DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

REGIONAL

SUSTAINABLE ENERGY FACILITY FOR THE EASTER CARIBBEAN

(RG-L1071)

Environmental and Social Management Report

(ESMR)

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I. Introduction

Country	Regional
Sector	Financial Markets
Project Name	Sustainable Energy Facility for the Eastern Caribbean
Borrower	Caribbean Development Bank
Executing Agency	Caribbean Development Bank
Transaction Type	Loan with Sovereign Guarantee
Project Cost (in US Dollars)	70,000,000
Environmental Category	Directive B13 (High risk, FI-1)

II. Project Description

2.1 The Sustainable Energy Facility will be a Global Credit Loan (GCL or the 'Facility') with the objective of contributing to diversification of the energy matrix in the Eastern Caribbean (EC) by promoting the implementation of Energy Efficiency (EE) and Renewable Energy (RE) technologies to reduce the region's dependency on liquid fossil fuels in an effort to reduce the cost of power generation and electricity tariffs. The Bank will provide a GCL to the CDB, which would on-lend the resources to finance eligible sub-loans in all beneficiary countries according to the following SEF components:

Component 1: Energy Efficiency – will provide loans to public sector actors to promote EE measures such as: (i) retrofitting government buildings; (ii) installing new or replacing existing streetlights with more efficient ones; (iii) increasing power generation efficiency; and (iv) implementing EE programs for small and medium enterprises (SMEs) and housing projects.

Component 2: Regulatory framework, institutional strengthening and capacity building – will provide technical assistance to the Executing Agency (EA) to strengthen its capacity as required to implement the SEF and to EC countries for: (i) developing an effective legal, policy and regulatory framework for the implementation of SE projects in the region; (ii) strengthening their technical, institutional, environmental and regulatory capacity; and (iii) acquiring the necessary skills to enable SE development.

Component 3: Renewable Energy – will provide loans to implement RE projects. Sub-component 3A will finance intermittent RE public sector projects such as wind power and solar PV. Sub-component 3B will finance base-load projects such as GE, hydro and waste to energy projects. Funds for geothermal projects will be made available through a facility called the GeoSmart Facility to address the specific challenges that GE development faces given its risk profile. The GeoSmart Facility will provide a range of financial products to public sector actors and/or public-private partnerships (PPP), customized for each stage of geothermal development: (1) pre-investment activities for which a mix of grants and concessional lending are best suited to unlock investments will include: (i) surface studies (3Gs), including social and environmental impact assessment, and their integration; and (ii) drilling of early exploration wells (slim holes); (2) exploration activities for which risk mitigation instruments such as contingent recovery grants are essential will include: (i) exploration drilling program (full size wells); and (ii) feasibility studies for targeted reservoirs, including social and environmental impact assessment; and (3) field and power plant development activities for which

concessional lending is called for will include: (i) production drilling (production and reinjection wells); (ii) engineering and construction of power plants; and (iii) substations and transmission lines.

2.2 The GeoSmart Facility will support the development of GE in the EC, which will contribute to the development of 10MW (±5) geothermal power plants in the five Eastern Caribbean islands with geothermal potential.[i] However, the actual size of the plant built will be based on Government's planned initiatives, the size of the geothermal resources, and the availability of additional grant resources and private funding for each individual plant. The Facility will finance pre-investment studies through power plant development. Table 1 shows the current status and estimated cost to develop GE in the EC, which is approximately US$383 million.

Table 1: Current Status and estimated cost to develop 10MW GE by stage (US$ millions)

Country	Stage 1a: Pre-Invest-ment (Studies)	Stage 1b: Pre-investment[1] (Slim hole drillings)	Stage 2: Exploration (Full scale drillings)	Stage 3: Field Development[2]		Total
				(Production/re-injection wells)	(Plant)	
Dominica	(done)	(done)	(done)	(done)	45	45
Grenada	(done)	6	14	21	45	87.5
St. Lucia	(done)	6	14	21	45	86.5
St. Kitts & Nevis	(done)	(done)	14	21	45	66
St. Vincent & The Grenadines	(done)	6	14	21	45	87
Total	**0**	**18**	**56**	**309**		**383**

2.3 The Caribbean Development Bank (CDB) would be the executing agency and borrower for the Facility that would implement a comprehensive initiative to support EE and RE in the region. The Facility's support for geothermal development will involve using innovative financial instruments and the technical and financial assistance of IDB, JICA, and other potential donors. All grant and loan resources to support geothermal development in the EC would be channeled by the CDB, with the exception of the grant resources from JICA, which would be channeled directly to the beneficiary countries.

