

CARIBBEAN DEVELOPMENT BANK

TWO HUNDRED AND SEVENTY-FIFTH MEETING OF THE BOARD OF DIRECTORS

TO BE HELD IN BARBADOS

MARCH 16, 2017

PAPER BD 29/17

TECHNICAL ASSISTANCE – INSTITUTIONAL STRENGTHENING ENERGY SECTOR
GRENADA

1. APPLICATION

1.01 The Caribbean Development Bank (CDB) received a letter of request from the Government of Grenada (GOGR) on January 17, 2017 for funding support for a Project Coordinator for a Geothermal Energy Project Management Unit (GPMU) being established in the Energy Division of the Ministry of Finance and Energy (MOFE). Subsequently the request was expanded to include the services of a Consultant Community Liaison Officer (CLO).

1.02 The beneficiary is GOGR and the Implementing Agency for this technical assistance (TA) project will be MOFE.

1.03 The total cost of the project is estimated at two hundred and seventy-two thousand, five hundred United States dollars (USD272,500), to be financed by a CDB Grant, not exceeding two hundred and thirty-one thousand, six hundred and thirty United States dollars (USD231,630) or 85% of the total cost, with counterpart financing provided by GOGR.

2. BACKGROUND

2.01 Grenada is overwhelmingly dependent on imported petroleum products to satisfy its growing energy demand. Petroleum products imported in 2014 cost approximately USD67 million (mn), representing 7% of gross domestic product. The high dependence on imported fuels underpins the country's lack of energy security and renders the economy a hostage to price volatility and other vagaries of the international oil market. This undermines economic stability and national efforts for long-term planning. The over-reliance on imported fuels is also a source of balance of payment challenges, and the associated foreign currency demand, causes a drain on the country's foreign exchange reserves.

2.02 In addition, the small and isolated nature of the electricity market in Grenada, like many of CDB's Borrowing Member Countries (BMCs), inhibits the achievement of economies of scale in the production and distribution of electricity, resulting in higher unit cost. The average peak electric demand in 2015 for Grenada for the past three years was 31 megawatts (MW). The average electricity tariff in Grenada peaked at USD0.41 per kilowatt-hour (/kWh) in 2008, and remains relatively high at USD0.27/kWh in 2016, even in the wake of the steep fall in the price of oil on the international market since 2014. This compares to an average tariff of USD0.10/kWh in the United States of America. The relatively high electricity costs over time have negatively impacted the country's economic competitiveness, and the livelihood of citizens especially the poorer segments of the population.

2.03 Against this background, Grenada (like the majority of CDB's BMCs) is seeking to reduce its dependence on imported fossil fuel, improve national energy security, and improve its competitiveness through increasing the deployment of sustainable energy options, *viz.* renewable energy (RE) and energy efficiency (EE). In this regard, GOGR has undertaken a number of steps over the past six years, including the approval of a National Energy Policy (since 2011), and the setting of ambitious EE and RE targets.

2.04 The Electricity Supply Act was revised in 2015, and a new regulatory framework is being established. A draft Geothermal Resource Development Bill has also been prepared to reflect GOGR's priority focus in this area. Further, as part of the Paris Climate Change Accord 2015, the country has committed to a significant Nationally Determined Contribution (NDC) for carbon emission reduction of 30% by 2025, with 2010 as the baseline year.

2.05 In line with its energy policy, GOGR is seeking to explore all viable RE options for electricity generation, including solar, wind, and geothermal energy (GE). However, the potential contribution from GE is considered to hold the greatest prospect for transforming the country's energy matrix, directly displacing diesel fuel-based generation. As a result, the GOGR has commenced exploration of its GE potential, with support from international development partners. Such support includes technical assistance provided by the Governments of New Zealand and Japan, to complete a comprehensive geothermal pre-drilling surface exploration programme in 2015. The results show indications of GE potential adequate to support a plant of 15 MW at the site currently being targeted – Mount St. Catherine. A plant of this capacity could displace 55% of the total electricity generation from diesel, contributing to stability in tariffs and enhanced energy security.

2.06 A Geothermal Development Roadmap has been prepared which outlines the major steps, timelines and budget required to realize a geothermal power in Grenada. The next major step is for exploration drilling to test the conceptual models of the geothermal system and verify the existence, temperature, permeability and extent of the resource. A key element of the Roadmap is the establishment of a Geothermal Project Management Unit (GPMU) to provide dedicated resources to pursue the GE development plan, the environmental and social impact assessment, and to support the successful achievement of exploration drilling. The GPMU will therefore provide the Ministry with the necessary capacity to implement the roadmap.

2.07 The GPMU will initially comprise a Geothermal Energy Project Coordinator (PC-GE) and Community Liaison Officer (CLO) with GOGR providing administrative support. The PC-GE will lead the GPMU reporting to Permanent Secretary MOFE, and coordinate the GE project implementation plan to achieve the Government's objectives. The GE-PC will be a key contributor to an Advisory Committee to be established by the Minister with responsibility for energy. The CLO will support the work of the GPMU by engaging the communities (men and women), located at, or adjacent to the targeted exploration sites and develop an awareness building strategy about GE. Based on lessons from GE developments in St. Vincent and the Grenadines and Dominica, the services of a CLO will be engaged at an early stage of the drilling project.

2.08 GOGR is seeking a grant to assist with the establishment and operation of the GPMU for the first two years, which will advance GE to the exploratory drilling phase. Based on the outcome of the drilling project, a decision will be taken on the future of the programme.

2.09 Since 2014, CDB has been engaged in discussions with Eastern Caribbean governments about GE developments. In addition, CDB has been mobilising suitable resources (grant and concessional) under a CDB GeoSmart Initiative¹, to support the relevant BMC governments at each stage of GE development.

