tech Acceleration
in the Caribbean Basin (RG-O1698)**

RG-O1698

FACILITY DOCUMENT

This document was prepared by the project team comprised of: Team Leader, Ruth Houliston (DIS/CBA), Nayaatha Taitt (DIS/CBA), Andres Rubio (DIS/CGU); Vashtie Dookiesingh (DIS/CTT), Jean Desmornes (DIS/CHA), Adrien Dewalque (DIS/CHA), Fausto Castillo (DIS/CHO); Terry-Ann Segree (DIS/CJA); Gabriela Flores (INV/CME); George Rogers (FML/LAB), David Isabel Williamson (ORP/GCM), Goritza Ninova (OPR/GCM), Miguel Aldaz (ORP/REM), Gloria Visconti (CSD/CCS), Javier Puig (CSD/CCS), Jossette Hernandez (INO/PTM), Alexandra Hambrook, FML/LAB, Patricia Guevara, LAB/DIS

This document contains confidential information relating to one or more of the ten exceptions of the Access to Information Policy and will be initially treated as confidential and made available only to Bank employees. The document will be disclosed and made available to the public upon approval.

CONTENTS
PROGRAM INFORMATION

I.	FACILITY DESCRIPTION	5
A.	Background	5
B.	Justification	6
C.	Objectives	7
D.	Problem and Opportunity	7
E.	Beneficiaries	10
II.	FACILITY STRUCTURE AND RESULTS	11
A.	Component I: Accelerating the Commercialization of Climate Tech Solutions	11
B.	Plan for Scale	13
C.	Program Results, Measurement, Monitoring and Evaluation	14
III.	ALIGNMENT WITH IDB GROUP, SCALABILITY, AND RISKS	14
IV.	COST AND FINANCING	16
V.	IMPLEMENTATION STRUCTURE	16
VI.	PROGRAM TIMEFRAME	17

PROGRAM INFORMATION

**REGIONAL
EcoMicro 2.0 Climate Resilience through Deep Tech Acceleration in the
Caribbean Basin (RG-O1698)**

Country and Geographic Location:	Regional – PPCR Eligible countries Dominica, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Saint Lucia, St. Vincent & The Grenadines		
Executing Agency:	Bank Executed Operation (BEO)		
Focus Area:	Climate Crisis Essential Services Agriculture and Natural Capital		
Coordination with Other Donors/Bank Operations:	<p>This project is fully aligned with IDB's "Vision 2025" strategy. This project is also fully aligned with Build Forward initiative launched by the IDB Caribbean Country Department and IDB Caribbean Governors in February 2021.</p> <p>The project is also aligned with, and falls under, the IDB Lab EcoMicro Facility (ongoing), which builds resilience of MSMEs and low-income households to climate change by increasing their access to tailored green finance.</p> <p>The project is also aligned, and will foster coordination with, several ongoing IDB Lab and CSD/CCS operations in the region, notably those which aim to strengthen entrepreneurship ecosystems and innovation networks in their respective countries and those addressing climate: Guyana (GY-T1159); Honduras (HO-T1352); Jamaica (RG-T3561); and Regional (RG-Q0046 and RG-T3821).</p>		
Project Beneficiaries:	This project is expected to benefit vulnerable households, MSMEs, communities, and/or public-sector services through climate tech solutions that build their resilience to climate change.		
Financing:	Non-reimbursable Technical Cooperation Financing:	0	0
	Contingent Recovery Grants (Strategic Climate Fund (SCX) under the Pilot Program for Climate Resilience (PPCR)):	US\$953,000	50%
	Counterpart Contribution:	US\$953,000	50%
	TOTAL PROJECT BUDGET:	US\$1,906,000	100%
Execution and Disbursement Period:	54 months of execution and 60 months of disbursement		
Unit responsible for disbursements:	COF Barbados		
Environmental and Social Safeguards Screening	This operation was screened and classified as required by the IDB's ESG safeguard policy (OP-703) on November 11, 2021. Given the limited impacts and risks, the proposed category for the project is C.		

