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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK  
MULTILATERAL INVESTMENT FUND

**REGIONAL**

**SARGASSUM INNOVATION FACILITY**

**(RG-O1726, DR-O0013)**

**FACILITY DOCUMENT**

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## **ANNEXES**

Annex I

Results Matrix

## ABBREVIATIONS

COF	Country Office
CRIG	Contingent Recovery Investment Grant
EE	Executing Agency
EU	European Union
EIB	European Investment Bank
FFP	Facility Focal Point
IDB	Interamerican Development Bank
IDB Lab	Interamerican Development Bank's Innovation Laboratory
LAC	Latin America and the Caribbean
NGO	Non-Governmental organization
NRIG	Non-Reimbursable Investment Grant
NRTC	Non-Reimbursable Technical Cooperation
QRR	Quality and Risk Review
SDG	Sustainable Development Goals
SME	Small and Medium Enterprises
SIF	Sargassum Innovation Facility
USAID	United States' Agency for International Development

## PROJECT SUMMARY

### REGIONAL SARGASSUM INNOVATION FACILITY (RG-O1726, DR-O0013)

Implementation Arrangements and Budget			
<b>Beneficiary Countries</b>			
The Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, Trinidad and Tobago, Dominican Republic, Haiti, Mexico, Honduras, Antigua and Barbuda, Dominica, Grenada, Saint Lucia, Saint Kitts and Nevis, and Saint Vincent and the Grenadines.			
<b>Executing Agencies:</b>			
Legally established entities may receive and administer resources under this facility.			
Source	Amount (US\$)	%	Operation
IDB Lab	1,500,000	30.3	RG-O1726
USAID <sup>1</sup>	950,000	19.2	DR-O0013
Local counterpart funds	2,500,000	50.5	
<b>Total:</b>	<b>4,950,000</b>	<b>100</b>	
Project Summary			
<p><b>Objectives:</b> The general objective of this document is to establish a facility to harness the potential of sargassum as a resource for various industries. The general objective of the facility is to leverage the potential of sargassum as a resource for various industries, contributing to mitigating the environmental and economic impact of sargassum arrivals in the most sensitive geographical regions, and strengthening the environmental and economic resilience of coastal communities affected by this phenomenon.</p> <p><b>Funding and Types of Financing:</b> The facility will be funded by the Inter-American Development Bank (IDB), through its innovation lab (IDB Lab), IDB Invest, the U.S. Agency for International Development (USAID), and counterpart funding from executing agencies<sup>2</sup>, adding up to a total amount of US\$5 million. IDB Lab's Blue Tech for Waste Challenge<sup>3</sup> and LAC Green Innovation Hub<sup>4</sup> will also collaborate with this facility. The facility will</p>			

<sup>1</sup> These funds will be administered by the IDB through a Project-Specific Grant (PSG). USAID will contribute US\$ 1,000,000. Out of this contribution, US\$ 50,000 will be set aside as a 5% administration fee. The remaining contribution of US\$ 950,000 corresponds to the project amount as indicated in the Implementation Arrangements and Budget table.

<sup>2</sup> To be selected by the jury members of the Sargassum Innovation Quest challenge.

<sup>3</sup> (RG-O1674) Global Environment Fund (GEF) ISLANDS Caribbean Incubator Facility, under which IDB Lab is executing the BlueTech for Waste Challenge (BT4W) in partnership with GEF, aiming to accelerate innovative solutions for the sustainable management of toxic chemicals and waste.

<sup>4</sup> (RG-O1700) Facility funded with resources from the Climate Investment Fund's (CIF) Clean Technology Fund (CTF) aiming to accelerate the deployment of catalytic green tech solutions and new business models to drive the transition to resilient, circular, low carbon societies.

finance between 8 and 12 private-sector<sup>5</sup> initiatives through non-reimbursable technical cooperation, non-reimbursable investment grants, and contingent recovery investment grants to a maximum of US\$600,000, and through loans in the range between US\$500,000 and US\$2,000,000<sup>6</sup>. Resources will be channeled through individual projects to be approved by IDB Lab’s management through Delegated Authority. All individual projects will have to comply with the eligibility criteria described in section II.C.

**Structure:** The facility will be structured in one main component, titled Mitigating environmental and economic impact of sargassum accumulation in coastal regions (US\$1,500,000 IDB Lab, and US\$950,000 USAID).