3. THE PROPOSAL

3.01 It is proposed that CDB approve a TA grant to GOCR in an amount not exceeding two hundred and thirty-one thousand, six hundred and thirty United States dollars (USD231,630), from its Special Funds Resources (SFR) to fund the following items in relation to the establishment of the GPMU in the Energy Division of the MOFE:

- (a) Consultant GE-PC
- (b) Consultant CLO; and
- (c) Consultants' Travel Expenses for GPMU.

3.02 The GE-PC and the CLO will possess the relevant knowledge, skills and experience to fulfil the requirements of the terms of reference (TORs). The draft TORs for the GE-PC, and the CLO positions are presented in Appendices 1 and 2, respectively.

4. PROJECT OUTCOME

4.01 The expected outcome of this TA project is improved and strengthened capacity of GOCR to successfully manage and implement GE projects in a manner that reflects a high level of community engagement. This would reduce technical, financial, and operational risks and increase the likelihood of the successful development of GE resources in Grenada. Appendix 3 outlines the Design and Results Monitoring Matrix.

5. PROJECT DESCRIPTION

5.01 The overall objective of this TA project is to strengthen the capacity of the Energy Division within the MOFE in order to advance the development of GE in Grenada. This will be achieved through the establishment of a GPMU and the retention of the services of consultants for a period of two years in the positions of PC-GE and CLO who would be, respectively, responsible for:

- (a) the overall coordination and management of the Government's exploration drilling campaign including costs, schedules and resources, and
- (b) facilitating community engagement and addressing relevant issues in a proactive and timely manner, to ensure an inclusive and gender sensitive approach to the development.

¹ CDB GeoSmart Initiative is the Bank's response to the need for risk mitigation for GE development in the Eastern Caribbean, and represents its efforts to mobilize adequate and suitable resources (grants, contingent grant, loans, and technical assistance) to address risks characteristic of the various stages of the GE project cycle.

6. JUSTIFICATION/BENEFITS

6.01 GOCR is seeking to improve the country's energy security, and the sustainability of the energy sector, to address related macro-economic challenges, and to achieve improved economic competitiveness. Accordingly, GOCR intends to explore and develop the country's indigenous RE options including its GE potential. It has been determined that GE has the potential of making the single greatest impact in transforming the country's energy sector². Therefore, GOCR has commenced the process of exploring its GE potential towards establishing a plant in the capacity of about 15MW. This TA project will enhance the capability of the Government to achieve these goals, by strengthening its capacity to manage GE resource development.

6.02 Developing GE is a complex undertaking requiring that specific risks be addressed, associated with financial, technical, environmental and social aspects, at each stage of the project cycle. There is also need for the procurement of specialized services, and the engagement of a wide range of stakeholders, including the participation of men as well as women, particularly at the community level. As demonstrated internationally, a leadership role by government is critical. However, in view of the special nature of GE projects, governments (especially in Small Island Developing States) need assistance to fulfil this leadership role. In this regard, there is need to have in place, the appropriate human and institutional capacities to facilitate, coordinate, and manage the efforts.

6.03 GOCR has signalled its intention to lead on the early stage GE development, seeking to further confirm the existence of an adequate GE resource, prior to inviting the participation of private developers for the investment stage. This TA support is therefore critical and timely to advance GE development in Grenada.

6.04 The TA will provide GOCR with the capacity to advance GE development through the exploratory drilling phase, thereby unlocking potential for investment in development drilling, and power plant development. These latter phases would be eligible for funding resources under the CDB GeoSmart Initiative.

6.05 The proposed TA is consistent with CDB's Strategic Objectives, Priorities, Policies and Strategies, shown below. These are:

- (a) CDB's Strategic Objective of Supporting Inclusive Sustainable Growth and Development within its BMCs.
- (b) CDB's Corporate Priorities of Strengthening and Modernising Economic and Social Infrastructure and Promoting Environmental Sustainability.
- (c) CDB's Energy Sector Policy and Strategy, which has an overarching focus on the promotion of RE for more affordable and stable energy costs.
- (d) CDB's Climate Resilience Strategy, which promotes environmental sustainability and climate compatibility.
- (e) CDB's Technical Assistance Policy and Operational Strategy of commitment to

² Inter-American Development Bank (IDB) 2014.

strengthening the synergies between TA operations and CDB’s investment lending.
6.06 The proposed TA is also consistent with the following:

- (a) Grenada’s National Energy Policy, 2011;
- (b) The United Nation’s Sustainable Development Goals (SDGs), in particular Goal 7, and
- (c) Grenada’s NDC for carbon emission reduction.

6.07 Based on CDB’s performance rating system, the Project was assessed as Satisfactory, with a score of 3.75, suggesting that it is likely to contribute to development effectiveness. The scores for the four core criteria and the justification for each score are presented at Appendix 4.

6.08 The Project was assessed as marginally mainstreamed (MM), based on CDB’s Gender Marker. The Gender Marker is summarised in Table 6.1 below and the Gender Marker Analysis is shown at Appendix 5.

TABLE 6.1: SUMMARY GENDER MARKER ANALYSIS

Gender Marker	Analysis	Design	Implementation	Monitoring and Evaluation	Score	Code
	0	0.5	0.5	0.5	1.5	MM

7. EXECUTION/IMPLEMENTATION

7.01 MOFE of Grenada will be the Implementing Agency for the Project with an estimated project completion period of 30 months.

7.02 The Consultants will be located in the Energy Division of the MOFE and are expected to have a close working relationship with other government departments and agencies in order to effectively manage the Government’s contributions. The PC-GE will establish a working group to ensure that all relevant agencies are consulted and their inputs are received in a timely manner.