I. FACILITY DESCRIPTION

A. Background

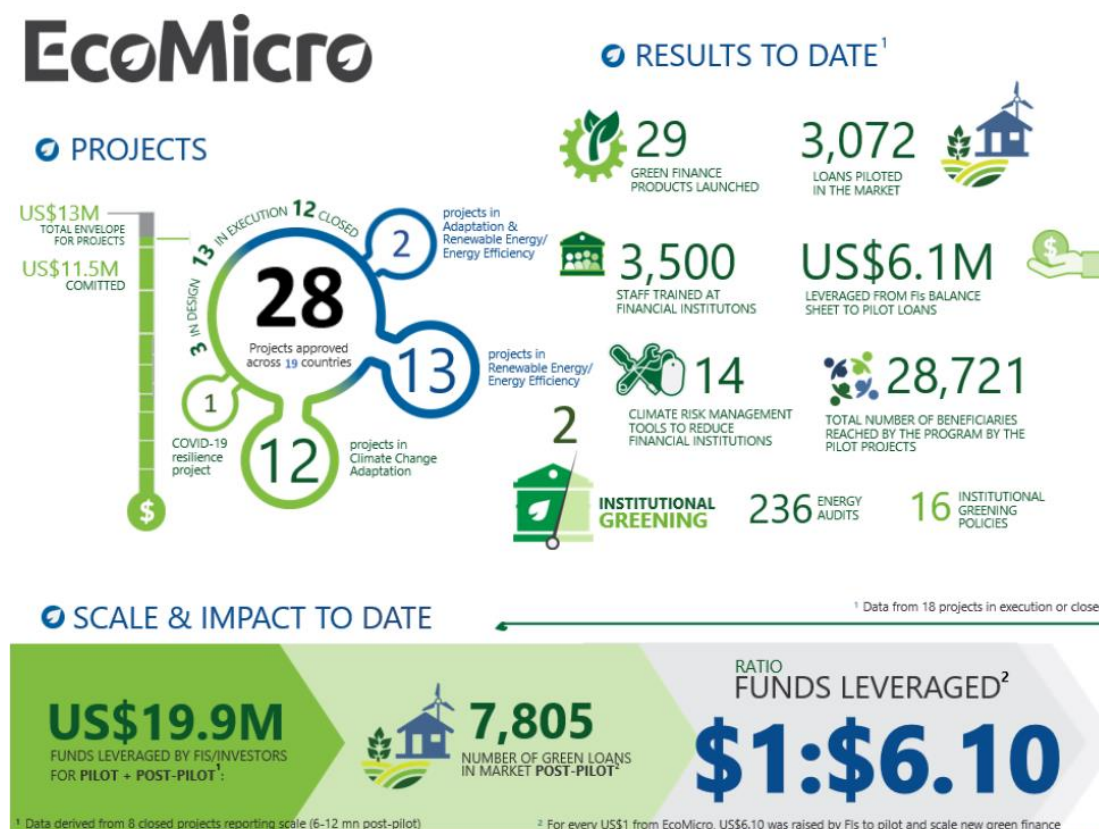
- 1.1. With over 20 years of experience, IDB Lab, the innovation laboratory of the IDB Group, has a long track record of providing reimbursable and non-reimbursable resources to microfinance institutions (MFIs), micro, small and medium-sized enterprises (MSMEs), start-ups and innovation ecosystem actors in Latin America and the Caribbean (LAC) that promote and support climate resilience.
- 1.2. **The EcoMicro Facility** for Green Finance for MSMEs and Low-Income Households: (EcoMicro) is a US\$17 million facility established to pilot green finance for MSMEs (including small farmers) and low-income households in Latin America and the Caribbean (LAC). The goal of the Program is to build resilience of MSMEs and low-income households to climate change. This is achieved by increasing their access to tailored green finance that enables them to adopt and integrate technology solutions into the businesses and homes that help address specific climate adaptation and mitigation needs (including adaptation technologies, renewable energy and energy efficiency solutions). EcoMicro achieves this by supporting Financial Intermediaries (FIs) to design and pilot green finance in close collaboration with technology providers and other key actors in the broader ecosystem.
- 1.3. As at November 2021, the EcoMicro Program has a geographically diverse portfolio of 29 projects across 20 countries: Argentina, Belize, Bolivia, Colombia, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, Saint Lucia, Trinidad and Tobago, and Suriname.
- 1.4. The overall EcoMicro portfolio is thematically distributed as follows – 12 projects in adaptation, 13 in mitigation (Renewable Energy/Energy Efficiency - RE/EE), 2 of which are piloting a combination of adaptation and mitigation, and 1 looking at building resilience post-COVID-19. With regards to instruments, 1 Financial Institution (FI) is piloting an Energy Performance Contracting (EPC) approach in partnership with Energy Service Companies (ESCOs), 1 a payment for ecosystem-based services approach through a carbon premium line of credit, 1 a line for agricultural micro-insurance, 1 a crowd-funding solution, and the remainder which are piloting productive and housing loans. Green finance is also being piloted in a number of value chains, including in the coffee and livestock sectors.
- 1.5. To date, EcoMicro has created 29 green finance products in partnership with 27 FIs across 19 countries. So far, FIs have placed over 3,000 green loans in the market to over 3,000 beneficiaries. Over US\$6.1 million in green finance has been leveraged from FIs - see Figure 1. Results to Date, below.
- 1.6. The Program is currently financed with funds from IDB Lab, co-financed by the Nordic Development Fund (NDF) and Global Affairs Canada (GAC) through Project Specific Grants (PSGs), and local counterpart funds. It was originally approved on September 20, 2011¹, and was subsequently amended² in 2015 to increase contributions from IDB Lab and NDF and to extend the execution term through December 2020. In 2016, GAC made an additional contribution to increase the outreach of the original program

¹ Resolution MIF/DE-33/11 (MIF/AT-1143-2)

² Resolutions DE-89/15 and MIF/DE-38/15 (MIF/AT-2243-3)

specifically in the Caribbean Region³. It is executed by IDB Lab led by the IDB Lab Discovery team located in the Barbados IDB Country Office.