2.4 Based on the concentration of these sub-loans in geothermal energy exploration and development, along with the sensitive physical locations (proximity of protected areas) of the projects under consideration, this operation is characterized as high risk (FI-1) with the potential for significant environmental and social (E&S) impacts.

III. Compliance Status and Project Standards

3.1 Based on Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), the Facility is classified as a Financial Intermediary and as such this operation is

[1] Additional costs may be incurred to enable pre-investment activities in the development sites.
[2] Does not include substations and transmission lines.

not categorized according to its potential E&S impacts and risks. The Facility's target investments include energy efficiency and renewable energy. The renewable energy component of the Facility is most dominant and comprised largely of geothermal sub-projects, presenting the potential for significant E&S risks. Of the five geothermal projects located respectively in Dominica, Grenada, St-Lucia, St-Kitts and Nevis and. St Vincent and Grenadines, the developments of Dominica and Nevis are most advanced with developed production and reinjection wells, and slim-hole wells respectively. Both countries are seeking financing for the next development stage which is construction of the production plant in Dominica and exploratory drilling in Nevis. These projects are considered high risk and are likely to be classified Category A investments. The other geothermal projects in St. Lucia, Grenada, and St. Vincent & The Grenadines will also likely be Category A or high risk Category B operations under the IDB's environmental and social impact classification system. Based on the information presented, this Facility is categorized as high risk (FI-1).

3.2 The project was granted eligibility by the Eligibility Review Meeting Committee with the approval on June 9, 2015 of the Project Profile (PP). As part of this PP a strategy for E&S due diligence was defined and focused on an assessment of CDB's pipeline and capacity to manage E&S aspects in high risk projects, as well as the process and standards that would apply in reviewing, managing and monitoring the particular risks pertaining to geothermal exploration and development. It was agreed that for this Facility and all sub-projects under it, the International Finance Corporation (IFC) Performance Standards and World Bank Environmental, Health and Safety (EHS) Guidelines (i.e. : General EHS; Geothermal Power Generation; and Electric Power Transmission and Distribution) will be the applicable standards in screening and managing E&S risks and impacts. Additionally, on all Category A sub-projects, IDB and CDB will undertake a hand-in-hand due diligence approach in order to ensure the comprehensive application of E&S standards consistent aforementioned standards.

3.3 The geothermal sub-projects are in different stages of development. While some projects have completed EIAs, it is expected that should they be considered eligible for CDB financing, updates to the EIAs and additional studies will likely be required under the conditions defined within this loan agreements.

IV. Key Environmental and Social Impacts, Risks and Mitigation

4.1 The potential key environmental, social, health and safety, and labor issues and risks associated with this Facility are mainly those related to sub-projects to be financed directly by the CDB. The Facility has been designed such that 20% of the sub-projects might be in energy efficiency, solar or wind, and 80% of the sub-projects will be oriented towards geothermal. These would be the only potential sectors eligible for on-lending and their associated risks are as follows:

4.2 **Geothermal:**. The exploration phase of each project will include possible negative environmental impacts and risks, though the more significant impacts are expected during construction. Each of the projects will involve drilling and testing of new production wells, reinjection wells, construction of the power plants buildings, and installation of equipment and, potential new access roads and electrical transmission associated facilities (which may include submarine cables).

4.3 Main construction impacts expected are: (i) potential contamination of soil and ground water by drilling mud (essentially a suspension of a natural clay material - bentonite - with some additives added), drilling mud with cuttings, or through the reinjection of the geothermal fluid (essentially a mixture of hot water and steam, at temperatures that can reach 290°C, with dissolved salts and gases); (ii) increased water demand from wells drilling and testing and for the cooling system; (iii) potential land contamination due to the disposal of drilling mud and solid wastes; (iv) noise and vibrations generated during drilling; and (v) effects of drilling on groundwater aquifers, nearby hot springs, natural thermal features, and induced micro-seismicity and/ground subsidence; (vi) increased heavy traffic and potential traffic accidents in the vicinity of the project site; (vii) noise and dust emissions; (viii) soil erosion and loss of vegetation; (ix) potential impacts to thermal features; and potential impacts to marine habitat and fauna Most of these construction impacts and risks can be adequately mitigated through the implementation of appropriate environmental, health and safety management plans and standard operating procedures (SOPs).