7.03 The CDB Grant will finance the Consultants specified at paragraph 3.01. GOCR will provide counterpart resources in the form of one counterpart staff to work with the Consultants, office space/s and equipment for the Consultants, and administrative support.

8. RISK ASSESSMENT AND MITIGATION

8.01 Some risks have been identified which could have an effect on the implementation of the proposed Project. The identified risks and the relevant mitigation actions are as presented in Table 8.1 below:

TABLE 8.1: RISK ASSESSMENT AND MITIGATION

	Risks	Mitigation
Strategic Risks	The levelized cost of energy (all-in costs) for GE compared to other RE is no longer competitive.	This risk remains; however, timely implementation of Roadmap could yield early tangible benefits, and provide evidence for assessing available options.
Implementation Risks	Failure to identify in a timely manner the appropriate consultant PC-GE and consultant CLO within the budget.	CDB to support GOCR by helping to circulate Request for Expression of Interest, widely. Budgetary contingency provided to allow for some flexibility in costs beyond those estimated by GOCR.

9. COST AND FINANCING

9.01 The total cost of the project is estimated at USD272,500 and Table 9.1 is a summary of the proposed financing. Details of the budget are set out in Appendix 6.

TABLE 9.1: FINANCING PLAN FOR THE SERVICES

Item	USD		
	CDB Grant	GOCR Contribution	Total
Professional Fees	220,600		220,600
Office Space, Admin Services and Office Equipment	-	38,930	38,930
Sub-total	220,600	38,930	259,530
Contingency	11,030	1,940	12,970
Total	231,630	40,870	272,500
Percentage	85	15	100

10. FUNDING SOURCE

10.01 CDB's contribution of not more than two hundred and thirty-one thousand, six hundred and thirty United States dollars (USD231,630) is eligible for financing from CDB's SFR/Other Special Funds (OSF). Funds are available within existing resources under CDB/Inter-American Development Bank (IDB)/CDB/Sustainability Facility (SEF), specifically from the Global Environmental Facility (GEF) grant resources allocated to Grenada. Appendix 7 shows a summary of SEF.

11. PROCUREMENT

11.01. The procurement for the PC-GE and the CLO shall be in accordance with CDB's Guidelines for the Selection and Engagement of Consultants by Recipients of CDB Financing (October 2011). A Procurement Plan is presented at Appendix 8.

11.02 Financing will be provided from the SEF and, accordingly, in line with the Finance Agreement signed with IDB (Board Paper BD 100/15), a waiver of CDB's Guidelines for the Selection and Engagement of Consultants (October 2011) is sought to extend eligibility to IDB member countries which are not CDB member countries. The value of the waiver requested is USD231,630.

12. RECOMMENDATION

12.01 It is recommended that the Board of Directors approve a grant to GOCR from CDB's SFR of an amount not exceeding the equivalent of two hundred thirty-one thousand six hundred and thirty United States dollars (USD231,630) (the Grant) allocated from resources provided to CDB by IDB (acting as an administrator of the IDB/ GEF) under the SEF, for the purpose of financing consultancy services to assist with the institutional strengthening of GPMU (the Project), on CDB's standard terms and conditions, and on the following terms and conditions:

(a) Disbursement

Except as CDB may otherwise agree, payment of the Grant shall be made as follows:

- (i) an amount not exceeding the equivalent of twenty thousand United States dollars (USD20,000) shall be paid as an advance (the Advance) on account of expenditures in respect of the Grant, following receipt by CDB of:
 - (aa) a request in writing from GOCR for such funds; and
 - (bb) a copy of the signed contract between GOCR and the consultant for the provision of the services in respect of which the payment is to be made; and
- (ii) the balance of the Grant will be paid quarterly, in amounts not exceeding the equivalent of twenty thousand United States dollars (USD20,000), by way of additional advance payments, provided however, that CDB shall not be under any obligation to make:
 - (aa) the first such payment until CDB shall have received an account and documentation satisfactory to CDB in support of expenditures incurred by GOCR with respect to the Advance;
 - (bb) any subsequent payment until CDB shall have received:
 - (i) an account and documentation satisfactory to CDB in support of expenditures financed by GOCR from the resources of the immediately preceding payment;
 - (ii) a request in writing from GOCR for the additional advance payment; and
 - (iii) the requisite number of copies of the reports, in form and substance acceptable to CDB, required to be submitted by the either

consultant to GOCR and CDB for the time being, in accordance with the respective TORs; and

- (iii) payments exceeding the equivalent of two hundred and eight thousand four hundred and sixty-seven United States dollars (USD 208,467) until CDB shall have received:
 - (aa) the requisite number of copies of the final reports, in form and substance acceptable to CDB, required to be submitted by either consultant to GOCR and CDB; and
 - (bb) a certified statement of the expenditures incurred by GOCR in respect of, and in connection with, the Project.

(b) Period of Disbursement

The first payment of the Grant shall be made by June 30, 2017, and the Grant shall be fully disbursed by September 30, 2019, or such later dates as CDB may specify in writing.

(c) Procurement

- (i) Subject to paragraph (b) below, procurement shall be in accordance with the procedures set out and/or referred to in the Grant Agreement between CDB and GOCR, or such other procedures as CDB may from time to time specify in writing.
- (ii) Procurement of the consultants shall be extended to IDB member countries.
- (iii) The Procurement Plan approved by CDB is set out at Appendix 8. Any revisions to the Procurement Plan shall require CDB's prior approval in writing.