Figure 1. The EcoMicro Program Results to Date



B. Justification

- 1.7. A key lesson learned through the execution of the EcoMicro portfolio of projects has been that increasing access to green finance alone is not sufficient to build resilience of MSMEs, low-income households and wider communities. In addition to providing access to green finance, which promotes demand for and uptake of technology solutions, - it is equally important to catalyze innovation in the supply of broad-based ClimateTech solutions (see Annex II for examples of ClimateTech solutions to be accelerated under this operation), including clean-tech, blue-tech, ag-tech, water-tech, and digi-tech, Ag-fintech that will contribute to the fundamental imperatives of climate resilience, decarbonization, waste management/circular economy, nature-based solutions and sustainable green economic recovery post COVID-19.
- 1.8. Without the availability of locally relevant and affordable ClimateTech solutions, MSMEs and low-income households will remain challenged in their quest to build climate resilience, and more broadly, there will be missed opportunities to enable greener and sustainable economic recovery post-COVID.

³ Resolutions DE-46/16 and MIF/DE-43/16 (MIF/AT-1143-4 and MIF/AT-1143-5 respectively)

C. Objectives

- 1.9. IDB Group has successfully received the endorsement of US\$953,000 in contingent recovery grant funding from the Pilot Program for Climate Resilience (PPCR) under the Strategic Climate Fund (SCX) to support the implementation of a new Program, **EcoMicro 2.0 Climate Resilience through Deep Tech Acceleration in the Caribbean Basin**.
- 1.10. The Regional Program will benefit PPCR eligible countries in the Caribbean Basin, including Dominica, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Saint Lucia, St. Vincent & The Grenadines
- 1.11. The *objective of the* proposed facility will support economic reactivation in the Caribbean Basin post COVID-19 by catalyzing deep innovation in broad-based ClimateTech (see Annex II for examples of climate tech solutions) to transform the way in which key economic sectors and systems reorient towards a resilient, greener, and sustainable economic recovery.
- 1.12. EcoMicro 2.0 marks a new chapter in the lifespan of the EcoMicro Facility, given that for the first-time (i) the focus shifts to catalyzing technology solutions (away from green financing that enables uptake of technology solutions), (ii) executing agencies of individual projects will include startups and or growth-oriented SMEs (expanding the scope from financial intermediaries), and (ii) financing will be provided in the form of Contingent Recovery Grants (CRGs), diversifying the product offering away from exclusively technical cooperation funding. With these changes, **EcoMicro 2.0** not only becomes more aligned with IDB Lab's innovation mandate, but also with the priorities laid out in IDB Lab's Business Plan 2022-2023.
- 1.13. EcoMicro 2.0 will be administered via the EcoMicro Facility (RG-01649), led by the IDB Lab Discovery Team based in the IDB Country Office in Barbados.
- 1.14. This proposal seeks the approval of the externally funded EcoMicro 2.0 Program: Climate Resilience through Deep Tech Acceleration in the Caribbean Basin to be administered under the EcoMicro Facility. While the Donors Committee delegated authority to the IDB Lab General Manager for the approval of projects under the EcoMicro Program (MIF-AT-1143-2), this project approval by the IDB Lab General Manager is authorized by Res. DE-103/14 and further delegation by the IDB President as described in PR-501 (sec.2.1).
- 1.15. This is the **thirtieth EcoMicro operation**, the first program to be funded by the PPCR, to be administered under the EcoMicro Facility. This is the first EcoMicro program to focus on catalyzing deep innovation to stimulate the supply of locally relevant ClimateTech solutions, with support for startups/growth-oriented SMEs, via CRGs.

D. Problem and Opportunity

- 1.16. As countries navigate the transition from coronacrisis to economic recovery, there lies a key opportunity to champion green recovery as a pathway towards more inclusive, sustainable, and resilient growth. Climate resilience lies at the core of

economic resilience and therefore bold climate action now, will promote sustainable economic recovery post-COVID-19.

- 1.17. As it relates to deep tech specifically, research has shown that there is a substantial untapped opportunity in LAC. In 2019, LAC invested less than \$300 million in venture capital (less than 7% of VC investments in that year) on Deep Tech startups. It is remarked that this is a very small sum when we compare to Israel (with 9 million people versus 650 million in LAC), where the private sector is investing billions in multiple deep tech areas and consider that the sector comprises powerful levers for economic growth, such as AI, IoT, and others like Robotics, Biotech, Advanced Materials and Nanotech. In addition, research shows that the LAC region has the fewest number of climate-focused incubators and accelerators while North America and Europe and Central Asia have the highest. This accentuates the absence of support mechanisms for climate entrepreneurs in this region.
- 1.18. Harnessing the transformative change in data and technology capabilities driving the Fourth Industrial Revolution (4IR) holds significant potential to power economic recovery post COVID-19 that is climate-neutral and resilient.
- 1.19. This program will promote broad-based climate resilience in Central America and the Caribbean via promotion of 4IR technology solutions that drive reactivation of key economic sectors impacted by the coronacrisis by integrating climate resilience to promote (i) promoting climate smart technologies, (ii) reactivating blue economy systems, (iii) promoting sustainable water management; while enabling tech solutions that promote sustainability and circularity – so that economic recovery is also climate-smart, and (vi) addressing increasing health challenges as they relate to climate change. PPCR Priority Areas for building climate resilience are outlined in Figure 2, below, which presents those sectors with the most immediate potential for local adaptation of deep tech innovation. While PPCR has not articulated similar priority areas for Central America as a region, these remain equally applicable to countries in Central American.

