

Market Analysis and Barrier Assessment for Accelerating Energy Standards Adoption

Regional P001 RG-T4613 [Web link to approved document] Energy Resilience for Sustainable Development in the Caribbean

#### 1. Background and Justification

- 1.1. Within the framework of the 2024 Call for Proposals of the Regional Public Good Initiative (www.iadb.org/rpg) from the Inter-American Development Bank, the RG-T4613 non-reimbursable technical cooperation (TC) project was approved for an amount of 475.000 United States dollars (US\$475.000), to finance the contracting of consulting services and procurement of goods necessary for adopting resiliency and adaptation measures in the energy sector and promoting the development and adoption of harmonized energy standards for buildings, electric appliances, and electric mobility.
- 1.2. This program is aligned with the general objective of the ONE Caribbean Program which refers to foster socioenvironmentally sustainable development in the Caribbean region that benefits its citizens as it directly contributes to the climate adaptation and disaster risk management priority area and the cross-cutting area of strengthening institutions. This TC will also receive additional funding of 500.000 United States dollars (US\$500.000) from the ONE Caribbean Fund to achieve its objective.
- 1.3. The Caribbean countries face the characteristics of Small Island Development States (SIDS) including small individual markets, distance to global markets, constrained natural resources including available land, a small human resource base, and poor economies of scale. Supply prices are high due to market inefficiencies, local monopolies, and weak bargaining power of the individual countries. The COVID-19 Pandemic drew attention to the urgency to address vulnerabilities to external shocks by economic diversification and planning for resilience towards building forward better.
- 1.4. Harmonization of technical standards increases the region's bargaining power to attract state-of-the-art technology for rolling out the transition towards a low-carbon energy sector, at more competitive costs. In 2019, the CARICOM Regional Energy Efficiency Building Code (CREEBC) covering residential and commercial constructions was developed by CROSQ, CARICOM Energy Division, and The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

# 2. Objective

2.1. The objective is to support regional agencies and national bureaus of standards in Caribbean countries to develop technical standards for relevant electricity sector technologies. Examples of relevant technologies include battery energy storage systems (BESS); electric vehicles (EV) and charging stations and infrastructure; smart charging systems and components; energy management systems for commercial buildings and households.

# 3. <u>Scope of Services</u>

**3.1.** The Firm will map current barriers and identify and prioritize actions to address these by engaging with market actors, including real estate developers and construction companies, owners and tenants of commercial buildings, the white goods retail sector, green building councils, electric utilities, and incumbent authorities.

# 4. Key Activities

- **4.1.** Work plan. The Firm will prepare a detailed work plan in close engagement with the IDB team and national stakeholders covering communication protocols, information sources, meeting schedule, detailed activity planning.
- **4.2. Baseline study.** The Firm will conduct comprehensive research and gather relevant data on the current energy standards, policies, and practices in the participating countries.



- **4.3.** Market Study. The Firm will identify existing barriers that hinder the adoption of energy standards by analysing regulatory, technical, and market challenges.
- **4.4. Recommendation and action plan.** Based on the baseline data and barrier analysis, the firm will prepare a set of detailed recommendations including specific actions and strategies to promote the adoption of energy standards.
- **4.5. Draft Report.** The Firm will prepare a draft report that will summarise the barrier analysis and recommended actions.
- **4.6.** Final report. The Firm will prepare a final report that will summarise the findings of the recommendation and action plan.

### 1. Deliverables

- **1.1.** Work plan with schedule and details of activities (activity 4.1)
- **1.2.** Baseline study with the current situation in the participating countries (activity 4.2)
- 1.3. Market study including barrier analysis and recommended actions (activities 4.3, 4.4 and 4.5)
- **1.4.** Final report (activity 4.6)

## 2. <u>Project Schedule and Milestones</u>

|  | Months |   |   |   |   |   |  |  |  |  |  |  |
|--|--------|---|---|---|---|---|--|--|--|--|--|--|
| Deliverables                               | 1      | 2 | 3 | 4 | 5 | 6 |  |  |  |  |  |  |
| Deliverable 1: Work plan                   |        |   |   |   |   |   |  |  |  |  |  |  |
| Deliverable 2: Baseline Study              |        |   |   |   |   |   |  |  |  |  |  |  |
| Deliverable 3: Market Study (Draft report) |        |   |   |   |   |   |  |  |  |  |  |  |
| Deliverable 5: Final report                |        |   |   |   |   |   |  |  |  |  |  |  |

### 3. <u>Reporting Requirements</u>

- **7.1.** All documents must be submitted in Microsoft Word, in an editable file, including Executive Summary, annexes, spreadsheets in Microsoft Excel, and other relevant material, in English.
- 7.2. Presentations must be submitted in Microsoft PowerPoint.