**Individual operations structure:** Activities eligible to be financed through the available financial instruments include: (i) acquisition or development of hardware, software, equipment, human resources and/or critical materials to develop, or implement the proposed solutions, (ii) advisory and technical assistance services in good business practices, growth strategy, marketing, and logistics, (iii) socio-environmental impact measurement and monitoring systems, (iv) advisory for alignment/compliance with international standards and norms (including the adoption of certifications), (v) technology upgrading in priority value chains, (vi) access to local and international markets, (vii) development of business agreements with anchor companies, (viii) identification of regulatory challenges, and (ix) construction of database consisting of potential providers and recipients of the innovative solutions and connections within the sargassum sector, among others.

**Priority sectors and value chains:** The facility will prioritize proposals supporting the capacity of start-ups, small and medium-sized enterprises (SMEs), corporations, academia and NGOs in any of five areas: (i) sargassum collection systems, (ii) sargassum pre-treatment, treatment and drying technologies, (iii) transformation and valorization of sargassum, (iv) monitoring and analysis, and (v) other technologies aligned with the purpose of the facility or a combination of the above mentioned technologies/approaches.

**Exceptions to Bank Policies:** N/A

Strategic Alignment						
<b>Challenges<sup>(a)</sup>:</b>	SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>	EI	<input type="checkbox"/>
<b>Cross-Cutting Themes<sup>(b)</sup>:</b>	GD	<input type="checkbox"/>	CC	<input checked="" type="checkbox"/>	IC	<input type="checkbox"/>

<sup>(a)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration). <sup>(b)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. FACILITY DESCRIPTION AND OBJECTIVES

### A. Background, Problem Addressed, and Justification

- 1.1. Since 2011, the coasts of the Caribbean countries, Central America, and Mexico have experienced a massive proliferation of pelagic sargassum originating from the

<sup>5</sup> Includes actors such as startups, foundations, non-profit organizations, corporations, academic institutions, and social organizations.

<sup>6</sup> In the event that a preselected proposal requests a loan, it will be managed with resources external to the facility, through the investment unit of IDB Lab or via IDB Invest.

equatorial Atlantic. According to the Journal of the Mexican Academy of Sciences, the Great Atlantic Sargassum Belt, which extends from the west of Africa to the east of Brazil, measures nearly 9,000 km and has a biomass of 20 million metric tons<sup>7</sup>. These masses of algae, carried by ocean currents, have made their way to the warm waters of the Caribbean Sea, depositing over extensive areas of their shores (Franks, Johnson, and Ko 2016, Wang et al. 2019). As a reference, according to a report from the University of South Florida, in 2022 alone, the amount of sargassum in the tropical Atlantic, the Caribbean Sea, the Central Western Atlantic, the Central Eastern Atlantic, and the Gulf of Mexico increased from 18.8 million tons in May to 24.2 million tons in June, setting a new historical record<sup>8</sup>.

- 1.2. The consequences of this unusual accumulation are varied and concerning. It has directly affected the tourism sector, which is vital for many Caribbean countries, as the beaches are frequently covered by this alga, and it has altered fishing dynamics, reducing catches and complicating the daily work of fishermen. According to the United States Environmental Protection Agency (EPA), the estimated cost to clean up decomposed sargassum in the Caribbean was approximately \$120 million in 2018. In places like Miami-Dade County, Florida, annual costs are estimated at \$35 million just to collect, transport, and dispose of the sargassum in landfills. Similarly, the study "[The Economic Impact of Sargassum: Evidence from the Mexican Coast](#)" by the Inter-American Development Bank found that in Quintana Roo, Mexico, the presence of sargassum on the beaches reduced nighttime light intensity, a proxy for economic activity, by 17.5%, which represents an approximate 11.6% decrease in local gross product. This effect extends up to 12 months after the detection of sargassum on the coasts, indicating a persistent and negative economic impact.
- 1.3. On the other hand, coastal ecosystems, which are essential for maintaining marine balance, are primarily threatened by contamination and degradation through sargassum decomposition, which releases harmful compounds and reduces water quality. Additionally, large accumulations of sargassum block sunlight, which is essential for the photosynthesis of organisms such as corals and seagrasses, and alter local fauna, affecting the reproduction and feeding of fish and crustaceans, and with them, the livelihoods of the communities that depend on these ecosystems. Not least important is the impact on public health, as decomposing sargassum can release gases and substances that are harmful to health (Desrochers, Cox, Oxenford, and van Tussenbroek et al., 2019).
- 1.4. After analysis and studies, experts have established connections between this increase in the occurrence of sargassum and factors such as climate change and oceanic eutrophication. It is likely that this phenomenon will continue to manifest, which has driven the need to raise the level of attention to these annual episodes in the Caribbean region. In such a scenario, managing sargassum has become a herculean task, with high costs that are unsustainable for many countries. The region is exploring ways to turn this environmental challenge into an economic opportunity, seeking innovative solutions for the collection, treatment, and transformation of sargassum as a raw material in various industries in the Caribbean and Mexico (UNEP 2018, ANR 2019). To reduce the adverse economic impact, innovative methods and entrepreneurial initiatives have been developed to exploit the potential