(d) Other Conditions

- (i) Except as CDB may otherwise agree, the Project shall be executed by GOCR through the MOFE.
- (ii) GOCR shall identify and provide any additional counterpart technical and administrative staff to support the consultants as well as any office space and equipment necessary for the successful completion of the Project.
- (iii) GOCR shall in accordance with the procurement procedures applicable to the Grant, select and engage the consultant who shall be responsible for providing the services of PC-GE set out in the TOR at Appendix 1.
- (iv) GOCR shall in accordance with the procurement procedures applicable to the Grant, select and engage the consultant who shall be responsible for providing the services of CLO set out in the TOR at Appendix 2.

- (v) GOCR shall:
 - (aa) insert, as applicable, the CDB and GEF logos on all documents and publications financed under the Project; and make reference to CDB and GEF, as applicable, as the source of financing in any meeting, press conference or communication in which reference is made to the financing of the consultants for the Project; and
 - (bb) preserve the original records of the Project for a minimum period of three (3) years after the expiration date of the period of disbursement referred to in paragraph 2 or any extension thereof. Such documents and records shall be maintained adequately in order to:
 - (i) substantiate Project-related activities, decisions and transactions, including all expenditures incurred; and
 - (ii) show the correlation of the expenditures incurred under the Project to the respective disbursements made by CDB.
- (e) Except as CDB may otherwise agree, GOCR shall meet, or cause to be met:
 - (i) the cost of the items designated for financing by GOCR in the budget set out in Appendix 6 (the Budget);
 - (ii) any amount by which the cost of the Project exceeds the estimated costs set out in the Budget; and
 - (iii) the cost of any other items needed for the purpose of, or in connection with, the Project;and shall provide all other inputs required for the punctual and efficient carrying out of the Project not being financed by CDB.
- (f) CDB shall be entitled to suspend, cancel or require a refund, if the GEF funding, or any part thereof is suspended, cancelled or required to be refunded, and if at any time CDB determines that any representative of GOCR has engaged in Prohibited Practices in connection with the use of the Grant without GOCR having taken timely and appropriate action satisfactory to CDB to address such practices when they occur, except that GOCR shall not be required to refund any amount already expended in connection with the Project and not recoverable by GOCR.

SUPPORTING DOCUMENTATION:

- Appendix 1 – Terms of Reference for the Consultant GE Project Coordinator
- Appendix 2 – Terms of Reference for Consultant Community Liaison Officer
- Appendix 3 – Design and Results Monitoring Matrix
- Appendix 4 – Performance Assessment Scoring
- Appendix 5 – Gender Marker Analysis

Appendix 6 – Budget

Appendix 7 – Summary: IDB/CDB Sustainable Energy Facility (SEF) for the Eastern Caribbean

Appendix 8 – Procurement Plan

Head, REEEU Office of Vice-President (Operations)	Tessa Williams-Robertson
SE Advisor, REEEU Office of Vice-President (Operations)	Joseph Williams

DRAFT TERMS OF REFERENCE
CONSULTANT GEOTHERMAL ENERGY PROJECT COORDINATOR
GRENADA

1. BACKGROUND

1.01 The Government of Grenada (GOGR) wishes to pursue the development of a potential geothermal resource by undertaking exploration drilling. This follows the completion of a comprehensive geothermal pre-drilling surface exploration programme in 2015, funded by the Governments of New Zealand and Japan. The exploratory work has provided strong indications that a geothermal resource suitable for power generation is to be found in Grenada. Exploration drilling is necessary to test the conceptual models of the geothermal system and verify the existence, temperature, permeability and extent of the resource.

1.02 The Government has requested grant resources to undertake this exploration drilling, with the first phase likely to comprise a slim-hole exploration campaign of up to three wells. This would allow the Government to delineate and gazette a geothermal resource area and then assign the development rights for this area to a legal entity through a process of competitive bidding. This legal entity would then complete the drilling required, develop the steam field, build and operate the power plant.

1.03 A Geothermal Development Roadmap has been prepared which outlines the major steps, timelines and budget requirements to realise geothermal development. A key requirement is the establishment of a Geothermal Project Management Unit (GPMU) to provide dedicated resources to support the advancement of the GE development initiative. A Project Coordinator, Geothermal Energy (PC-GE) is required to lead the Unit, develop the drilling project and oversee the necessary works to achieve the Government's objectives.

2. INSTITUTIONAL ARRANGEMENTS

2.01 GPMU will be responsible for undertaking the necessary activities to advance the drilling project. The Unit will be located in the Energy Division of the Ministry of Finance and Energy and is expected to have a close working relationship with other Government Departments and agencies in order to effectively manage the Government's contributions. This will include establishing a working group to ensure that all relevant agencies are consulted and their inputs considered in a timely manner.

2.02 The GPMU will be a focal point for international development organisations and bilateral cooperation. It will be able to draw on the services of external geothermal technical advisors and will need to cultivate relationships with financing and other agencies that could support delivery of the GE programme.

2.03 A Draft Geothermal Resource Development Bill has been prepared and, although a review and finalisation of the Bill is to be undertaken, the ultimate passing of the Bill will trigger the creation of a new multi-sectoral statutory board – the Geothermal Resources Advisory Committee. The Committee is expected to advise the Minister responsible for energy on the ability to use and access the resource, who in turn would advise Cabinet on the progress of the geothermal resource development. The Project Coordinator is a key contributor to the Committee. The timing of the passing of the Bill has not been established and so the Unit will in the first instance, report to the Permanent Secretary of the Ministry of Finance and Energy.

2.04 GOGR is applying for funding to establish the Unit with up to two full time staff for two years. GPMU will oversee the preparation, bidding and execution of an exploration-drilling program, infrastructure development and associated activities. Initially, the PC-GE will establish the Unit and will be able to draw on existing administrative resources within the Energy Division.