#### 4. Acceptance Criteria

- 8.1. The deliverables will be accepted for payment once they have the written approval of the IDB team.
- 8.2. Partial deliverables, or deliverables that are not accepted, will not be paid.

# 5. Consulting Firm and Team Requirements

- 5.1. Work team. The Firm shall provide a work team with minimum the following key criteria:
  - Project Manager. Degree in engineering, economics, or related areas. At least 10 years of general experience, five (5) years of experience in project management for the energy sector. Experience in Latin America and the Caribbean is desirable.
  - Specialist in the energy sector. Degree in engineering or related areas, with a master's or doctorate in energy planning, energy economics, or related subjects. With the specific experience of at least ten (10) years in structuring and evaluating projects in the energy sector with an emphasis on new technologies.
- **5.2.** Language requirements:
  - English and Spanish speaking personnel.

# 6. Other Requirements

**6.1.** All information shared with the consultancy will be considered confidential. The consultancy may not disclose to third parties any product of this consultancy, without the express consent of the IDB, in writing.

#### 7. <u>Supervision and Reporting</u>



7.1. The Energy Division (INE/ENE) will have the technical responsibility for the execution of this contract as well as approval of products prepared by the Firm. In representation of the IDBG, the technical coordination for this consultancy rests with Roberto Gabriel Aiello (INE/ENE) who will act as Team Leader, supervising the products presented, and sharing comments to improve their quality.

## 8. <u>Schedule of Payments</u>

- **8.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- **8.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

| Payment Schedule                              |      |  |  |  |  |  |  |  |
|---|------|--|--|--|--|--|--|--|
| Deliverable                                   | %    |  |  |  |  |  |  |  |
| 1. Deliverable 1: Work plan                   | 20%  |  |  |  |  |  |  |  |
| 2. Deliverable 2: Baseline Study              | 20%  |  |  |  |  |  |  |  |
| 3. Deliverable 3: Market study (draft report) | 30%  |  |  |  |  |  |  |  |
| 4. Deliverable 4: Final report                | 30%  |  |  |  |  |  |  |  |
| TOTAL   | 100% |  |  |  |  |  |  |  |



**Development of Regional Energy Technology Standards** 

Regional P002 *RG-T4613 [Web link to approved document]* Energy Resilience for Sustainable Development in the Caribbean

### 1. Background and Justification

- 1.1. Within the framework of the 2024 Call for Proposals of the Regional Public Good Initiative (www.iadb.org/rpg) from the Inter-American Development Bank, the RG-T4613 non-reimbursable technical cooperation (TC) project was approved for an amount of 475.000 United States dollars (US\$475.000), to finance the contracting of consulting services and procurement of goods necessary for adopting resiliency and adaptation measures in the energy sector and promoting the development and adoption of harmonized energy standards for buildings, electric appliances, and electric mobility.
- 1.2. This program is aligned with the general objective of the ONE Caribbean Program which refers to foster socioenvironmentally sustainable development in the Caribbean region that benefits its citizens as it directly contributes to the climate adaptation and disaster risk management priority area and the cross-cutting area of strengthening institutions. This TC will also receive additional funding of 500.000 United States dollars (US\$500.000) from the ONE Caribbean Fund to achieve its objective.
- 1.3. The Caribbean countries face the characteristics of Small Island Development States (SIDS) including small individual markets, distance to global markets, constrained natural resources including available land, a small human resource base, and poor economies of scale. Supply prices are high due to market inefficiencies, local monopolies, and weak bargaining power of the individual countries. The COVID-19 Pandemic drew attention to the urgency to address vulnerabilities to external shocks by economic diversification and planning for resilience towards building forward better.
- 1.4. Harmonization of technical standards increases the region's bargaining power to attract state-of-the-art technology for rolling out the transition towards a low-carbon energy sector, at more competitive costs. In 2019, the CARICOM Regional Energy Efficiency Building Code (CREEBC) covering residential and commercial constructions was developed by CROSQ, CARICOM Energy Division, and The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

# 2. Objective

2.1. The objective is to support regional agencies and national bureaus of standards in Caribbean countries to develop technical standards for relevant electricity sector technologies.

