

Guidelines



Accelerating the sustainable management of chemicals and waste with innovative technologies

Waste streams

- 1. Used lubricating oils
- 2. Used and end-of-life tires
- 3. Used and end-of-life vehicles
- 4. Used and end-of-life electronic and electrical equipment (E-waste)
- 5. Plastic waste that may contain hazardous substances
- 6. Manufacturing/industrial waste
- 7. Organic and municipal solid waste
- 8. Medical waste
- 9. Hazardous pesticides



Objective

The Inter-American Development Bank (IDB), through its innovation laboratory, IDB Lab, and in collaboration with the Global Environment Facility (GEF)¹ seeks to support innovative solutions that contribute to the sound management of hazardous Chemicals and Waste (C&W) to protect human health and the environment, and address climate vulnerability in the Caribbean region.

See context and objective

Submission of applications From April 19th to May 31th, 2022 Announcement of selected applications
July-August 2022

Challenge Timeline

Awards

IDB Lab/IDB funding and GEF financing² (under the terms and conditions set forth in section V), and participation in IDB regional networking events.

Geographical Scope

12 target Caribbean countries: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago.

If your organization is legally registered in one of these 12 target countries where the project will be implemented, you can apply to the Challenge.

If your organization is legally registered in one of the <u>48 IDB member countries</u> other than one of the 12 target countries where the project will be implemented, you may apply only in partnership with an organization registered and located in one of the 12 target countries where the project will be implemented.

See Applicants details and requirements

¹GEF financing will only be provided for projects in the following 10 countries: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominican Republic, Guyana, Saint Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago. IDB Lab will also provide financing for projects in Haiti and Jamaica.

² See footnote 1



01 Context

Caribbean countries, and in particular Small Island Developing States (SIDS), experience unique challenges with managing chemicals and waste due to their small physical size, high population density, limited resources, unique biodiversity, high risk of exposure to natural hazards and disasters, vulnerability to the effects of climate change, remoteness from global markets, and small economies of scale.

Major industries, such as oil and gas, mining, fishing, forestry, agriculture and tourism, trigger a series of similar waste challenges: (i) mining produces tailings that wash downstream, affecting water quality and health of communities; (ii) unsustainable forestry practices degrade the land, leading to depleted water quality; (iii) agriculture and farming affect the land and waterways; (iv) fishing boats' ballast water affects marine biodiversity; (v) ghost fishing nets negatively impacts marine organisms; and (vi) tourism activities can lead to an increase in solid waste generation, which is complex and costly to manage, and skew per capita waste generation rates due to the large influx of tourists they receive³. In the Caribbean, the approximately (pre-pandemic) 75 million-night stays per year generated as much as 166 million tons of tourism-related waste annually⁴.

Caribbean countries are faced with the need to address a set of related common issues and priorities: (a) better management of land-based sources of marine litter, including the potential to take informed decisions on the phase out of single use plastics; (b) better management of electronics and improved access to recycling technologies; (c) reduce risks from pesticide use, specifically phasing out Highly Hazardous Pesticides linked to less environmental pollution, to lower chemical residues in food and exposure during application; (d) improved management of used oil waste, e-waste, pneumatic tires, and end of life vehicles; (f) phase-out mercury containing products and devices in line with the Minamata Convention phase-out deadline of 2020⁵; (g) the need for improved management of waste streams that can lead to the releases of Mercury (Hg), new Persistent Organic Pollutants (POPs), Unintentional POPs or marine litter, including Waste Electrical and Electronic Equipment (WEEE) management, healthcare waste management, and municipal waste management; and, (h) the need to reduce importation of hazardous material with appropriate alternatives.