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<sup>7</sup> Aldana, Dalila. [México ante el sargazo](#). Ciencia, Revista de la Academia Mexicana de Ciencias. Diciembre 2020, volumen 71, número 4.

<sup>8</sup> Santana, Mayka. [Récord histórico de sargazo en el Caribe: 24 millones de toneladas](#). Hosteltur. Agosto 2022.

economic benefits derived from the abundant available biomass, however, they failed to deal with the scale of problem.

- 1.5. Turning the large quantities of sargassum into economic opportunities that generate jobs, solve the biomass removal problem, and improve the adaptability and resilience of affected countries will likely require focusing on applications that can create stable markets in the medium and long term. However, efforts to leverage this abundant biological resource have faced several challenges that hinder the development or expansion of various sargassum-based products and services. In the wider Caribbean region, issues related to the valorization of sargassum can be grouped into five main categories: (1) variable supply (of sargassum and its various forms); (2) limited knowledge about its chemical components, including micropollutants; (3) collection, transportation, and storage; (4) management and governance; and (5) financing (Oxenford et al. 2021; Desrochers et al. 2022).
- 1.6. Utilizing pelagic sargassum is essential for the Caribbean region to adapt to the constant massive arrivals of this algae. However, it is crucial to adequately address the key challenges to achieve its full commercial potential. In this regard, various entities such as entrepreneurs, SMEs, and research centers, among others, will play a vital role in the creation of sargassum-derived products and the application of innovative collection and transformation technologies, thereby opening employment opportunities and contributing to local economies. A wide range of technological advancements employed in Central America, Mexico, and the Caribbean for sargassum utilization has been identified and assessed. Sargassum-based compost, biofertilizers, bioplastics, biogas, construction materials, clothing, footwear, cosmetics, and the development of harvesting equipment demonstrates the breadth of commercial opportunities in this emerging sector within the region<sup>9</sup>.

## **B. Objective**

- 1.7. The general objective of the facility is to leverage the potential of sargassum as a resource for various industries, contributing to mitigating the environmental and economic impact of sargassum arrivals in the most sensitive geographical regions, and strengthening the environmental and economic resilience of coastal communities affected by this phenomenon. To this end, an open call for innovation (or challenge) is proposed called the [\*\*Sargassum Innovation Quest: Building Resilient Coastal Ecosystems\*\*](#), inviting different actors such as startups, foundations, non-profit organizations, corporations, academic institutions, and social organizations to participate with technology solutions that are already tested at an experimental level and require scaling to a commercial level, and whose business models respond to criteria of economic viability, social impact, environmental sustainability, and innovation in the sector.
- 1.8. The Facility will focus on supporting proposals that aim at achieving measurable and concrete outcomes through innovative, cost-effective, transparent, and collaborative interventions, also that:
  - i. are innovative in nature and present a business model that, within the logic of the circular economy, contributes directly or indirectly to the transformation and valorization of sargassum for commercial purposes,

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<sup>9</sup> For more details, refer to the study "[Innovations for Sargassum Resilience](#)".