#### 3. <u>Scope of Services</u>

**3.1.** The Firm will facilitate collaboration between regional agencies, national bureaus, and relevant stakeholders to strengthen technical knowledge and capacity for standards development.

# 4. <u>Key Activities</u>

- **4.1. Baseline study.** The Firm will conduct comprehensive research and gather relevant data on the applicable technical standards worldwide for future reference for the participating countries.
- **4.2. Roadmap.** The Firm will prepare a roadmap towards the design, development and adoption of new technical standards, based on successful examples worldwide, and with technologies prioritized in dialogue with regional stakeholders.
- **4.3.** Terms of Reference and Work Program. The Firm will establish terms of reference and a work program for a regional CROSQ standards committee.
- **4.4. Progress reports.** The Firm will prepare periodic meeting minutes and progress reports regarding its participation in kick-off meetings and be available to provide technical expertise on these technologies and related technical standards.



**4.5. Final report.** The Firm will prepare a final report outline for prioritized technical standards in in alignment with CROSQ formats, as well as provide recommendations for the work in progress.

## 5. Deliverables

- **5.1.** Baseline study (activity 4.1)
- 5.2. Roadmap (activity 4.2)
- 5.3. Terms of reference and work program (activity 4.3)
- 5.4. Progress reports (activity 4.4)
- **5.5.** Final report (activity 4.5)

# 6. **Project Schedule and Milestones**

|  |   | Months |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
|--|---|--------|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Deliverables   | 1 | 2      | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Deliverable 1: Baseline study                          |   |        |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 2: Roadmap                                 |   |        |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 3: Terms of reference and work<br>programs |   |        |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 4: Meeting minutes (periodic reports)      |   |        |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 5: Final report                            |   |        |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |

#### 7. <u>Reporting Requirements</u>

- **7.3.** All documents must be submitted in Microsoft Word, in an editable file, including Executive Summary, annexes, spreadsheets in Microsoft Excel, and other relevant material, in English.
- 7.4. Presentations must be submitted in Microsoft PowerPoint.

#### 8. <u>Acceptance Criteria</u>

- 8.3. The deliverables will be accepted for payment once they have the written approval of the IDB team.
- 8.4. Partial deliverables, or deliverables that are not accepted, will not be paid.

# 9. <u>Consulting Firm and Team Requirements</u>

- 9.1. Work team. The Firm shall provide a work team with minimum the following key criteria:
  - Project Manager. Degree in engineering, economics, or related areas. At least 10 years of general experience, five (5) years of experience in project management for the energy sector. Experience in Latin America and the Caribbean is desirable.
  - Specialist in the energy sector. Degree in engineering or related areas, with a master's or doctorate in energy planning, energy economics, or related subjects. With the specific experience of at least ten (10) years in structuring and evaluating projects in the energy sector with an emphasis on new technologies.
- 9.2. Language requirements:
  - English and Spanish speaking personnel.

# 10. Other Requirements

**10.1.** All information shared with the consultancy will be considered confidential. The consultancy may not disclose to third parties any product of this consultancy, without the express consent of the IDB, in writing.

# 11. Supervision and Reporting

11.1. The Energy Division (INE/ENE) will have the technical responsibility for the execution of this contract as well as approval of products prepared by the Firm. In representation of the IDBG, the technical coordination for this consultancy rests with Roberto Gabriel Aiello (INE/ENE) who will act as Team Leader, supervising the products presented, and sharing comments to improve their quality.



# 12. Schedule of Payments

- **12.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- **12.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

| Payment Schedule                                       |      |  |  |  |  |  |  |
|--|------|--|--|--|--|--|--|
| Deliverable  | %    |  |  |  |  |  |  |
| 1. Deliverable 1: Baseline study                       | 20%  |  |  |  |  |  |  |
| 2. Deliverable 2: Roadmap                              | 20%  |  |  |  |  |  |  |
| 3. Deliverable 3: Terms of reference and work programs | 20%  |  |  |  |  |  |  |
| 4. Deliverable 4: Meeting minutes                      | 10%  |  |  |  |  |  |  |
| 5. Deliverable 5: Final report                         | 30%  |  |  |  |  |  |  |
| TOTAL  | 100% |  |  |  |  |  |  |



Strengthening of preparedness of electric utilities in the Caribbean to respond to natural disaster

Regional P003 *RG-T4613 [Web link to approved document]* Energy Resilience for Sustainable Development in the Caribbean