Another important aspect to consider is **gender and diversity**, as factors such as poverty and socioeconomic status, gender-based norms, access to health, and overall

³ Mohee, R., Mauthoor, S., Bundhoo, Z., Somaroo, G., Soobhany, N., Gunasee, S. (2015). Current status of solid waste management in small island developing states: A review. Waste Management, 43, 539-549 - https://doi.org/10.1016/j.wasman.2015.06.012

⁴ Global Waste SIDS Outlook 2014

⁵Fourth meeting of the Conference of the Parties to the Minamata Convention on Mercury (COP-4) COP-4 will be held in two segments: The First Segment to be held online from 1-5 November 2021, and the Second Segment to convene in person within the period of 21 to 25 March 2022 in Bali, Indonesia.

representation in decision-making processes and management policies relating to C&W, determine the extent of repercussions of inadequate waste management on men and women and indigenous communities. Concrete gender-based activities must be considered to avoid reinforcing existing gender inequalities and grant equal opportunities to men and women to participate in and benefit from individual projects, in addition to indigenous communities.

The Caribbean private sector has a unique opportunity to benefit from the available financial support to continue undertaking environmentally sound management of C&W with innovative technologies and processes that follow a circular economy⁶ approach (returning the collected and recycled waste in the production cycle as a valuable raw material). Possible investments could be centered around:

- Materials Recovery Facilities oils, e-waste, plastics, metals, organics, glass.
- E-Waste disassembly and repair facilities.
- Used Lubricating Oils base oil recovery and blending plants.
- Plastics conversion facilities producing plastic wood and plastic sheeting.
- Tire crumble conversion to carbon black and fuel oils.
- Tire slices conversion to coating and paving materials.
- Medical wastes recovery treatment.
- Production of biochar from organic wastes⁷.

This Challenge is aligned with the IDB Group's commitment to support greener economies in the Latin American and Caribbean region to respond to the challenges of the climate crisis, biodiversity loss, and related environmental issues.

02 Objective of the Challenge

The Inter-American Development Bank ("IDB"), through its innovation laboratory, IDB Lab, and in partnership with the Global Environment Facility (GEF)⁸ seeks to support innovative solutions that contribute to the sound management of hazardous chemicals and waste products and materials to protect human health and the environment, and address climate vulnerability in the 12 target Caribbean countries.⁹

IDB Lab is looking to support private sector organizations such as startups, foundations, non-profits, corporates, among others, with business models of "ready to implement¹⁰"

⁶ Circular Economy is a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows. It works effectively at every scale (McArthur Foundation).

⁷ Mapping of Private Sector Companies in Target Countries. BCRC. November 2021.

⁸ See footnote 1

⁹ Antigua and Barbuda, Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago.

¹⁰ A "Ready to implement" solution is an innovation that can demonstrate successful deployment of a prototype/Minimum Viable Product (MVP).



innovative solutions to address the following priority waste streams (additional details can be found in the <u>section 03</u> below):

- 1. Used lubricating oils;
- 2. Used and end-of-life tires;
- 3. Used and end-of-life vehicles;
- 4. Used and end-of-life electronic and electrical equipment (E-waste);
- 5. Plastic waste that may contain hazardous substances (see section 03)
- 6. Manufacturing/industrial waste;
- 7. Organic and municipal solid waste;
- 8. Medical waste; and,
- 9. Hazardous pesticides.

The proposed solutions must:

- A. Be innovative in nature and present a business model that has not been implemented before in the country or that adds an innovation component to an existing model.
- B. Focus on reducing environmental pollution and climate vulnerability, thus, contributing to at least one of the following indicators:
 - (i) reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced);
 - (ii) reduction, avoidance of emissions of Persistent Organic Pollutants (POPs) to air from point and non-point sources;
 - (iii) reduction of marine litter.
- C. Promote the social and economic inclusion of poor and vulnerable population; and,
- D. Contemplate a path for scalability or replication, as well as financial sustainability.

03 Priority Waste Streams

<u>IDB Lab</u> seeks to identify innovative solutions that soundly manage the following priority waste streams, particularly affecting poor and vulnerable in the 12 target countries:

- 1. Used lubricating oils. This waste stream is generated in large quantities in participating countries in the transportation, electricity generation, and industrial sectors.
- 2. Used and end-of-life tires. This waste stream is generated in large quantities in the transportation sector, and its disposal in landfills and open dumpsites throughout the



Caribbean poses both a human health hazards as well as a management issue as they take up a large amount space in landfills, or are disposed by burning, which worsens pollution.