- ii. focus on reducing the coastal accumulation rate of sargassum (accumulated biomass in coastal areas),
  - iii. promote social and economic inclusion of the poor and vulnerable populations,
  - iv. have a path for scalability or replication, as well as financial sustainability, through a company or private sector organization, and
  - v. are implemented within a minimum period of 12 months and a maximum of 36 months.
- 1.9. The facility is part of the Inter-American Development Bank (IDB) Group's strategy to promote innovation and applied technology for the adaptation and resilience of Latin American and Caribbean economies.
- 1.10. **Participating Countries.** The facility will support the following countries: The Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, Trinidad and Tobago, Dominican Republic, Haiti, Mexico, and Honduras. Also Countries listed as beneficiaries of the [Compete Caribbean](#) program that are not members of the IDB: Antigua and Barbuda, Dominica, Grenada, Saint Lucia, Saint Kitts and Nevis, and Saint Vincent and the Grenadines.
- 1.11. These countries have been identified as particularly vulnerable because they face a significant and recurring impact of sargassum on their coasts, affecting their ecosystems and economy, including small island economies dependent on tourism and fishing. At the same time, they represent a range of countries that reflects the geographical diversity of the Caribbean and the Caribbean Basin, allowing the developed solutions to be adapted and replicated in different regional contexts.
- 1.12. **Strategic Alignment:** The facility is in line with the IDB Group's Institutional Strategy 2024-2030 (Impact+), which supports one of the main goals "**Addressing Climate Change**", through activities that fall under the cross-cutting focus area "**Biodiversity, natural capital and climate action**". Specifically, the activities of the facility support adaptation to climate change, to enhance climate resilience and to protect vulnerable populations<sup>10</sup>, by choosing initiatives that help reduce the negative impacts of sargassum when it arrives at the coast, from an economic, environmental and health perspective. Likewise, by using sargassum as a raw material in its transformation and valorization process, it helps improve the coastal marine ecosystem<sup>11</sup>, by minimizing the amounts of sargassum that pile up on the beach and coast, affecting the habitat of these areas. From the perspective of innovation<sup>12</sup>, it will rapidly scale up ecological models of innovation and business in sectors where progress has been limited and will adapt previous or tried technologies and accelerate new ones for adaptation to climate change and the mitigation of its effects, all in the context of sargassum.
- 1.13. The facility is aligned with the following sustainable development goals (SDGs) declared by the United Nations General Assembly: SDG 1: No poverty - By strengthening the economic resilience of coastal communities, the facility aims to create jobs and improve livelihoods, thereby contributing to poverty reduction. SDG

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<sup>10</sup> Section 5.4.1 Adapting to climate change, boosting climate resilience and protecting vulnerable populations. EI 2024-2030

<sup>11</sup> Section 5.4.3 Contend, restore, and sustainably manage terrestrial and aquatic ecosystems and reduce biodiversity loss, and 5.4.4 Address local pollution.

<sup>12</sup> Section 5.5.5 Innovation. EI 2024-2030



8: Decent Work and Economic Growth - The facility focuses on leveraging sargassum as a resource for various industries, which can stimulate economic growth and create decent job opportunities. SDG 9: Industry, Innovation, and Infrastructure - The call for innovation encourages technological solutions and scaling up experimental technologies, promoting industry and innovation. SDG 11: Sustainable Cities and Communities - Strengthening the resilience of coastal communities against sargassum influxes contributes to making these communities more sustainable and resilient. SDG 12: Responsible Consumption and Production - Utilizing sargassum as a resource for various industries promotes sustainable consumption and production patterns. SDG 13: Climate Action - Mitigating the environmental impact of sargassum contributes to broader climate action efforts by addressing issues exacerbated by climate change. SDG 14: Life Below Water - Addressing the sargassum influx helps protect marine ecosystems and promotes the sustainable use of ocean resources. SDG 17: Partnerships for the Goals - The facility encourages participation from various actors, fostering partnerships and collaboration to achieve the outlined objectives.