#### 1. Background and Justification

- 1.1. Within the framework of the 2024 Call for Proposals of the Regional Public Good Initiative (www.iadb.org/rpg) from the Inter-American Development Bank, the RG-T4613 non-reimbursable technical cooperation (TC) project was approved for an amount of 475.000 United States dollars (US\$475.000), to finance the contracting of consulting services and procurement of goods necessary for adopting resiliency and adaptation measures in the energy sector and promoting the development and adoption of harmonized energy standards for buildings, electric appliances, and electric mobility.
- 1.2. This program is aligned with the general objective of the ONE Caribbean Program which refers to foster socioenvironmentally sustainable development in the Caribbean region that benefits its citizens as it directly contributes to the climate adaptation and disaster risk management priority area and the cross-cutting area of strengthening institutions. This TC will also receive additional funding of 500.000 United States dollars (US\$500.000) from the ONE Caribbean Fund to achieve its objective.
- 1.3. The Caribbean countries face the characteristics of Small Island Development States (SIDS) including small individual markets, distance to global markets, constrained natural resources including available land, a small human resource base, and poor economies of scale. Supply prices are high due to market inefficiencies, local monopolies, and weak bargaining power of the individual countries. The COVID-19 Pandemic drew attention to the urgency to address vulnerabilities to external shocks by economic diversification and planning for resilience towards building forward better.
- 1.4. Harmonization of technical standards increases the region's bargaining power to attract state-of-the-art technology for rolling out the transition towards a low-carbon energy sector, at more competitive costs. In 2019, the CARICOM Regional Energy Efficiency Building Code (CREEBC) covering residential and commercial constructions was developed by CROSQ, CARICOM Energy Division, and The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

# 2. Objectives

2.1. The objective is to assess disaster preparedness gaps of electric utilities in the Caribbean and define and implement actions for strengthening.

#### 3. Scope of Services

- **3.1.** The Firm will further develop and implement training activities on electric infrastructure technology and response strategies that enhance sector resilience.
- **3.2.** The Firm will provide expertise and capacity to assist the national stakeholders to update and finalize their Disaster Response Plans (DRPs).

#### 4. Key Activities

- **4.1.** Work plan. The Firm will prepare a detailed work plan in close engagement with the IDB team and national stakeholders covering working session schedules with the national stakeholders and their partners to discuss progress, issues, and resources needed.
- 4.2. Disaster Preparedness Gap Assessment. The Firm will work with the national stakeholders' focal point to assess their current level of disaster preparedness according to an established methodology, considering the following aspects



including, but not limited to electric grid infrastructure, emergency power facilities, internal communication protocols, staff training and awareness, coordination with sector entities (including energy ministries and regulators), local authorities, and designated disaster management entities. The Firm should submit at least one draft of the report for comments.

- **4.3.** Roadmap. The Firm will prepare a roadmap and identify actions (individualized for each utility) to address the identified weaknesses.
- **4.4. Resilience Training.** The Firm will prepare and implement training activities on energy sector resilience. The scope, modality (hybrid or presential), and number of training sessions to be agreed with the IDB team.
- **4.5. Training delivery.** In collaboration with regional project partners, the Firm shall conduct a series of training sessions (presential or hybrid). A summary of training sessions, training material, and participants list shall be prepared
- **4.6. Disaster Response Plans (DRPs) analysis.** The Firm will prepare and support to update the DRPs for each national stakeholder in coordination with IDB team. The Firm should submit at least one draft of the report for comments.

### 5. <u>Deliverables</u>

- 5.1. Work plan with schedule and details of activities (activity 4.1)
- 5.2. Roadmap Status Report (activity 4.3)
- 5.3. Disaster Preparedness Gap Assessment Report (activity 4.2)
- 5.4. Resilience Training Program Manual (activities 4.4 and 4.5)
- 5.5. Disaster Response Plan Report (activity 4.6)

# 6. <u>Project Schedule and Milestones</u>

|  | Months |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
|--|--------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Deliverables   | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Deliverable 1: Work plan                                   |        |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 2: Roadmap                                     |        |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 3: Disaster Preparedness Gap Assessment Report |        |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 4: Resilience Training Activities              |        |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Deliverable 5: Disaster Response Plans Final Report        |        |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |

# 7. <u>Reporting Requirements</u>

- **7.5.** All documents must be submitted in Microsoft Word, in an editable file, including Executive Summary, annexes, spreadsheets in Microsoft Excel, and other relevant material, in English.
- 7.6. Presentations must be submitted in Microsoft PowerPoint.