- 3. Used and end-of-life vehicles. End of life vehicles are in most cases subject to very informal recovery efforts or are left to decay in abandoned areas. The volume of non-depolluted vehicles pileup around landfills and other dump sites and represent a large pollution potential.
- 4. Used and end-of-life electronic and electrical equipment (e-waste). This waste stream is generated from a very wide range of economic activities, ranging from household waste generation to sophisticated ICT generated waste. The increase in penetration of Electric Vehicles (EV) among participating countries, also poses a potential e-waste challenge if proper disposal or recovery of end-of-life EV batteries is not properly addressed.
- 5. Plastics. This waste stream is generated mainly by the food and beverage industry. Single use plastics, including styrofoam and polystyrene food containers, have been one of the most prevalent sources of plastic waste in participating countries. Plastic waste that may contain potentially hazardous substances, or may be contaminated by hazardous substances, or mixed with hazardous wastes, and, as such, may pose a risk to human health and the environment, including marine and terrestrial ecosystems, will be prioritized following the Basel Convention Plastic Waste Amendments.
- 6. Manufacturing/industrial waste. Priority industrial waste in participating countries include garbage, dirt and gravel, masonry and concrete, scrap metals, trash, oil, solvents, chemicals, weed grass and trees, wood and scrap lumber, and similar wastes.
- 7. Organic and municipal solid waste. This category of waste, while not falling under the ambit of the hazardous C&W conventions, comprises over 70% of total waste streams going to landfills in participating countries. These wastes are easily combustible and lead to the rapid spread of landfill fires. Inadequate management of these types of waste could lead to the generation of Unintentional Persistent Organic Pollutants (UPOPS) by fueling landfill fires that burn certain types of plastics and nitrated and sulphonated materials. Please note that Applications to manage this waste stream will only be prioritized when showing a clear impact on reducing UPOPs and other hazardous C&W.
- 8. Medical waste. Medical waste, including used surgical equipment, sharps, and biowaste, is a major concern in participating countries. With the advent of the COVID-19 epidemic, medical waste generation has increased, and improperly discarded personal protective equipment, hand sanitizer containers, face masks and gloves are increasingly appearing in rivers, oceans, and coastal areas.



9. Hazardous pesticides could also be prioritized as long as they contribute to the reduction of environmental pollution in participating countries.

04 Who can Present Applications?

Startups with "ready-to-implement "" solutions, small and medium-sized enterprises (SMEs), corporations, NGOs, and others with demonstrated expertise in managing the at least one of the priority waste streams mentioned in section O3.

If your organization is located in one of the 12 target countries where the project will be implemented, you may apply to the Challenge.

If your organization is located in one of the <u>48 IDB member countries</u> other than one of the 12 target countries where the project will be implemented, you may apply only in partnership with an organization registered and located in one of the 12 target countries where the project will be implemented. The Caribbean-based organization should be materially involved in the activities of the proposed project. Project impact must favor one of the 12 target countries.

05 Awards

IDB Lab may consider the Applicants whose proposals are selected to receive financing to implement their proposed business model in one of the 12 target countries.

Applicants whose proposals are selected will also be included among IDB Lab's network of global innovators working in LAC to exchange knowledge, experiences, best practices, and may have opportunities to participate in networking events organized by the IDB Group and its partners.

Selected Applicants will receive IDB Lab/IDB and/or GEF funding once:

- The proposed business model has been duly analyzed to obtain evidence of its viability;
- The Applicant's experience in the sector, capacity to manage the financial resources and project execution experience has been evaluated;
- Availability of or ability to mobilize counterpart resources has been demonstrated; and,
- A legal written agreement to use IDB Lab/IDB and/or GEF funding and counterpart resources towards the implementation of the selected model/project has been signed by both parties (IDB/IDB Lab and Applicant selected through the analysis process).

¹¹ A "Ready to implement" solution is an innovation that can demonstrate successful deployment of a prototype/Minimum Viable Product (MVP).