3. ROLE OF GPMU

3.01 The following activities will be formed by the GPMU, in pursuit of the objective of strengthening GOGR's capacity to advance its geothermal programme:

- (a) Co-ordinate all geothermal related activities across Government agencies and managing Government contributions through the establishment of a working group.
- (b) In collaboration with the international partners, develop a project budget, schedule and resource plan setting out key milestones to achieve a drilling start date of Q4 2018.
- (c) Prepare a procurement plan in collaboration with relevant Government departments for the goods and services necessary to facilitate a drilling programme.
- (d) In co-ordination with the Energy Division, develop a communications strategy for engagement with affected landowners, and wider stakeholder community to improve understanding of geothermal energy.
- (e) Identify sources of funds and expertise necessary to deliver the project and support GOCR in the process of accessing financing and satisfaction of agency requirements.
- (f) Ensure all relevant permits necessary to facilitate drilling are identified and work with Government Departments and Statutory Bodies to ensure timely award. This includes completing Environmental and Social Impact Assessments to international standards as required by international funding agencies.
- (g) In collaboration with funding agencies, the Ministry of Finance, Ministry of Works and the NAWASA, support the procurement of services to upgrade infrastructure, access water for drilling and contract drilling services.
- (h) Support the testing of geothermal wells, publication of results and development of approaches to advance the drilling project.

4. GEOTHERMAL ENERGY PROJECT COORDINATOR'S KEY RESPONSIBILITIES

4.01 The Project Coordinator, Geothermal Energy (PC-GE) will be responsible for the overall management of the Government's exploration drilling campaign including costs, schedules and resources. He/ She will work closely with relevant Government agencies, international funders, technical specialists and legal experts to achieve this.

4.02 The Government will be required to support the drilling project through the provision of certain services, regulatory approvals and physical works. The PC-GE will be the focal point for internal and external communication regarding GE within the Government. The PC-GE will be required to:

- (a) Work closely with MOFE in its establishment of a working group comprised of key Government Ministries to identify and deliver on Government contributions.
- (b) Support the chair of the working group, with relevant recommendations, based on the issues linked to the GE project.
- (c) Liaise with statutory and non-statutory bodies with responsibility for enablers of the project (i.e. NAWASA, Grenada Ports Authority, etc.).
- (d) Provide oversight for the development and implementation of a communication and stakeholder engagement strategy to increase government and public awareness of the benefits and limitations of geothermal energy. This should relate to international funding agencies' requirements for environmental and social impact assessments and associated management plans.

- (e) Identify sources of technical and financial assistance, which may be available from the international community. Prepare applications for such assistance in collaboration with the Director of Economic and Technical Cooperation, and the Energy Division.
- (f) Collaborate with the Ministry of Works and other relevant Ministries in the development of implementation schedules and budgets.
- (g) Coordinate a detailed project implementation plan for the exploration drilling campaign (including infrastructure requirements) by working with local and international technical experts to identify the scope of works, budget requirements and implementation schedule.
- (h) Develop annual work plans with budgets to inform the procurement requirements for the project. This should include terms of references and technical specifications.
- (i) In line with donor and Government requirements, administer a transparent, robust process for the tendering, evaluation and award of contracts.
- (j) Assist in the preparation of tender documents, negotiations and procurement of services for the execution of infrastructure works, exploration drilling and associated administration.
- (k) Oversee the timely engagement of consultants for the preparation of an ESIA.
- (l) Monitor compliance of project activities with relevant local and international legislation, with a particular focus on health and safety of working environments and execution of activities.
- (m) The PC-GE will submit to the Permanent Secretary monthly Progress Reports on the status of tasks undertaken.
- (n) Updates will be provided to the Working Group and funding agencies, as required.
- (o) Monitor costs, schedules and resources and alert relevant agencies of any risks to the drilling project.
- (p) Supervise and oversee the work of Consultants and Contractors hired. Approve payments against contractual milestones, where appropriate.
- (q) Advise the Ministry of Finance and Energy on key actions to be taken based on the results/outcome of drilling activities and technical recommendations.
- (r) Provide input into the revision and drafting of legal and regulatory amendments required for the achievement of the geothermal development.
- (s) Carry out any other relevant activities, as required, to support the successful completion of exploration drilling in Grenada.
- (t) Develop a capacity development plan for the transfer of knowledge and expertise during the assignment so that key skills can be transferred to the GOGR officials who will take long-term responsibility for the integration of the activities and follow up.

5. KEY DELIVERABLES

5.01 As part of the fulfilment of the afore-mentioned responsibilities, the PC-GE shall deliver the following based on schedule to be established:

- (a) Work Programme for the GPMU.
- (b) Monthly Progress Reports, including key performance indicators.
- (c) Proposal for the establishment of a GE Working Group, which will comprise key government ministries and other stakeholders, and including Terms of reference for the Working Group.
- (d) Capacity development plan for knowledge sharing for staff of MOFE.
- (e) Annual work plans and budget for GE drilling project, including procurement plans.
- (f) Procurement documentation and evaluation reports for contractors and consultants.

6. DURATION OF THE ASSIGNMENT

6.01 The assignment is on a full-time basis and the duration is for a term of two years, renewable each year, and subject to annual performance review and availability of funding.