# 8. Acceptance Criteria

- 8.5. The deliverables will be accepted for payment once they have the written approval of the IDB team.
- 8.6. Partial deliverables, or deliverables that are not accepted, will not be paid.

# 9. Consulting Firm and Team Requirements

- 9.1. Work team. The Firm shall provide a work team with minimum the following key criteria:
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- 9.2. Language requirements:
  - English and Spanish speaking personnel.

### 10. Other Requirements

**10.1.** All information shared with the consultancy will be considered confidential. The consultancy may not disclose to third parties any product of this consultancy, without the express consent of the IDB, in writing.

## 11. Supervision and Reporting

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## 12. Schedule of Payments

- **12.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- **12.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

| Payment Schedule   |      |  |  |  |  |  |  |  |
|--|------|--|--|--|--|--|--|--|
| Deliverable  | %    |  |  |  |  |  |  |  |
| 1. Deliverable 1: Work plan                                      | 10%  |  |  |  |  |  |  |  |
| 2. Deliverable 2: Roadmap  | 10%  |  |  |  |  |  |  |  |
| 3. Deliverable 3: Disaster Preparedness Gap Assessment<br>Report | 30%  |  |  |  |  |  |  |  |
| 4. Deliverable 4: Resilience Training Activities                 | 20%  |  |  |  |  |  |  |  |
| 5. Deliverable 5: Disaster Response Plans Final Report           | 30%  |  |  |  |  |  |  |  |
| TOTAL  | 100% |  |  |  |  |  |  |  |



Development of financial and procurement instruments to expedite electric grid recovery in the aftermath of natural disaster.

Regional P004 *RG-T4613 [Web link to approved document]* Energy Resilience for Sustainable Development in the Caribbean

#### 1. Background and Justification

- 1.1. Within the framework of the 2024 Call for Proposals of the Regional Public Good Initiative (www.iadb.org/rpg) from the Inter-American Development Bank, the RG-T4613 non-reimbursable technical cooperation (TC) project was approved for an amount of 475.000 United States dollars (US\$475.000), to finance the contracting of consulting services and procurement of goods necessary for adopting resiliency and adaptation measures in the energy sector and promoting the development and adoption of harmonized energy standards for buildings, electric appliances, and electric mobility.
- 1.2. This program is aligned with the general objective of the ONE Caribbean Program which refers to foster socioenvironmentally sustainable development in the Caribbean region that benefits its citizens as it directly contributes to the climate adaptation and disaster risk management priority area and the cross-cutting area of strengthening institutions. This TC will also receive additional funding of 500.000 United States dollars (US\$500.000) from the ONE Caribbean Fund to achieve its objective.
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# 2. <u>Objectives</u>

2.1. The objective is to enhance electricity sector mechanisms and instruments for service recovery in the aftermath of natural disaster.

# 3. Scope of Services

**3.1.** The Firm will develop financial and procurement instruments to expedite the electric grid recovery in the aftermath of natural disasters.

#### 4. <u>Key Activities</u>

- **4.1.** Work plan. The Firm will prepare a detailed work plan in close engagement with the IDB team and national stakeholders covering working session schedules with the national stakeholders and their partners to discuss progress, issues, and resources needed.
- **4.2. Baseline Information Collection.** The Firm will collect baseline information and gap analysis of current electricity sector recovery mechanisms in the Caribbean in coordination with IDB team and regional stakeholders.
- **4.3.** Sector Recovery Mechanisms Gap Analysis. The Firm will develop a gap analysis of current mechanisms and identify key actions for improvement.



- **4.4.** Identification of opportunities and barriers. The Firm will assess the opportunities and barriers for electric utilities and national governments to access finance for recovery and repair of electric system components, as well as identifying gaps regional financial system and propose specific actions for closing them.
- **4.5.** Access to finance Assessment. The Firm will assess the access to finance for electric system repair and recovery and proposals to close current gaps in the regional financial system.
- **4.6.** Ready-to-Bid Procurement Packages. The Firm will further develop ready-to-bid procurement packages for equipment, works and services for all participating countries by assessing the procurement rules and processes for the electricity sector in the selected Caribbean Island states.
- **4.7.** Technical Compatibility Assessment. The Firm will assess the technical compatibility of supplies and equipment for electricity service recovery to harmonize procurement packages to the extent possible.