06 Evaluation Criteria

Applications will be evaluated according to the following criteria:

- Level of innovation of the business model, use of disruptive technologies, methodologies and/or processes (15%).
- Degree of social and economic impact. Special consideration will be given to models targeting excluded groups and communities or low-income/poor and vulnerable population in the country where the project will be implemented (20%)
 - * Promotion of gender equity will be positively considered. Hazardous Chemicals and Waste (C&W) reach and expose populations equally. However, factors such as poverty and socioeconomic status, gender-based norms, access to health, and overall representation in decision-making processes and management policies relating to C&W, affect men, women and indigenous communities in equal manner. Concrete gender-based activities must be considered to avoid reinforcing existing gender inequalities and grant equal opportunities to men and women to participate in and benefit from individual projects. (5%).
- Potential for scale or replication of the proposed business model in the country where the project will be implemented (15%).
- Financial sustainability or growth potential over the next 3-5 years after funding (revenue generation model) and repayment capacity for loan applicants- (15%)
- Technical capacity of Applicant and strategic partners, including for compliance with environmental safeguards and targeted monitoring thereof, and to implement proposed model in the country where the project will be implemented (15%).
- Viability of execution for the model, including definition of potential risks that may affect successful implementation and mitigating actions to address these risks (15%).

07 Types of Financing Available

Applicants can present their applications and apply for a financing instrument (or a combination thereof) that best fits the business model and the applicant organization type. The financial instruments include "Non-reimbursable Grant", "Contingent Recovery Financing" (reimbursable), and "Loan" (reimbursable) and are detailed in the table below.

IDB Lab, at its sole discretion, will allocate financial resources to eligible projects as follows:

Source of Funding	Type of Financing	Eligible Countries
IDB	Loans	Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Suriname, Trinidad and Tobago.
IDB Lab	Contingent Recovery Grant, Non-reimbursable grant	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, St. Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago.
GEF	Non-reimbursable grant	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominican Republic, Guyana, St. Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago.



Please note that:

A. Applicants should be able to contribute at least 50% in counterpart funds for project budget (IDB 50% + Applicant 50% = 100% Total Project Cost).

B. After a due diligence process, IDB Lab may propose financial instruments different from the ones proposed by the Applicant.



Financial Instrument	Contingent Recovery Financing ¹²	Non-reimbursable Grant	Loan (reimbursable)
Type of Applicant	For-profit organizations such as: • Start-ups • Small and Medium Enterprises (SMEs) • Corporations • Social Businesses (e.g. B corporations ¹³) • NGOs	Nonprofit organizations, or companies that implement innovative models with limited earning potential, but with strong social and environmental impact, such as: • Foundations • Social Businesses (e.g. B corporations) • Public innovation agencies • Accelerators • NGOs	Private organizations (for-profit or nonprofit) that are cashflow positive and can demonstrate ability to repay, such as: • Small and Medium Enterprises (SMEs) • Social Businesses (e.g. B corporations) • Financial Intermediaries (banks, cooperatives, microfinance institutions, foundations, etc.)
Type of models/ solutions	The projects with this type of financing are focused on piloting innovative solutions and income generating, sustainable business models that could be scaled-up or replicated, either during project implementation or in a subsequent stage (potentially with IDB Lab investment products and other financial support from the IDB Group).	This type of financing is offered generally to entities that implement innovative models with limited earning potential, but with strong social impact and replicability.	The projects with this type of financing are focused on replicating or scaling innovative solutions and income generating business models with evidence of initial traction and that have the potential of becoming financially sustainable or scaled-up.

¹² Reimbursement conditions to be agreed during due diligence.

¹³ B Corporation is a private certification of for-profit companies of their "social and environmental" performance.



Use of Financial Resources

Revenue generating financing such as acquisition or development of hardware, software, equipment, and other investments. Acquisition of critical human and/or material resources to develop, test, or implement the solution proposed.

IDB Lab financing may also be used for advisorv services and technical assistance to design and implement solutions (individuals. firms, or specialized agencies), specialized consulting services, trainings, events and workshops. production. or reproduction of material (assessments. guides, manuals, infographics, etc.), travel expenses. communication materials (videos, case studies, etc.) and others needed to achieve the outcome of the project.