7. QUALIFICATIONS AND EXPERIENCE

7.01 The successful candidate must be a citizen or bona fide resident of CDB or IDB member countries, and have:

- (a) A Master's degree or post graduate qualification in a relevant field such as Geothermal Energy, Engineering (civil, mechanical, and electrical) or Project Management with five years' experience in management and implementation of energy or infrastructure projects; or
- (b) A Bachelor's Degree or equivalent in a relevant field such as Engineering or Project Management with a minimum of ten years' experience in management and implementation of energy or infrastructure projects.
- (c) Demonstrated knowledge of, and experience with, procurement of engineering services, management of consultancy contracts, and budgeting and reporting.
- (d) Experience working with procedures and operations of multilateral development banks and/or bilateral agencies.
- (e) Ability to transfer knowledge and skills and to develop capacity.
- (f) Excellent interpersonal skills and ability to work with a wide range of stakeholders.

DRAFT TERMS OF REFERENCE
CONSULTANT COMMUNITY LIAISON OFFICER

GOVERNMENT OF GRENADA
GEOTHERMAL RESOURCE DEVELOPMENT PROJECT

1. BACKGROUND

1.01 The Government of Grenada wishes to progress the development of a geothermal power plant in Grenada by undertaking exploration drilling of a geothermal prospect. This follows the completion of a comprehensive geothermal pre-drilling surface exploration programme in 2015, funded by the Governments of New Zealand and Japan. The exploratory work has provided strong indications that a geothermal system of a type suitable for power generation is to be found in Grenada. Exploration drilling is necessary to test the conceptual models of the geothermal system and verify the existence, temperature, permeability and extent of the resource.

1.02 The Government has expressed a desire to advance the project by undertaking exploration drilling in the geothermal prospect area using grant funds, with the first phase likely to comprise a slim-hole exploration campaign of up to three wells. This will allow the Government to delineate and gazette a geothermal resource area and then assign the development rights to this area to a legal entity through a process of competitive bidding. This legal entity would then complete the drilling required, develop the steam field, build and operate the power plant.

1.03 A Geothermal Development Roadmap has been prepared which outlines the major steps, timelines and budget requirements to realise a geothermal power plant in Grenada. A Project Coordinator, Geothermal Energy (PC-GE) is required to develop the project and implement necessary works to achieve the Government's objectives. The procurement process for this Coordinator has commenced. It is also considered that a Community Liaison Officer (CLO) is required to build awareness about geothermal energy development, nationally and to engage on a continuous basis with the communities targeted for the physical exploration and development, in an effort to build ownership and strengthen relationships between project and the communities.

2. INSTITUTIONAL ARRANGEMENTS

2.01 The Geothermal Project Management Unit (GPMU) will be responsible for undertaking the necessary activities to advance the project towards the goal of drilling deep geothermal exploration wells. The Unit will be located in the Energy Division of the Ministry of Finance and Energy and is expected to have a close working relationship with other Government Departments and agencies in order to effectively manage the Government's contributions. This will include establishing a working group to ensure that all relevant agencies are consulted, and their contributions considered in a timely manner.

2.02 The GPMU is expected to be a focal point for international development organisations and bilateral cooperation. It will be able to draw on the services of external geothermal technical advisors and will need to cultivate relationships with financing and other agencies that could support delivery of a GE programme.

2.03 The Government of Grenada is applying for funding to establish up to two full time staff for a term of two years. They will oversee the preparation, bidding and execution of an exploration drilling program, infrastructure development, other associated activities, and also to build awareness and engage with affected communities.

Role of GPMU

- (a) Co-ordinate all geothermal-related activities across Government agencies and managing Government contributions through the establishment of a working group.
- (b) In collaboration with the international partners, develop a project budget, schedule and resource plan setting out key milestones to achieve a drilling start date of end-2018.

- (c) Prepare a procurement plan in collaboration with relevant Government departments for the goods and services necessary to facilitate a drilling programme.
- (d) In co-ordination with the Energy Division, develop an information, education and communications strategy for engagement with affected landowners, and wider stakeholder community to improve understanding of geothermal energy.
- (e) Identify sources of funds and expertise necessary to deliver the project and support GOCR in the process of accessing financing and satisfaction of agency requirements.
- (f) Collaborate with Government Departments and Statutory Bodies to facilitate the granting of relevant permits for drilling; including the completion of Environmental and Social Impact Assessments to international standards as required.
- (g) Support the procurement of services to upgrade infrastructure, access water for drilling and contract drilling services, through collaboration with stakeholders, as required.
- (h) Support the testing of geothermal wells, publication of results and development of approaches to advance the drilling project.

3. COMMUNITY LIAISON OFFICER'S KEY RESPONSIBILITIES

3.01 The CLO is expected to continuously engage with the communities surrounding the exploration drilling sites, to share information about the proposed drilling, respond to concerns and general build awareness about geothermal energy development at a national level.

3.02 The CLO will:

- (a) Produce gender responsive community profiles of the demographic, socio-cultural, economic, environmental and institutional situation (including possible physical cultural property, natural habitats and biodiversity conservation areas) of each community identified and targeted for geothermal development.
- (b) Develop a stakeholder engagement plan (SEP). The SEP is to be dynamic and should be updated periodically, as necessary and will ultimately form part of the Environmental and Social Impact Assessment for the drilling activity. SEP will cover:
 - (i) stakeholder identification, and analysis to be undertaken;
 - (ii) stakeholder engagement program (e.g., information to be disclosed, format and communication methods; stakeholder consultation methods);
 - (iii) schedule for the various stakeholder engagement activities; and
 - (iv) grievance response mechanisms.
- (c) Implement a broad-based Information, Education and Communications Strategy (IEC Strategy) through local and national consultations.
- (d) Promote constructive partnerships and communication between GOCR and the communities on issues relating to project development, implementation and monitoring, with the key responsibility for implementing community engagement activities.
- (e) Contribute to stakeholder participation at all relevant levels, in accordance with the diverse needs of stakeholders (particularly women and young persons) through participatory assessments, institutional mapping exercises; focus group discussions; community

meetings and national consultations. Accurate record keeping of these engagements is required.