## II. COMPONENTS, USE OF RESOURCES, AND RESULTS

### A. Components

- 2.1. The facility will be structured in one single component. **Component 1: Mitigating environmental and economic impact of sargassum accumulation in coastal regions. (Total resources US\$4,950,000 --- US\$1,500,000 from IDB Lab, US\$950,000 from USAID, US\$2,500,000 from counterpart funding).**
- 2.2. This component aims at the effective management of sargassum while fostering innovation and collaboration across various sectors, supporting the development of sustainable and economically viable solutions.
- 2.3. To achieve this goal, the activities to be financed are focused on: (i) the use of innovative technologies for efficient sargassum collection with minimal environmental impact such as floating barriers, specialized vessels, and coastal management systems; (ii) the necessary pre-treatment and drying technologies to prepare sargassum for transformation and valorization through the use of renewable energy sources, mechanical, biological and chemical methods for cleaning and separating debris; (iii) the development of technologies to convert sargassum into valuable products such as biogas, bioethanol, biodiesel, composite materials, fertilizers, compost, and extraction of bioactive compounds, fostering new markets and industries; and (iv) the implementation of advanced real-time monitoring systems (drones, satellites, sensors) and data analysis tools to optimize prediction, management, and response strategies.
- 2.4. The regional expected results of these activities include: (i) new sargassum-derived products for use in various industries, contributing to economic growth and job creation; (ii) reduced moisture content in sargassum, cleaned biomass ready for further processing, and optimized pre-treatment systems; (iii) efficient containment and collection systems that minimize environmental impact and improve the management of sargassum biomass; (iv) new industries, markets, and job opportunities associated with sargassum processing and product development that support local coastal economies, (v) enhanced monitoring capabilities and predictive

models to manage sargassum accumulations more effectively, and (vi) knowledge exchange between countries to promote the use of technologies applied within the framework of this facility.

## **B. Origination and Identification of Individual Projects to be Financed by the Facility**

- 2.5. It is expected that the project ideas or proposals that will be presented for possible funding will be received through the challenge “[Sargassum Innovation Quest: Building Resilient Coastal Ecosystems](#)”, which has been widely mobilized through IDB’s social media and dissemination channels.
- 2.6. Each of the individual projects to be funded by the Facility RG-O1726, DR-O0013 will obtain its own no objection from the corresponding beneficiary country, following the procedures required by the governments of each country. IDB Lab will ensure that all individual projects comply with the implementation arrangements established in section IV.

## **C. Eligibility Criteria**

- 2.7. All projects to be financed by the facility will be evaluated according to the eligibility criteria established in this document. The processing, approval, and implementation of each project will be subject to IDB Lab policies and procedures.
- 2.8. To select the most merited projects, the criteria will include:
  - i. **Technical feasibility:** The technical feasibility of the solutions to address the sargassum problem is evaluated considering the maturity of the technology, processing time of sargassum biomass, implementation safety for people and the environment, and operational and maintenance costs. These criteria ensure that the solutions are viable, safe, efficient, and economically sustainable.
  - ii. **Innovation:** The degree of novelty, originality, and creativity of the solutions will be recognized, as well as their contribution to the scientific and technological development of the region. Being innovative in nature or presenting a solution that has not been implemented before in the country or that adds an innovation component to an existing model. Innovations can be a new technology, a new application of technology, a new business model, or a new process or methodology for solving a current problem, and the team identifies its competitive advantages.
  - iii. **Environmental impact:** The potential of the solutions to mitigate the harmful effects of sargassum on marine and coastal ecosystems and the generation and management of waste in transformation processes will be valued.
  - iv. **Scalability:** The scalability of a solution refers to its ability to be replicated and expanded to other contexts and territories also affected by the sargassum phenomenon. This criterion evaluates two key aspects: the possibility of replication and the scalability capacity. This criterion seeks that the proposed solution is not only effective in a specific environment but also has the potential to be adopted and used in other areas affected by sargassum.
  - v. **Community participation:** The degree to which the solutions bring added value to the affected community, by addressing a direct challenge related to sargassum and by contributing to their socioeconomic wellbeing. The potential

impact of individual projects will be assessed following IDB Lab's impact analysis, the iDELTA, with the support of the Development Effectiveness Division (DSP/DVF) of IDB Invest.

- vi. **Economic sustainability:** Each project that will be financed will be analyzed and designed with a sustainability strategy that is specific to the individual project, with the intention that the activities and outcomes of each project become sustainable in the medium term as is currently done with all other IDB Lab projects. In particular, the financial sustainability or growth potential over the next 3-5 years after funding (revenue generation model).
- 2.9 Selected proposals will contribute at least 50% in counterpart funds (half in cash, half in-kind) for their project budget. Hence, Facility 50% + Applicant 50% = 100% Total Project Cost.