IDB Lab financing could cover overhead costs such as salary of existing staff or office expenses, and there are some restrictions on financing administrative costs.

Funding cannot be used for purchase of land, or real estate. Funding may cover investments in equipment or infrastructure.

Knowledge transfer financing, such as advisory services and technical assistance to design and implement solutions (individuals, firms, or specialized agencies), specialized consulting services, trainings, events and workshops, production, or reproduction of material (assessments, guides, manuals, infographics, etc.), travel expenses, communication materials (videos, case studies, etc.) and others needed to achieve the outcome of the project.

IDB Lab's grant resources cannot be used for: purchase of land or construction of infrastructure. Not more than 30% of IDB Lab financing may be used for equipment purchase, including software or other products. However, other resources may be able to cover minor investments in equipment and infrastructure/works.

IDB Lab does not cover overhead costs such as salary of existing staff or office expenses, and there are some restrictions on financing administrative costs.

Capital expenditures (such as equipment, machinery, software, and other products) and working capital.

Funding does not cover overhead cost such as salary of existing staff or office expenses, and there are some restrictions on financing administrative costs.

Loan financing cannot be used for the purchase of land, real estate, or shares in a company, or repayment of existing debts, among other excluded uses.



Business Stage / Profitability	Medium-High but uncertain earning potential	Limited earning potential	Evidence of initial market traction, cashflow positive, income-generating
Financing (range)	US\$300,000 - US\$750,000	US\$300,000 - US\$750,000	US\$500,000 - US\$2,000,000
Counterpart requirement (funds to be provided by the Applicant)	Counterpart funds to be provided by the Applicant: 50% or higher percentage of the total project amount, half in cash and half in kind. Total project amount = IDB Lab funding up to 50% + Counterpart of Applicant 50% or higher percentage (25% cash + 25% in kind).	Counterpart funds to be provided by the Applicant: 50% or higher percentage of the total project amount, half in cash and half in kind. Total project amount = IDB Lab funding up to 50% + Counterpart of Applicant 50% or higher percentage (25% cash + 25% in kind).	Counterpart funds to be provided by the Applicant: desirable, but not required 50% of the total project amount, half in cash and half in kind. *Counterpart will be positively considered for selection.
Additional Conditions	The Applicant will be responsible to repay partially or completely the funded amount if the business moves forward successfully according to the conditions and the schedule agreed in the due diligence process.		Medium to long-term tenor (3-7 years); grace period for capital repayment of up to 3 years decided on a case-by-case basis; market interest rate; US\$ denominated. Specific loan conditions will be negotiated on a case-by-case basis depending on the proposed use of the funds, the business plan, the financial situation of the Applicant (assets, liabilities, equity, profitability) and the financial projections, among others.



Indicative Timeframe

After the challenge closes, design and final approval by IDB Lab: 3-6 months. Implementation period: between 12 and 36 months from signature of the legal agreement. The business model supported by the grant must achieve its objectives during this period. Repayment period: conditions will be negotiated on a case-by-case basis, but in general will never be longer than 5 years after the end of implementation date.

After the close of the challenge, design and final approval by IDB Lab: 3-6 months. Implementation period: between 12 and 36 months from signing the legal agreement. The business model supported by the grant must achieve its objectives during this period.

After the close of the challenge, design and final approval by IDB 4-6 months. Implementation period: once loan contract is signed, loan resources will be available for disbursement for a period of up to 2 years, after which the unused funds will be returned to IDB. The loan amortization period and structure will be decided on a case-by-case basis according to the project needs (but will never be longer than 7 years from the date of contract signature).

Required Documents

Copies of Applicant's latest annual financial statements for 2019-2021, of which the last one should be audited (or follow the required practice in Applicant's country).