Figure 2. Example of PPCR Priority Areas in the Caribbean Region⁴

- 1.20. This program will promote solutions that have capacity to create jobs and contribute to stronger economies and more resilient societies – while overcoming the early-stage funding gap that hampers emergence of tech solutions - particularly in nascent innovation ecosystems, especially those in small economies.
- 1.21. The program will build capacity and fund interventions that unlocks innovation and crowds in investment for a greener economic recovery post COVID-19.



1. Agriculture



2. Natural resource management



3. Water management

Specifically, the program will spur adaptation and application of advanced ClimateTech with significant potential to support climate resilient economic recovery post COVID-19 through gender smart innovation.

Country	PPCR Priority Areas
Regional	Agriculture and food security, coastal zone management, tourism, water resource management,* health,* ecosystem-based adaptation, infrastructure and land use planning*
Dominica	Agriculture and food security,* water quality and quantity,* fisheries,* climate change impacts on coastal and marine resources,* infrastructure and human settlements, tourism, forestry*
Grenada	Integrated water resource management,* capacity building at the sector level, and data management.
Haiti	Agriculture and food security,* coastal zone management and reconstruction* are the main areas, with sub-sectors/themes being infrastructure, land planning and data management*
Jamaica	Agriculture,* land-use planning,* health, water resources,* integrated coastal zone management,* climate proofing of national and sectoral plans, tourism, and data management*
Saint Lucia	Agriculture,* coastal and marine resources,* financial sector, forestry,* biodiversity, health,* human settlement, critical infrastructure, tourism, and water resource management.* Data needs were also highlighted for Saint Lucia, particularly the need for bathymetric and hydrometric data.*
Saint Vincent and the Grenadines	Monitoring and evaluation of environmental hazards,* watershed management,* public sensitisation and awareness, integrated planning, and data management*

**Denotes focus areas for gender assessment.*

⁴ The examples provided while defined priorities for the Caribbean Region are equally applicable to Central American region, for which PPCR has not articulated specific regional priorities.

The focus will be on new business models and climate tech solutions, including ag-tech, nature-based solutions, water/clean tech, blue-tech, and health-tech. Each of these innovations have the potential to contribute to economic reactivation post-COVID.

- 1.22. Particular emphasis will be placed on clusters of transformative technologies such as Artificial Intelligence (AI), robotics, additive manufacturing (or 3D printing), drones⁵, biotechnologies, Internet of Things (IoT), digital twins and blockchain, among others, with the promise of bringing radical innovation approaches to managing environmental footprints and building resilience.
- 1.23. In particular, the Program recognizes the varying degrees of sophistication of the entrepreneurial ecosystems present in the various countries represented under this proposal. These range from the smaller and more nascent entrepreneurship ecosystems, such as those in the Caribbean as compared to the larger and the more developed ecosystems as in Mexico and those more medium-sized ecosystems such as in Guatemala, Honduras, Nicaragua. For example, one study notes that a large share of startups in LAC are located in metropolitan regions with over 1 million population, such as in Mexico City. Meanwhile, other countries are either in very early stages of their development or inactivated. However, the rise of Guatemala as a new entrepreneurial hub leading the way among smaller countries shows there are still large untapped opportunities in the rest of region. This heterogeneity will be considered during program execution to ensure that support is adequately tailored to the needs of the specific ecosystem.
- 1.24. **Gender.** Studies have shown that men and women have different abilities to adapt to climate change because of gender inequalities in access to and control of assets, services, and decision-making. Women's ability to adapt to climate change is further limited by gender norms, roles, and biases present in communities, societies, places of work, and institutions of the Caribbean Basin. Climate change can exacerbate gender inequalities and in turn increase the vulnerability of communities and countries. Gendered impacts of climate change can negatively affect women's ability to generate income, reduce their time availability for productive and household endeavors, and further limit their mobility (see Figure 2 below). These in turn are further negatively impacted by women's lower levels of decision-making power and asset ownership needed to develop appropriate coping mechanisms. These series of factors create new challenges and opportunities for women's empowerment.⁶ The Program will mainstream gender actions that take these inequalities into consideration through all of the program activities. These are described in Section D below.

E. Beneficiaries

- 1.25. The intended direct and initial beneficiaries of this Program are climate tech start-ups that will receive financial support and mentorship to bring to market their climate tech solutions⁷. As a key subset, this will also include female founder teams. Encouraging women's entrepreneurship in ClimateTech through resources to scale their business also promote job opportunities for women in clean growth, science, and environment-