#### **D. Individual Project Design, Review, and Approval**

- 2.10 Once selected, individual projects to be funded by the Facility RG-O1726, DR-O0013 will be submitted to IDB Lab eligibility committee virtually, and designed and approved using the existing policies, procedures, and formats for IDB Lab related to risk management, procurement, and contracting, application of the DIC1, financial management, and supervision. As is currently done with individual IDB Lab projects, each project in the Facility will prepare a document that will include iDELTA completion, an assessment of risk of non-alignment with the Paris Agreement, a social and environmental impact section, and will be reviewed during its QRR.
- 2.11 Individual Projects receiving USAID or other external donors' funds under this facility will be approved by the IDB Lab General Manager in line with the established delegation of authority<sup>13</sup>. In line with this delegation of authority, IDB Lab requests authority from the Donors' Committee for the General Manager to approve individual projects under this facility, financed with IDB Lab funding.
- 2.12 There will be non-objection from the correspondent IDB's Country Representative before a project is submitted for eligibility, and from Co-financing Management Unit (ORP/GCM) for those projects financed with USAID resources.
- 2.13 Individual Projects financed by the facility are expected to be in the order of US\$300,000, to a maximum of US\$600,000 each for NRTC, NRIG and CRIG, and in the order of US\$500,000 to a maximum of US\$2,000,000 for Loans<sup>14</sup>.

#### **E. Execution and supervision of individual projects**

- 2.14 Each project will report through IDB Lab's semi-annual Project Status Report System (PSR) and the Bank's Technical Cooperation Monitoring and Reporting System (TCM), and complete GCF APR report (specific GCF indicators).
- 2.15 The facility will hire a consultant to support the analysis of the selected projects, who will be supervised by the Bank's country office in Dominican Republic.

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<sup>13</sup> PR-501 Approval of Nonreimbursable Operations  
(Delegation of Authority for Approval of Nonreimbursable Operations of up to US\$3,000,000).

<sup>14</sup> In the event that a preselected proposal requests a loan, it will be managed with resources external to the facility, through the investment unit of IDB Lab or via IDB Invest.

- 2.16 The Facility will cross-check with the terms and conditions of IDB Lab's [Blue Tech for Waste Challenge](#)<sup>15</sup> and of the LAC Green Innovation Hub<sup>16</sup>, including any relevant obligations related to monitoring, reporting, and communications, for projects that may be aligned with such facilities. IDB Lab will coordinate closely with these two other facilities to ensure the fulfillment of any contractual obligations.

## **F. Results**

- 2.17 The success of the facility will be measured through the following set of target results indicators: number of proposals selected and financed; total investment in sargassum solutions enabled; number of new or innovative technologies used and scaled; tonnes of sargassum collected and managed; tonnes of carbon dioxide equivalent (tCO<sub>2</sub>eq) reduced or avoided; number of sargassum by-products commercialized.
- 2.18 All projects under the facility RG-O1726, DR-O0013 will use IDB Lab's KPIs (for example, emissions avoided (annual tons CO<sub>2</sub> equivalent); Beneficiaries of enhanced disaster and climate change resilience (#); Enterprises provided with technical assistance (#); Jobs supported (#)).
- 2.19 As a result of the financed projects by this facility, the following outcomes will be achieved: (i) Improved management of sargassum contributing to emissions reductions; (ii) Strengthened capacity of local executing agencies; (iii) amount of mobilized resources to expand market capacity of business oriented to transform and valorize sargassum, amongst others, (iv) integration of IDB Lab supported Sargassum projects into value chains of collection and processing supported by European Union, European Investment Bank, FMO, and other partners.
- 2.20 The facility will especially benefit business owners and their families whose incomes have improved, including natural and legal persons, classified as micro, small and medium enterprises (MSMEs) operating in the affected areas of the region and conducting eligible investments.
- 2.21 Similarly, the facility is also expected to indirectly benefit all participants in the value chain of sargassum, through better articulation and distribution of benefits, and the region's communities, thanks to the implementation of practices that promote better management of sargassum overall. The beneficiaries live mostly in coastal areas.
- 2.22 By bundling together, a significant number of individual projects, this innovative facility should demonstrate the commercial viability and potential of the sargassum sector, which will reduce the perception risk of the sector and attract the attention from impact investors and/or identify opportunities for BID Invest. The implementation and supervision of the projects will allow IDB Lab to generate actionable evidence, with a series of technologies, open innovation practices and partnerships, that developing the sargassum business pipeline can increase economic and social value in the region in a sustainable, low emissions/high carbon stock and climate resilient way.

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<sup>15</sup> (RG-O1674) Global Environment Fund (GEF) ISLANDS Caribbean Incubator Facility, under which IDB Lab is executing the BlueTech for Waste Challenge (BT4W) in partnership with GEF, aiming to accelerate innovative solutions for the sustainable management of toxic chemicals and waste.