- (f) Produce timely feedback to GOCR on relevant issues, opportunities and challenges identified by community members during project development, implementation and monitoring.
- (g) Produce timely feedback to the community members on project implementation and monitoring, including issues, challenges, implementation timelines and decisions made by the GOCR in accordance with agreed protocols.
- (h) Establish and operationalise a Grievance Response Mechanism through participatory consultations among local communities, relevant stakeholders and GOCR, identifying potential grievances or project risks and their mitigation actions.
- (i) Contribute to stakeholder participation at all relevant levels in accordance with the diverse needs of stakeholders (particularly women and youth) through participatory assessments, institutional mapping exercises, focus group discussions, community meetings and national consultations.
- (j) Assist the PC-GE, as required, to achieve the overall project objectives, particularly in the gathering of baseline data with the Community Profiles for assessment of ESIA's.
- (k) Contribute to a capacity development plan for the transfer of knowledge to counterparts during the assignment.
- (l) Contribute to awareness of the community and workers' health and safety directly associated with the drilling project and targeted communities.

4. KEY DELIVERABLES

4.01 As part of the fulfilment of these responsibilities, the CLO shall deliver the following, based on schedule to be established:

- (a) Gender responsive community profiles for each community identified and targeted for the GE Programme.
- (b) SEP.
- (c) IEC Strategy.
- (d) Records of community engagements held under the grievance response mechanism.
- (e) Periodic progress report, including key performance indicators to be established with MOFE, and acceptable to CB.
- (f) A capacity development plan for the transfer of knowledge.

5. DURATION

5.01 The consultancy is expected to last not more than 24 months from the date of contract signing.

6. REPORTING

7.01 CLO will be located in the GPMU, MOFE, and will report to the PC-GE.

7.02 The CLO will furnish monthly and quarterly reports as required, providing details of activities completed under the SEP and IEC Strategy.

7. QUALIFICATIONS AND EXPERIENCE

8.01 The CLO must be a citizen or bona fide resident of CDB or IDB member countries. He/she must have a strong client-orientation and inter-personal skills with proven ability to work cooperatively with diverse groups and stakeholders and should possess the following minimum qualifications:

- (a) A post-graduate degree or equivalent qualification in the sociology, anthropology, community development or other relevant discipline.
- (b) Sound knowledge of communication, education and information strategies for public awareness campaign development and implementation.
- (c) A minimum of ten years' relevant experience encompassing stakeholder engagement practice, gender-responsive approaches, community development practices, and social research using participatory research methods and approaches.
- (d) Ability to transfer knowledge and skills and experience of developing capacity development plans.
- (e) Fluency in English (oral and written).

DESIGN AND RESULTS MONITORING MATRIX

Narrative Summary	Performance Indicators/Targets			Data Sources/Reporting	Assumptions
1. <u>IMPACT:</u> GE plant project successfully completed.	N/A			N/A	N/A
2. <u>OUTCOME:</u> Improved capacity of the Government of Grenada to manage GE projects in a manner that engages the communities.	GE Project under development, and progressing in a timely manner according to schedule, and within budget, meeting quality standards target: schedule July 2017 – June 2019.			Reports from Ministry responsible for energy.	Government provide counterpart resources available to the project.
3. <u>OUTPUTS:</u> 1. Work programme and timely execution. 2. Stakeholder Engagement Plan and timely execution.	1. Executed contracts in timely manner to meet quality standards. 2. Proportion of grievances addressed in a timely and satisfactory manner: o Baseline 0 o Target 75%			Project Reports	1. Geothermal energy (GE) resource available in quantity and quality. 2. Suitable Partner is identified by GOCR for establishing a PPP to develop GE.
4. <u>INPUTS:</u>	USD ('000)				
Item	Conference		Total		
	CDB/ GEF	Counterpart			Suitably qualified personnel available at reasonable costs to take up PC-GE and CLO job in a timely manner.
Professional fees, and travel Office Equipment, and administrative support.	231.6 -	- 40.9	231.6 40.9		
Total	231.6	40.9	272.5		

PERFORMANCE ASSESSMENT SCORE

Criteria	Score	Justification
Relevance	4	The TA intervention contributes to CDB's Strategic Objective of Supporting Inclusive Sustainable Growth and Development within its BMCs. It is aligned with CDB's Energy Sector Policy and Strategy, which has strong focus on the promotion of RE for more affordable and stable energy costs and with GOGR's priorities for the energy sector, including international commitments.
Effectiveness	4	The proposed TA will strengthen institutional capacity at the level of MOFE. This will directly enhance the implementation of GE programme, and have a direct positive impact on key energy sector and climate change outcomes. This includes an increase in the contribution of RE to the national energy matrix, and a consequential reduction in emissions.
Efficiency	4	The strategy of embedding the GPMU, including the PC-GE and CLO, in the Energy Division, directly enhances human resource capacity to support the GE project. This arrangement facilitate the coordination of GE matters with other energy-related matters and is an efficient means of achieving the outcomes.
Sustainability	3	GOGR will be required to provide a counterpart from the Ministry to work closely with the PC-GE and CLO. The capacity built will enhance sustainability of the benefits of the TA intervention. While the posts of PC-GE, and CLO may be time bound, the relevant knowledge and experience of GE project management and implementation, and community engagement, would have been built, ensuring that over the long term the relevant capabilities are in place. The CLO will promote an inclusive and gender-balanced approach to GE development, thereby increasing the likelihood of long-term sustainability.
Overall Score	3.75	Satisfactory