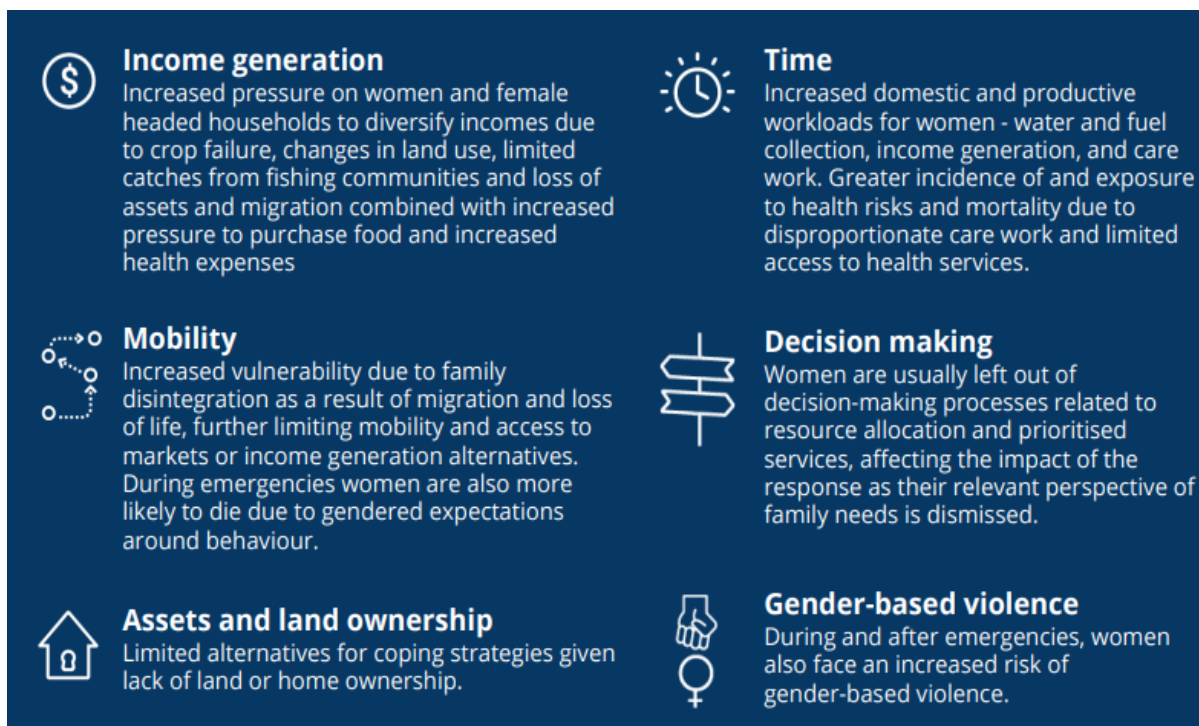
⁵ Drone regulation in each jurisdiction will be observed in order to ensure that relevant projects are compliant with the prevailing local regulations.

⁶ IDB Study of the Impacts of Climate Change on the Women and Men of the Caribbean, Value for Women, 2020

⁷ A maximum of one project per country will be supported under this initial round of limited financing for between 2-4 startups

related fields, while increasing availability of innovative environmentally sustainable technologies needed for climate action.

Figure 1: Gendered Impacts of Climate Change



- 1.26. Other indirect beneficiaries that will benefit from the climate tech solutions being accelerated include vulnerable households, MSMEs, communities, and/or public-sector services, with the objective to build their resilience to climate change. For example, these indirect beneficiaries may benefit from potential climate tech solutions such as blueprints for decarbonization and circularity that bring practical opportunities for MSMEs to assess, prioritize and implement RE/EE, resource efficiency and circularity measures that reduces carbon footprint; industrial waste-to-energy, biomaterials for packaging, 3D printing, etc. Female-headed households and MSMEs will also benefit through enhanced resilience building and adaptation.

II. FACILITY STRUCTURE AND RESULTS

A. Component I: Accelerating the Commercialization of Climate Tech Solutions

- 2.1. The Facility will be structured around this single area of intervention.
- 2.2. The **objective** of this component is to catalyze commercially viable climate tech solutions that harness the potential of deep tech to build climate resilience of MSMEs, households and their wider communities and/or public sector services. The purpose of the component is to deploy early-stage risk tolerant financing, in the form of Contingent Recovery Grants (CRGs), to support highly impactful early ventures addressing key climate challenges with promising climate tech solutions.

- 2.3. Between 2 to 4 CRGs will be funded under the program, with an expected value of between US\$250,000 to US\$500,000 each. Individual CRG projects will be executed by start-ups and/or SMEs on a growth trajectory, in eligible PPCR countries.
- 2.4. The aim is to spur the application of ClimateTech with significant potential to support climate resilient economic recovery post COVID-19 through gender smart innovation. Particular emphasis will be placed on clusters of transformative technologies such as Artificial Intelligence (AI), robotics, additive manufacturing (or 3D printing), drones, biotechnologies, internet of things, digital twins and blockchain, among others, with the promise of bringing radical innovation approaches to building resilience, adaptation and managing environmental footprints. In addition, emphasis will be placed on firms expressing willingness to mainstream a gendered approach across all aspects of their business - including management, operations, and business development segments. This includes, for example, consideration of companies that do not yet have women on their board but are open to implementing a leadership diversity strategy as part of an investment agreement.
- 2.5. Under this Component, the following activities will be undertaken:
- **Development of a methodological approach** to support IDB Lab in the identification of 2-4 gender-smart climate tech solutions with the largest potential impact and scalability in terms of climate resilience and gender inclusion as well as the potential for scale and replicability in other countries of the region. The methodology will help IDB Lab country specialists to assess:
 - the type and amount of climate risks being addressed by the startup/business;
 - the determination of how gender is included in the business proposition and the net positive benefits for women inclusion;
 - the potential to build climate resilience on key sectors of the economy;
 - positive economic impact and ecosystem services (carbon, water, biodiversity) that the businesses will deliver if deployed at scale;
 - the financial, technical and institutional capacity of the firm to manage a CRG
 - **Individual Project Approval:** Individual Projects under the Facility will be approved following established IDB Lab EcoMicro operating regulations. Since the Facility only provides financing for between 2-4 individual projects (i) origination of these projects will be facilitated by IDB Lab specialists following the above methodology, (ii) individual projects will be pitched to IDB Lab to secure eligibility, and (iii) Government no-objection will be obtained only at the level of individual projects. See Annex III Implementation Structure for details.
 - **Due diligence:** due diligence will be conducted of selected companies (up to 4) with potentially relevant and impact climate tech solutions in line with the relevant IDB integrity and due diligence screening procedures. Note at the beginning of the Program, the specifications for the selection of tech startups will be defined, with emphasis placed on climate tech startups demonstrating an innovative solution, geographic alignment, robust implementation capacity, clear path to achieve sustainability, impact to achieve scale, and ability to mobilize counterpart resources⁸. In addition, the due diligence will also consider the capacity for gender-responsiveness of the tech startups in regard to gender-related goals, or at minimum