<sup>16</sup> (RG-O1700) Facility funded with resources from the Climate Investment Fund's (CIF) Clean Technology Fund (CTF) aiming to accelerate the deployment of catalytic green tech solutions and new business models to drive the transition to resilient, circular, low carbon societies.

### III. FINANCING STRUCTURE

#### A. Financing Instruments

- 3.1 **Source of funding:** The facility will be funded, in the amount of US\$2,450,000, by the IDB Lab and USAID.
- 3.2 **Types of financing instruments:** The facility will deploy funding through Non-Reimbursable Technical Cooperation (NRTC), Non-Reimbursable Investment Grants (NRIG), Contingent Recovery Investment Grants (CRIG), Loans (L)<sup>17</sup>, or a combination of these instruments. The following table describes which instruments will be available to the different beneficiary countries:

Source of Financing	Type of Financing	Funds available	Eligible countries
IDB / IDB Lab	Non-Reimbursable Technical Cooperation (NRTC). Non-Reimbursable Investment Grant (NRIG). Contingent Recovery Investment Grant (CRIG). Loan (L).	US\$1.5 Million	The Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, Trinidad and Tobago, Dominican Republic, Haiti, Honduras, and Mexico.  Antigua and Barbuda, Dominica, Granada, Saint Lucia, Saint Kitts and Nevis, and Saint Vincent and the Grenadines.
USAID	Non-Reimbursable Technical Cooperation (NRTC). Non-Reimbursable Investment Grant (NRIG). Contingent Recovery Investment Grant (CRIG).	US\$ 950,000	Dominican Republic.

<sup>17</sup> In the event that a preselected proposal requests a loan, it will be managed with resources external to the facility, through the investment unit of IDB Lab or via IDB Invest.

**B. Indicative Budget**

3.3 **Budget:** The facility’s budget will be structured as follows:

Component	DR-O0013			RG-O1726			Total
	PSC	Counterpart	Total	MSE	Counterpart	Total	
1. Mitigating environmental and economic impact of sargassum accumulation in coastal regions.	US\$ 950,000	US\$ 500,000 cash US\$ 500,000 in-kind	US\$ 1,950,000	US\$ 1,450,000	US\$ 750,000 cash US\$ 750,000 in-kind	US\$ 2,950,000	US\$4,900,000
Analysis and Dissemination of project proposals				US\$ 50,000		US\$50,000	US\$ 50,000
<b>Total</b>	<b>US\$ 950,000</b>	<b>US\$ 1,000,000</b>	<b>US\$ 1,950,000</b>	<b>US\$ 1,500,000</b>	<b>US\$ 1,500,000</b>	<b>US\$ 3,000,000</b>	<b>US\$ 4,950,000</b>
Percentages			40%			60%	100%

3.4 **Resource Mobilization:** The facility will be open for additional contributions from external donors as long as these donors accept the conditions outlined in this facility document or any other conditions established by the IDB. The approval of these resources will follow IDB procedures.

3.5 USAID expects to commit US\$ 950,000 to DR-O0013. Resources for this contribution will be received in the Project Specific Contribution Account (PSC).

3.6 Resources of project DR-O0013 to be received from USAID through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the “Report on COFABS, Ad-Hocs and CLFGS and a Proposal to Unify Them as Project Specific Grants (PSGs)” (Document SC-114). As contemplated in these procedures, the commitment by USAID will be established through a separate Administration Agreement. Under such an agreement, the resources for this project will be administered by the Bank.

3.7 The project team will be responsible for preparing and submitting the project reporting to the donor, as well as for all other actions and deliverables pertaining to project execution and agreed with the donor in the Administration Agreement.

**IV. IMPLEMENTATION ARRANGEMENTS AND GOVERNANCE STRUCTURE**

**A. Implementation and execution arrangements**

4.1 **Overall implementation arrangements:** This facility will be led and executed by IDB Lab, and will be conducted in close collaboration with with IDB Lab’s Blue Tech for Waste Challenge, LAC Green Innovation Hub, and the U.S. Agency for International Development (USAID) through the establishment of a Technical Committee, which will include technical representatives from all facilities and parties. This committee will have the responsibility to review the projects proposed based on

the eligibility criteria indicated in section II and make recommendations to IDB Lab management for final approval. IDB Lab will name a Facility Focal Point (FFP) who will coordinate with the CSD/ACU team and ORP/GCM.