# 5. <u>Deliverables</u>

- 5.1. Work plan with schedule and details of activities (activity 4.1)
- 5.2. Gap analysis of sector recovery mechanisms report (activities 4.2 and 4.3)
- 5.3. Assessment and proposal for access to repair and recovery finance (activities 4.4 and 4.5)
- **5.4.** Ready-to-bid procurement packages (activities 4.7 and 4.6)

# 6. <u>Project Schedule and Milestones</u>

|   |   | Months |   |   |   |   |   |   |   |    |    |    |  |  |  |  |
|---|---|--------|---|---|---|---|---|---|---|----|----|----|--|--|--|--|
| Deliverables  | 1 | 2      | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |  |  |
| Deliverable 1: Work plan  |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |  |
| Deliverable 2: Gap analysis of sector recovery mechanisms report                    |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |  |
| Deliverable 3: Assessment and proposal for access to repair<br>and recovery finance |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |  |
| Deliverable 4: Ready-to-bid procurement packages                                    |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |  |

## 7. <u>Reporting Requirements</u>

- **7.7.** All documents must be submitted in Microsoft Word, in an editable file, including Executive Summary, annexes, spreadsheets in Microsoft Excel, and other relevant material, in English.
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third parties any product of this consultancy, without the express consent of the IDB, in writing.

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11.1. The Energy Division (INE/ENE) will have the technical responsibility for the execution of this contract as well as approval of products prepared by the Firm. In representation of the IDBG, the technical coordination for this consultancy rests with Roberto Gabriel Aiello (INE/ENE) who will act as Team Leader, supervising the products presented, and sharing comments to improve their quality.

### 12. Schedule of Payments

- **12.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- **12.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

| Payment Schedule  |      |  |  |  |  |  |  |  |
|---|------|--|--|--|--|--|--|--|
| Deliverable   | %    |  |  |  |  |  |  |  |
| 1. Deliverable 1: Work plan   | 10%  |  |  |  |  |  |  |  |
| 2. Deliverable 2: Gap Analysis Report   | 25%  |  |  |  |  |  |  |  |
| 3. Deliverable 3: Assessment and proposal for access to repair and recovery finance | 30%  |  |  |  |  |  |  |  |
| 4. Deliverable 4: Ready-to-bid procurement packages                                 | 35%  |  |  |  |  |  |  |  |
| TOTAL   | 100% |  |  |  |  |  |  |  |



Upgrading of pooled procurement and parametric insurance mechanisms for electric utilities in the Caribbean

Regional P005 *RG-T4613 [Web link to approved document]* Energy Resilience for Sustainable Development in the Caribbean

#### 1. Background and Justification

- 1.1. Within the framework of the 2024 Call for Proposals of the Regional Public Good Initiative (www.iadb.org/rpg) from the Inter-American Development Bank, the RG-T4613 non-reimbursable technical cooperation (TC) project was approved for an amount of 475.000 United States dollars (US\$475.000), to finance the contracting of consulting services and procurement of goods necessary for adopting resiliency and adaptation measures in the energy sector and promoting the development and adoption of harmonized energy standards for buildings, electric appliances, and electric mobility.
- 1.2. This program is aligned with the general objective of the ONE Caribbean Program which refers to foster socioenvironmentally sustainable development in the Caribbean region that benefits its citizens as it directly contributes to the climate adaptation and disaster risk management priority area and the cross-cutting area of strengthening institutions. This TC will also receive additional funding of 500.000 United States dollars (US\$500.000) from the ONE Caribbean Fund to achieve its objective.
- 1.3. The Caribbean countries face the characteristics of Small Island Development States (SIDS) including small individual markets, distance to global markets, constrained natural resources including available land, a small human resource base, and poor economies of scale. Supply prices are high due to market inefficiencies, local monopolies, and weak bargaining power of the individual countries. The COVID-19 Pandemic drew attention to the urgency to address vulnerabilities to external shocks by economic diversification and planning for resilience towards building forward better.
- 1.4. Harmonization of technical standards increases the region's bargaining power to attract state-of-the-art technology for rolling out the transition towards a low-carbon energy sector, at more competitive costs. In 2019, the CARICOM Regional Energy Efficiency Building Code (CREEBC) covering residential and commercial constructions was developed by CROSQ, CARICOM Energy Division, and The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

# 2. <u>Objectives</u>

2.1. The objective is to develop and enhance pooled procurement and parametric insurance mechanisms for electric utilities in the Caribbean.