⁸ All projects will follow the prescribed IDB Lab counterpart requirements, which stipulate that the proponent must provide at least 50% of the project funding, of which at least 50% must be in cash.

demonstration of a commitment to gender-mainstreaming – e.g., to processes such as collecting gender-disaggregated data.

- **Design of individual CRGs:** design will be undertaken to articulate the activities to be undertaken, expected results, budget and term sheet negotiation with contingent recovery triggers based on the executing partners' business projections. Design will also incorporate definition and execution of Gender Action Plans to strengthen climate resilient and gender outcomes. Gender Action Plans will identify gender-smart commitments for the supported firms, and outline progress indicators towards achieving these gender-focused goals. These might include, for example, increasing the percentage of women in board and leadership positions, and developing or improving human resources policies to promote gender equity, hiring, and/or training to support women employees, and gender-responsive procurement to support women in their supply chains and to optimize or improve resilience or sustainability in the supply chain. Milestones can also focus on improved collection of gender disaggregated data or a more in-depth understanding of the implications of gender on the company's strategy. The Gender Action Plan will also make recommendations for stakeholder engagement activities that promote engagement with women representatives from the private sector in addition to the Ministry of Women's Affairs or equivalent, as well as gender focal points in relevant line ministries in countries where beneficiary firms are located. The roll-out of specific Gender Action Plan recommendations might include that explicit consideration be given to gender in the design of climate deep tech products and services. This includes considerations such as: *Are women involved in the research and design of products and services? Is explicit consideration given to gender in the design of clean energy products or services, for example? Are women the primary end-users of products and services, or do women and men use products and services differently? How does the design and marketing of products and services respond to these differences?*
 - **Implementation and Monitoring:** implementation and monitoring of the CRGs will be undertaken during project execution, including monitoring and evaluating the project's results as presented in the Results Matrix and Milestones Table, and disbursement of funds.
 - **Recovery of Funds (post-pilot):** each individual CRG project will establish milestones/triggers for the commencement of the recovery of the grant. These are to be negotiated and agreed with each CRG executing partner and shall be based on their financial projections and included in the project term sheet. The recovery of funds becomes applicable once the executing partners achieves the reimbursement triggers. Given that these resources will be provided from the SCX on a contingent recovery basis, if such resources are recovered pursuant to the mechanism described, the corresponding amount will be returned to the IDB, which in turn will transfer them to SCX.
- 2.6. The EcoMicro Facility, led by the IDB Lab Discovery Team based in the IDB Country Office in Barbados, will be responsible for administering the Facility.

B. Plan for Scale

- 2.7. By the end of this program, the startups/businesses receiving the CRGs will have developed and tested a first-to-market deep tech climate solution/business model. Building on these advancements, these startups/businesses will pursue opportunities for scale through research that will inform a go-to-market strategy for expansion. These considerations will be embedded within the design of the individual CRGs based on the specific financial and business model projections of each individual startup/business.

C. Program Results, Measurement, Monitoring and Evaluation

- 2.8. **Program Results.** By the end of this program the following results are expected: (i) US\$953,000 in CRGs deployed to accelerate Climate Tech solutions; (ii) between 2-4 Climate Tech Solutions supported through CRGs; (iii) 100 vulnerable households, communities, businesses, and/or public-sector services adopting climate tech solutions to respond to climate variability or climate change.
- 2.9. **Monitoring and Evaluation.** The program will be supervised by the IDB Lab EcoMicro Team within CCB/CBA. The Country Office in Barbados will retain responsibility for disbursements.