- 4.2 The Technical Committee will regularly interact with representatives from IDB Invest, the Knowledge, Innovation and Communication Sector (KIC) and the Competitiveness, Technology, and Innovation Division (CTI), and other departments, to ensure coordination with existing projects and strategically coordinate future actions.
- 4.3 IDB Lab specialists in the beneficiaries' countries will be directly involved in the design and supervision of individual projects and will ensure the involvement of other relevant specialists from COF for each individual project.
- 4.4 The Facility will leverage the expertise of IDB sector specialists from the Natural Resources Division (RND) who will be involved in Component 1 as well as specific IDB Group sector specialists (potentially CSC, among others), as well as IDB Invest, depending on the selected projects. This will enable the challenge to benefit from a broad range of sector-specific knowledge and experience in different areas, including climate change, natural capital, and tourism to ensure effective and innovative project interventions.
- 4.5 **Executing agencies:** Upon the respective due diligence, legally established entities may receive and administer resources under this facility to execute projects. These executing agencies could be one of the following: (i) private companies (including startups and SMEs); (ii) academic institutions; (iii) NGOs and foundations.
- 4.6 **Execution period: The life cycle of the facility is estimated to be up to three years (36 months) after the facility is officially approved.** The facility may be extended by IDB Lab in compliance with IDB's policies and procedures. All individual projects must be approved at least twelve (12) months before the administrative closure date of the facility.
- 4.7 **Procurement of Goods and Services and Financial Management.** The contracting of consulting services and the procurement of goods and related services financed with the facility's resources will follow the Bank's procurement policies and procedures established in IDB's Procurement "Policies for the Selection and Contracting of Consultants financed by the Bank" (GN-2350-15), and "Policies for the Procurement of Goods and Works (GN-2349-15). Financial management of the facility's resources will follow the Bank's Financial Management Guidelines (OP-273-6).

## **B. Environmental and social safeguard risks**

- 4.8 There is no adverse environmental or social (E&S) impact at the level of the IDB Lab Facility. **The Facility is therefore an E&S Category C project.** Potential E&S impact will occur with each subproject rather than at the Facility level. Each project in this Facility will be reviewed separately and categorized by DSP/SEG following the guidelines of the IDB Environmental and Social Policy Framework (GN-2965-21). For subprojects Categorized as B, an E&S Due Diligence and Public Disclosure will need to be done, to comply with IDB E&S Policy Framework.
- 4.9 Based on the information about sectors to be supported by the Facility, it is expected that most of the sub-projects would be considered as E&S Category B projects.

### **C. Fiduciary and other risks**

- 4.10 The IDB Lab Risk Analysis tool will be applied to the selected project proposals after eligibility. The main risks of the facility and their mitigants identified are as follows:
- 4.11 Variable supply of sargassum. It is hard to predict how and where sargassum inundations will hit hardest among the Caribbean countries. Projects that depend on an ample supply of sargassum biomass may risk inconsistent availability. This risk can be mitigated by developing flexible and adaptable collection and processing systems. Similarly, projects focusing on collection and treatment may face logistical difficulties in managing large volumes of sargassum. Such projects must mitigate this risk by investing in efficient logistics and storage solutions to handle biomass effectively.
- 4.12 There is still somewhat limited knowledge of the exact chemical composition and potential contaminants found in sargassum. This may pose a risk for projects that focus on the transformation and valorization of sargassum. To mitigate, thorough research and analysis should be conducted to understand and manage its chemical properties.
- 4.13 Coordination challenges among stakeholders and regulatory hurdles pose several risks, such as legal and operational barriers, local bureaucratic procedures and differing regulatory frameworks among the target countries that can delay decision-making and implementation of selected proposals. To mitigate these types of risks, there needs to be careful planning, strong communication, and flexible strategies to ensure success of the selected projects, as well as ensuring clear governance structures from the implementing partners and engagement of stakeholders in collaborative planning.
- 4.14 Insufficient funding to scale and sustain operations related to sargassum management can impact the completion of projects, reduce the geographical or functional scope of operations, compromise the quality of technology and/or methods used for data monitoring and analysis, and even strain local economies who suffer the consequences of unmanaged coastal sargassum. To mitigate these risks, it is necessary to secure diverse funding sources and demonstrate effective financial planning.