- Written evidence of counterpart resources to implement the model (similar to a letter of interest or commitment).
- Registration (this must be a legal document establishing the Applicant as registered or authorized by the government to do business. Organizations with temporary authorizations/licenses to operate in the country where the project will be implemented will not be accepted:
 - i. Applicant registered in one of the 12 target countries where the project will be implemented: copy of Applicant's proof of legal constitution and incorporation under the laws of the target country where the project will be implemented.
 - ii. If Applicant is registered in one of the 48 IDB member countries other than the target country where the project will be implemented: copy of Applicant's proof of legal constitution and incorporation under the laws of one of the IDB member countries, plus a copy of a collaboration/joint venture agreement with an Applicant organization registered in the target country where the project will be implemented.
- Copy of the Applicant's bylaws and other documents on its corporate governance.



08 Application Process

1. Complete online application:

- Submit proposal through the <u>online platform</u> within the timeframe specified in <u>Section</u>
 10.
- Applications will be selected if they fully comply with the evaluation criteria and requirements described in <u>Section 06</u>.

2. Upload Documents:

- a. written evidence of counterpart resources
- b. written proof of legal constitution or incorporation and bylaws
- c. copies of Applicant's latest annual financial statements prepared by an external auditing firm (or follow required practice in Applicant's country).

09 Selection Process

Phase I

After completing the application via the <u>online platform</u>, an IDB Group technical team will review, analyze, and pre-select the applications.

Phase II

Due diligence visits or interviews will be conducted to analyze the viability of the model of the pre-selected applications. Subject to the outcome of the due diligence, pre-selected applications will proceed to Phase III.

Phase III

IDB Lab will select applications according to the evaluation criteria described in <u>Section O6</u>. Selected applications will be announced as per the established <u>timeline</u>. Once the best way to implement the model has been assessed, IDB Lab will provide support to the selected Applicant(s) to initiate the design of the project (which includes developing a project plan and other documents necessary to request official internal IDB/IDB Lab approval). This process may last up to six months, depending on the maturity of the proposed model and the implementing capacity of the selected Applicants.

*Note that final approval is subject to internal IDB/IDB Lab procedures with the understanding that for a project to be selected to receive financing, it must have been



approved by all those directly involved in IDB/IDB Lab's approval process. Likewise, a legal agreement must be signed which sets forth how the financing and the counterpart resources will be used to implement the model.

10 Challenge Timeline

Dates are approximate and subject to change:

Challenge Launch: April 19, 2022

Submit applications: April 19 - May 31st, 2022

Final submission deadline: May 31st, 2022 (midnight, Eastern Time USA)

Review by IDB Group: June 2022

Due diligence and final selection: July 2022

Announcement of selected applications: July-August 2022

FREQUENTLY ASKED QUESTIONS

PLEASE E-MAIL QUESTIONS TO: BlueTech-Challenge@iadb.org

11 Disclaimers and Reservation of Rights

The IDB reserves the right to eliminate participants at any part of the process and this decision shall be final and binding. The IDB may decide to not select an Applicant if the submission did not meet the requirements or did not have sufficient quality.

The IDB may search for publicly available information regarding Applicants and may seek to verify details referenced in the application. The IDB reserves the right to cancel the competition at any time.

All decisions of the IDB are final and binding, with no process for appeal.

Applicants that submit content that is offensive, illegal, etc. and those that disparage the IDB or other sponsors will be eliminated.



IDB will not consider participants who are ineligible to participate in IDB projects or contracting under its sanctions protocol.

Applicants must attest that the submittal is original and that they are not infringing on any copyrights or other intellectual property. Any such infringement may result in disqualification. Applicants are responsible for all content such as photos, images, videos, graphics, written content, audio files, information, or data uploaded or submitted.

The IDB will not be responsible to maintain the intellectual property of the applications submitted.

The IDB does not provide individual feedback or comments on applications.

In order to receive IDB funding, selected Applicants must sign an agreement with the IDB which includes relevant commitments, representations, and grants of indemnity by the Applicant.

IDB reserves the right to disseminate and share the identity of the Applicants and any other information deemed relevant.

IDB reserves the right to share the information of the application, without the need of consent or approval from the Applicant, within the IDB Group and/or with strategic partners under non-disclosure agreements to look for co-financiers.

These terms and conditions may be updated at any time and will be made available to all participants online.