III. ALIGNMENT WITH IDB GROUP, SCALABILITY, AND RISKS

A. Alignment with IDB Group

- 3.1. This project is fully aligned with IDB's "Vision 2025" strategy which focuses on 5 core pillars: (i) digitalization, (ii) strengthening value chains and nearshoring, (iii) climate, (iv) small- and medium-sized enterprises, and (v) gender. Key to this alignment is the project approach to spur adaptation and application of advanced ClimateTech with significant potential to support climate resilient economic recovery post COVID-19, including through gender smart innovation.
- 3.2. This project is also fully aligned with Build Forward initiative launched by the IDB Caribbean Country Department and IDB Caribbean Governors in February 2021. Build Forward aims to advance technology and resilience in Caribbean by, inter alia, catalyzing private capital for investments in resilient infrastructure, nature and disaster-risk based solutions. It will create strategic options to ensure that all investment assets are developed to maximize opportunities and minimize risks from climate change over their lifespan.
- 3.3. The project is also aligned with, and falls under, the IDB Lab EcoMicro Facility (RG-RG-O1649 - ongoing). EcoMicro aims to pilot green finance for MSMEs (including small farmers) and low-income households in Latin America and the Caribbean (LAC). The goal of the Program is to build resilience of MSMEs and low-income households to climate change. This is achieved by increasing their access to tailored green finance that enables them to adopt and integrate technology solutions into the businesses and homes that help address specific climate adaptation and mitigation needs (including adaptation technologies, renewable energy and energy efficiency solutions). EcoMicro achieves this by supporting Financial Intermediaries (FIs) to design and pilot green finance in close collaboration with technology providers and other key actors in the broader ecosystem.

- 3.4. The project is also aligned, and will foster coordination with, several ongoing IDB Lab and CSD/CCS climate finance operations in the region, notably those which aim to strengthen entrepreneurship ecosystems and innovation networks in their respective countries and those that foster investment in climate tech. Local partners will be mobilized to facilitate sourcing of CRGs under this Program (see Annex III Implementation Mechanism for details), and include, for example:
- Guyana – *Nexus Hub Tech Solutions*, which seeks to support development of the technology driven innovation ecosystem in Guyana (GY-T1159);
 - Honduras - *TECH4DEV*, which will contribute to the strengthening of the technology-based entrepreneurial that will improve the ability to innovate and technological adoption in the sectors that most influence on human capital strengthening as well as AgTech and FinTech (HO-T1352);
 - Honduras – *Mi Pesca Resilience of the Blue Economy and Coastal Ecosystem of Northern Honduras* (HO-T1257)
 - Jamaica – *TechBeach Retreat Creating a Global Gateway for Technology Businesses in the Caribbean*, which seeks to create an integrated and coordinated regional innovation ecosystem in which Caribbean tech businesses have access to highly skilled tech industry advisors, mentors and capital (RG-T3561);
 - Jamaica - *Building Resilience through Climate Adaptation Technologies* (JA-T1189) – the objective is to improve climate and weather data and other hazard-related information and share it effectively. This will lead to avoided loss of life, damage to property and revenue as a result of severe weather and climate events.
 - Mexico & Guatemala - *Low Emissions and Climate Resilient Agriculture Risk Sharing Facility for Mexico and Guatemala* (RG-O1656), a Facility that provides support to climate projects that demonstrate innovative and environmentally sustainable practices, supporting them to engage financial institutions and anchor companies and thus obtain long-term loans and agricultural investments climatically smart necessary. The facility is implemented by IDB Lab, in a blended finance model with the Green Climate Fund to promote innovative climate projects.
 - Haiti - *Accelerating Innovation for Haitian MSMEs* (HA-T1292) which aims at strengthening and connecting business service providers to fill the gaps in the Haitian ecosystem. The project will support 2,000 MSMEs and develop a pay-for-result mechanism to finance the support provided to the Haitian entrepreneurs.
 - Regional (with coverage in PPCR eligible countries including Nicaragua, Guatemala, Mexico, Honduras) – *Pomona Impact Fund II: A Regional Impact Fund*, whose aim is to address the lack of long-term financing available to Small and Growing Businesses, principally in Central America. With a target capitalization of US\$30 million, it will strategically focus on innovative, high-impact Central American SGBs in agriculture and basic services (RG-Q0046);
 - Regional (with coverage in PPCR eligible countries including Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico)– *Circulate Capital LAC Ocean Fund*, whose objective is to launch the first fund in LAC dedicated to fighting plastic pollution and advancing the circular economy (RG-T3821).

- Regional Althelia Fund for the Sustainability of Oceans, the first investment fund to focus on the Blue Economy in LAC (RG-Q0042)
- Regional – Caribbean BlueTech4Waste 2022 Challenge to be co-funded by GEF and IDB Lab. Applicants to this Challenge that are not eligible for funding, could be potential partners for the PPCR Program.

IV. COST AND FINANCING

- 4.1. The program has a total cost of *US\$1,906,000*, of which *US\$ 953,000 (50%)* will be in contingent recovery grant funds to be provided by PPCR; *US\$953,000 (50%)* will be provided in counterpart consisting of half in cash and half in-kind contributions generated by each project.

Table 1: Program Budget

Program Categories	PPCR	Counterpart*	Total
	Contingent Recovery Grant		
Component 1: Accelerating the Commercialization of Climate Tech Solutions	953,000	953,000	1,906,000
Grand Total	953,000	953,000	1,906,000
% of Financing	50%	50%	100%