#### 3. Scope of Services

**3.1.** The Firm will provide support and closely coordinate with CCRIF, CARILEC, and national utilities on pooled procurement and parametric insurance.

# 4. <u>Key Activities</u>

- **4.1.** Work plan. The Firm will prepare a detailed work plan in close engagement with the IDB team and national stakeholders covering communication protocols, information sources, meeting schedule, detailed activity planning.
- **4.2. Insurance and mutual assistance systems gap analysis.** The Firm will assess the status of existing insurance and mutual assistance systems (e.g. CCRIF and CDAP).
- 4.3. Identification of areas of improvement. The Firm will identify specific actions for improvement of the systems.
- **4.4.** Assessment of technical standards. The Firm will assess the technical standards for prioritized equipment and supplies for pooled procurement.



- 4.5. Identification of harmonization. The Firm will identify opportunities for harmonization of the technical standards.
- 4.6. Market analysis. The Firm will carry out an analysis of relevant electricity sector equipment in the Caribbean.
- **4.7.** Value chain assessment. The Firm will prepare an assessment of current supply chains and market shares of suppliers in the Caribbean.

# 5. <u>Deliverables</u>

- **5.1.** Work plan with schedule and details of activities (activity 4.1)
- 5.2. Gap Analysis (activities 4.2 and 4.3)
- 5.3. Assessment and Opportunities for Harmonization report (activities 4.4 and 4.5)
- 5.4. Market analysis and value chain assessment (activities 4.6 and 4.7)

### 6. **Project Schedule and Milestones**

| <b>N</b>  |   | Months |   |   |   |   |   |   |   |    |    |    |  |  |  |
|---|---|--------|---|---|---|---|---|---|---|----|----|----|--|--|--|
| Deliverables  | 1 | 2      | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |  |
| Deliverable 1: Work plan  |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |
| Deliverable 2: Gap Analysis   |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |
| Deliverable 3: Assessment and Opportunities for<br>Harmonization report |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |
| Deliverable 4: Market analysis and value chain assessment               |   |        |   |   |   |   |   |   |   |    |    |    |  |  |  |

### 7. <u>Reporting Requirements</u>

- **7.9.** All documents must be submitted in Microsoft Word, in an editable file, including Executive Summary, annexes, spreadsheets in Microsoft Excel, and other relevant material, in English.
- 7.10. Presentations must be submitted in Microsoft PowerPoint.

# 8. Acceptance Criteria

8.9. The deliverables will be accepted for payment once they have the written approval of the IDB team.

**8.10.** Partial deliverables, or deliverables that are not accepted, will not be paid.

# 9. Consulting Firm and Team Requirements

- 9.1. Work team. The Firm shall provide a work team with minimum the following key criteria:
  - Project Manager. Degree in engineering, economics, or related areas. At least 10 years of general experience, five (5) years of experience in project management for the energy sector. Experience in Latin America and the Caribbean is desirable.
  - Specialist in the energy sector. Degree in engineering or related areas, with a master's or doctorate in energy planning, energy economics, or related subjects. With the specific experience of at least ten (10) years in structuring and evaluating projects in the energy sector with an emphasis on new technologies.
- **9.2.** Language requirements:
  - English and Spanish speaking personnel.

# 10. Other Requirements

**10.1.** All information shared with the consultancy will be considered confidential. The consultancy may not disclose to third parties any product of this consultancy, without the express consent of the IDB, in writing.

## 11. Supervision and Reporting

11.1. The Energy Division (INE/ENE) will have the technical responsibility for the execution of this contract as well as approval of products prepared by the Firm. In representation of the IDBG, the technical coordination for this consultancy rests with Roberto Gabriel Aiello (INE/ENE) who will act as Team Leader, supervising the products



presented, and sharing comments to improve their quality.

## 12. Schedule of Payments

- **12.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- **12.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

| Payment Schedule   |      |  |  |  |  |  |  |
|--|------|--|--|--|--|--|--|
| Deliverable  | %    |  |  |  |  |  |  |
| 1. Deliverable 1: Work plan  | 10%  |  |  |  |  |  |  |
| 2. Deliverable 2: Gap Analysis   | 30%  |  |  |  |  |  |  |
| 3. Deliverable 3: Assessment and Opportunities for<br>Harmonization report | 30%  |  |  |  |  |  |  |
| 4. Deliverable 4: Market analysis and value chain assessment               | 40%  |  |  |  |  |  |  |
| TOTAL  | 100% |  |  |  |  |  |  |

# Consultant for Leading the implementation of Resiliency of Power Infrastructure and Response Preparedness for Energy Service Restoration. Component III: Project coordination

# Post of Duty: Remote

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

# About this position

We are looking for a consultant with experience in the energy sector to knowledge of the Caribbean resiliency of power and response preparedness to provide outputs for Component III of the TC "Project coordination and execution support."