GENDER MARKER ANALYSIS

Project Cycle Stage	Criteria	Score
Analysis: Introduction/ Background/ Preparation	Consultations with women/girls/men/boys and relevant gender-related or sector-related public or private organisations have taken place.	0
	Social analysis identifies gender issues and priorities.	0
	Macroeconomic analysis identifies gender issues and priorities.	0
Design: Project Proposal/ Definition/ Objective/ Description	To address the needs of women/girls and men/boys concrete interventions to reduce existing gender disparities have been designed. Effect on project outcome is direct.	0.5
	Project objective / outcome includes gender equality.	0
Implementation: Execution	Implementation arrangements (gender mainstreaming capacity building or gender expertise in implementing agency) to enhance the gender capacity of the implementing agency. Effect on project outcome is indirect.	0
	Terms of Reference of project coordinating unit / project management unit include responsibilities of gender mainstreaming, especially at the levels of the PC/director and the Monitoring and Evaluation (M&E) officer.	0.5
M&E: Results Monitoring Framework (RMF)	Collection of sex-disaggregated data required for M&E (stated and budgeted in the Project)	0.5
	At least one gender-specific indicator at the outcome and/or output level in the RMF.	0
Scoring Code		1.5
Scoring Code		
<p>Gender specific (GS): if 3.75 points to 4 points</p> <p>Gender mainstreamed (GM): if 3 points to 3.5 points</p> <p>Marginally mainstreamed (MM): if 1.5 to 2.75 points.</p> <p>NO: if projects score zero or 1; if NO please give a justification why</p>		

The project is scored as MM. The project has limited potential to contribute significantly to gender equality.

DETAILED BUDGET

Item	Contribution (USD)		
	CDB	GOCR	Total
Professional Fees	220,600		220,600
Office Space, Admin Services & Office Equipment	-	38,930	38,930
Sub-total	220,600	38,930	259,530
Contingency	11,030	1,940	12,970
Total	231,630	40,870	272,500
Percentage	85	15	100

THE CDB/IDB SUSTAINABLE ENERGY FACILITY FOR THE EASTERN CARIBBEAN

1. In October 2015, CDB and IDB signed three Agreements as part of a Sustainable Energy Facility (SEF) for the Eastern Caribbean programme representing a total sum of forty-two million and sixty-three thousand, six hundred and ninety-eight United States dollars (\$42,063,698). The SEF comprises a Global Credit Loan, a Clean Technology Fund Grant and a Global Environment Facility Trust Fund Grant, for contributing to the diversification of the energy matrix in Eastern Caribbean countries (ECC). The overall focus of the SEF is in RE and EE interventions, but particular emphasis is placed on geothermal energy development. A counterpart contribution of \$29,435,000 is available within CDB's existing resources for the relevant disbursement period to finance projects, which meet SEF objectives, including for private sector electric utilities and at least one energy sector/policy loan for at least one of the beneficiary countries.

2. SEF has three components *viz.*:

- (a) Component I: Energy Efficiency –Grants and loans for promotion of EE measures
- (b) Component II: Regulatory Framework, Institutional Strengthening, and Capacity building – Non-reimbursable technical assistance support to governments to support institutional strengthening objectives, and for project development and preparation; and
- (c) Component III: Renewable Energy –RE investment projects with emphasis on geothermal energy development.

3. Component 3 of the SEF programme provides concessional loans to governments and special purpose vehicles (SPVs), established under public/private partnerships (PPPs) for development of baseload RE, such as GE. Funds for GE projects will be made available under a CDB initiative called the CDB GeoSmart Initiative that will identify appropriate resource and/or provide a range of financial instruments to the public sector and/or SPVs. The activities to be financed are:

- (a) pre-investment activities, for which grants are best suited to unlock investments, including surface studies (geology, geophysics and geochemistry), environmental and social impact assessments; and drilling of early exploration wells (slim holes);
- (b) exploration activities, for which risk mitigation instruments are suited, such as contingent recovery grants, concessional loans and/or guarantees; and
- (c) field and power plant development activities.

PROCUREMENT PLAN

A. General

1. Project Information:

Country: Grenada
Project Name: Technical Assistance – Institutional Strengthening Energy Sector
Grenada
Beneficiary: Government of Grenada
Project Executing Agency: Ministry of Finance and Energy

2. Bank’s Approval Date of the Procurement Plan: March 16, 2017

3. Period covered by this Procurement Plan: April 1, 2017 to September 30, 2019

B. Consultancy Services

1. **Prior Review Threshold:** Procurement decision subject to prior review by the Bank as stated in Appendix 1 to the Guidelines for the Selection and Engagement of Consultants:

	Selection Method	Prior Review Threshold	Comments
1.	ICS	>30,000	

2. **Shortlist comprising entirely of national consultants:** N/A

3. **Reference to (if any) Project Operational/Procurement Manual:** CDB Guidelines for Selection and Engagement of Consultants 2011

4. **Any Other Special Procurement Arrangements:** a waiver of CDB’s Guidelines for Selection and Engagement of Consultants (October 2011) to extend eligibility to IDB member countries which are not CDB member countries.

5. Procurement Packages with Selection Methods and Time Schedule:

Ref No.	Contract (Description)	Estimated Cost (USD)	Selection Method	Review by Bank (Prior/Post)	Expected Bid-Opening Date	Comments
1	PC-GE	■	ICS	Prior	Feb 28, 2017	
2	CLO	■	ICS	Prior	August 2017	

C. Implementing Agency Capacity Building Activities with Time Schedule

CDB online Procurement Training for PC-GE and CLO; and virtual meeting on procurement via video-conferencing.

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.