* 50% of Counterpart will be in-cash and 50% in-kind

V. IMPLEMENTATION STRUCTURE

- 5.1. This Program will be a Bank Executed Operation (BEO) under the IDB Lab EcoMicro Facility. It will be managed by the IDB Lab Team Leader/Program Coordinator for EcoMicro supported by the IDB Lab/EcoMicro Regional Program Analyst. See Annex III Implementation Structure for details.
- 5.2. The implementation of **Component I**. IDB Lab Team will lead the origination, design, and monitoring of individual CRGs under the Facility. Each individual CRG will be approved through the delegated authority vested in the IDB Lab General Manager for Bank-administered resources (See PR-501). This is also in keeping with the Donors delegated authority to the IDB Lab General Manager for the approval of projects under the EcoMicro Program (MIF-AT-1143-2). IDB Lab arrangements for results-based disbursements, procurement, and financial management will be observed by each project.
- 5.3. **Implementation Support & Knowledge Dissemination.** The Facility also relies on (i) external consulting support to facilitate the origination, design, mentoring of startups through execution, to be procured using PPCR MPIS Fees for IDB Lab, and (ii) an external communications consultant and web development team to curate a knowledge repository around green finance and communicate stories from the field, lessons, and Program impact. The Team will also mobilize complementary support

and expertise from within IDB Lab's Investment Unit and across the wider IDB Group as needed, including sector specialists from the Climate Change Division, Water and Sanitation Division, Housing and Urban Development Division, Natural Capital Lab, and IDB Invest.

- 5.4. **Environmental and social safeguard risks** In accordance with the guidelines of the Policy Environment and Safeguards Compliance Policy (OP-703, Directive B.13), this Program does not require ex-ante impact classification. The Facility will support between 2 to 4 Clean Tech Startups via Contingent Recovery Grants, that build climate resilience of vulnerable populations, MSMEs and/or delivery of public services. This program will promote broad-based climate resilience in Central America and the Caribbean via promotion of deep tech solutions that promote (i) climate smart technologies, (ii) reactivating blue economy systems, (iii) promoting sustainable water management; while enabling tech solutions that promote sustainability and circularity – so that economic recovery is also climate-smart, and (vi) addressing increasing health challenges as they relate to climate change. The focus will be on new business models and climate tech solutions, including ag-tech, nature-based solutions, water/clean tech, blue-tech, and health-tech. Therefore, the individual projects funded under this facility are expected to yield positive environmental impacts. All individual projects approved under this facility will have to comply with IDB's environmental and social safeguards. If necessary, individual projects will include an Environmental and Social Management Plan that will address issues identified according to IDB's environmental and social safeguards policies and guidelines.

VI. PROGRAM TIMEFRAME

- 6.1. The Program timeframe is expected to extend for a period of five (5) years from approval (2021-2026). This is broken down across 2 phases as described below and includes 54 months of execution and 60 months of disbursement.

- **Design and approval of sub-projects – to be completed by 30 December 2023.**

During this first phase, the IDB Lab/EcoMicro Project Team with assistance from external consulting support will facilitate the origination/identification, preparation of the 2-4 individual Contingent Recovery Grants (CRGs) for highly impactful early ventures addressing key climate challenges with promising climate tech solutions in eligible PPCR countries.

- **Execution of sub-projects – estimated to be completed by 30 December 2026.**

During this second phase, the IDB Lab/EcoMicro Project Team will support the execution of the individual Contingent Recovery Grants (CRGs) following approval. This includes disbursement of funds, monitoring of results, fulfillment of reporting obligations, etc. IDB Lab arrangements for results-based disbursements, procurement, and financial management, will be observed by each project. The duration of individual sub-projects will be determined on a case-by-case basis; however, they are expected to be fully executed within 3 to 4 years.

- 6.2. **Recovery of funds** will occur following the completion of the projects. Executing Agencies will be responsible to demonstrate progress towards the achievement of the triggers for recovery as per the agreed upon Term Sheet. The Executing Agency will issue periodic reimbursements to IDB Lab provided there is commercial viability. Timeframes for commercial viability will be determined on a case by case, however it is expected that the recovery of funds would be realized in approximately 5 years.

VII. RECOMMENDATION

- 7.1. The Chief of Unit, Grant's Unit, Cesar Buenadicha recommends the approval of this operation by the IDB Lab CEO, under the Delegation of Authority granted by the Donors Committee by Resolution MIF/DE-33/11 adopted on September 20th, 2011 and the use of resources from the Pilot Project For Climate Resilience (PPCR) under the Strategic Climate Fund (SCX), totaling up to US\$953,000, in order to finance the corresponding project.

VIII. APPROVAL

- 8.1. I hereby approve, according to the Delegation of Authority provided by the President of the Bank according with the facility approved by the Donors Committee by Resolution MIF/DE-33-11 adopted on September 20th, 2011 (MIF/AT-1143-2), up to US\$953,000 for the financing of the project "*EcoMicro 2.0 Climate Resilience through Deep Tech Acceleration in the Caribbean Basin*" RG-O1698 the "Project," to be considered as part of the EcoMicro Facility.
- 8.2. That the resources of the project shall be utilized to finance the activities described and budgeted in this document chargeable to the Pilot Project For Climate Resilience (PPCR) under the Strategic Climate Fund (SCX) on a non-reimbursable basis.
- 8.3. The commitment and disbursement of these resources shall be made only by the Bank in US\$. The same currency shall be used to stipulate the remuneration and payment to the consultant, except in the case of local consultants working in their own Borrowing Member Countries who shall have their remuneration defined and paid in the currency of such country.
- 8.4. No resources of the Program shall be made available to cover amounts greater than the amount certified herein above for the implementation of this Project Document.

Approved

Irene Arias Hofman
IDB Lab General Manager

12/06/2021

Date