The Energy Division (INE/ENE) of the Inter-American Development Bank (IDB) is a functional division of the Infrastructure and Energy Sector (INE/INE), under the Vice Presidency of Sectors and Knowledge (VPS/VPS), which supports and develops knowledge in the energy sector in Latin America and the Caribbean (LAC). INE/ENE is responsible for the development of technical analysis, identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector.

The Caribbean hosts some of the most vulnerable nations in the world in terms of climate related disasters. In 2023, the Atlantic basin saw 20 named storms. This type of events can affect the ability of countries to invest in infrastructure and social programs. Moreover, it is estimated that they would need to replace their



infrastructure capital stock in full, on average, every 50 years due to climate related events. The Caribbean energy sector is no exception to the potential crippling effects of natural disasters such as hurricanes/storms, which puts a severe burden to the already constrained fiscal spaces in most countries.

# What you'll do:

- a. Coordinate the TC efforts on resiliency for the power sector in the Caribbean and support the execution of its work plan:
  - Support beneficiary countries and teams to conduct the needs identification process, including scheduling process, country workshop organization and follow-up activities.
  - Prepare the minutes and documents that synthesize workshops and meetings results, identifying common themes presented by the different institutions and the main conclusions.
  - Take part in the workshop and meeting sessions in person or virtually, according to the event format.
  - After the workshops and meetings, support countries and agencies representatives to define a collaborative workplan including description of the scope of the technical support, schedule, participant institutions and personnel; and follow up the agencies technical support progress.

# **Deliverables and Payments Timeline:**

- Deliverable 1: Work plan of the consultancy
- Deliverable 2: Progress Report. Executive report that summarizes the progress of all the activities developed under the initiative. The report must include as annexes documents, technical reports, workshop materials elaborated.
- Deliverable 3: Final Report. Executive report that summarizes the progress of all the activities developed under the initiative. The report must include as annexes documents, technical reports, workshop materials elaborated, and lessons learned analysis. All deliverables will be accompanied by an internal presentation to the Bank. Presentations and deliverables will be in Spanish or English.

| Deliverable # | Percentage | Planned Date to Submit          |
|---------------|------------|---------------------------------|
| Deliverable 1 | 25%        | 10 days after signing contract  |
| Deliverable 2 | 45%        | 133 days after signing contract |
| Deliverable 3 | 30%        | 255 days after signing contract |

• For this consultancy, future trips are planned.

# What you'll need

**Education:** Advanced degree in Climate Finance, Environmental Policy, Economics, International Development, or a related field.

Experience: At least 10 years of experience on related topics

**Languages:** Proficiency in Spanish and English, spoken and written, is required. Additional knowledge of French and Portuguese is preferable.

# Key skills:

- Learn continuously.
- Collaborate and share knowledge.
- Focus on clients.
- Communicate and influence.
- Innovate and try new things.

# Requirements:



- Citizenship: You are a citizen of one of our 48-member countries.
- **Consanguinity**: You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

# Type of contract and duration:

- Type of contract: Products and External Services Consultant (PEC), Lump Sum
- Length of contract: 12 months
- Work Location: Remote.

# What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A competitive compensation package.
- A flexible way of working. You will be evaluated by deliverable.

# Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afrodescendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at <u>diversity@iadb.org</u> to request reasonable accommodation to complete this application.

# Our Human Resources Team reviews carefully every application.

# About the IDB Group

The IDB Group, composed of the Inter-American Development Bank (IDB), IDB Invest, and the IDB Lab offers flexible financing solutions to its member countries to finance economic and social development through lending and grants to public and private entities in Latin America and the Caribbean.

# About IDB

We work to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, we help improve health and education and advance infrastructure. Our aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today we are the leading source of development financing for Latin America and the Caribbean. We provide loans, grants, and technical assistance; and we conduct extensive research. We maintain a strong commitment to achieving measurable results and the highest standards of integrity, transparency, and accountability.

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