4.4 Once in operation, main impacts and risks are: (i) an increased level of micro-seismicity in the region; (ii) land subsidence; (iii) surface and underground water contamination due to accidental spills; (iv) mud contamination; (v) air emissions of hydrogen sulfide; (vi) health and occupational accidents; and (vii) increased exposure of community and workers to explosions, well blowouts and pipeline failures.

4.5 Of the five potential sites, three are most advanced and include Dominica, Nevis and St. Vincent. In all three, the project team was able to obtain additional E&S project information, and in the case of two, Dominica and Nevis, to undertake site visits to gain a better understanding of potential environmental and social issues.[3] It should be noted that whereas site specific information is known, it remains unclear whether the developers will seek financing from CDB and for which stage in the sub-projects' development. Based on available EIA information obtained for the more advanced projects the following brief overview summarizes the environmental and social setting and presents initial issues for future consideration:

a. ***Dominica****:* The Dominica Geothermal Project, known as the Wotten Waven-Trafalgar-Laudat field in the Roseau Valley, is most advanced among the islands, having already developed a production well (Laudat) with roughly 8-10MW of capacity and two re-injection wells (Wotten Waven and Trafalgar). The production well pad is located adjacent to an existing hydropower production plant, and in constructing the roughly 2.5 km pipeline to the reinjection sites would make use of the hydro pipeline's right of way access. The two reinjection sites are each located adjacent to a small community, while the production site and ultimate production plant are located off an existing road that services the installed hydropower plant (see map in Annex 1 for general location). The surrounding environment is characterized by a mix of degraded and partly degraded land, comprised of rain forest, wetlands, cultivated land, and swamps.
b. The Geothermal Development Unit (GeoDU) under the Ministry of Trade, Energy and Employment has been in discussions with a consortium of developers for next stage construction of a production plant at Laudat, and is seeking

[3] The team's visit was not conducted as formal E&S sub-project due diligence, but rather to gather initial baseline information given the sensitivity of the sub-project locations. During CDB's subsequent appraisal of sub-project opportunities and in each instance of Geothermal and other Category A sub-projects, IDB will undertake a hand-in-hand due diligence evaluation to evaluate E&S gaps and mitigation measures s in conformance with the IFC Performance Standards and WB EHS Guidelines.

international financing.[4] As part of this process, the GeoDU plans to prepare a new Environmental and Social Impact Assessment (ESIA). It would be compliant with international best practice standards and address identified gaps defined by the World Bank under the earlier EIA, prepared in 2013 to national standards and in advance of exploratory drilling. Key issues to address would include: (i) an expanded analysis of the project's zone of influence particularly relating to the production plant location, and transmission line impacts, (ii) a more comprehensive environmental and social baseline, (iii) community perception of potential impacts related to air emissions, surface and ground water impacts, (iv) and a biodiversity baseline given location's sensitivity. In addition, detailed management plans will need to be developed such as an improved Stakeholder Engagement Plan including a consultation program preparation of a land acquisition and resettlement plan ach (a possibility at the Wotten Waven site),a land ownership/access arrangements, and a comprehensive Environmental and Social Management Plan. This updated ESIA will also include detail on the development and upgrade of the current 11kv transmission line, which would run approximately 30 km in length and currently services a nearby 6.5MW hydro facility. Should CDB's financing be considered for this next phase of Dominica's geothermal development, both IDB and CDB would work closely in the environmental and social analysis and preparation of the Terms of Reference (TORs) for these additional baseline studies.

c. ***Nevis****:* The field at Nevis is the second most advanced site. In 2010, an ESIA was prepared by an international consultant at the request of US Export-Import Bank and assessed based on World Bank Operating Manual (OP 4.01) and IFC Performance Standard requirements. While the EIA was prepared in advance of just the development of the 8MW production wells, the study contemplated additional phases, including the single-flash power plant, the pipelines, water supply system, and access roads, (it did not include an assessment of the transmission line). Unlike the Dominica site, the 79 acre concession is located predominantly on a relatively flat expanse of degraded land, previously used for agriculture and livestock grazing. Construction of the power plant would involve conversion of roughly 11 acres of land designated as a watershed. Installation of pipelines between production and reinjection well pads would span between 800-1200 feet depending on site selection. There is a scattering of roughly 40 residents to the east, south and west of the site at roughly 1,000 feet distance. The EIA includes a baseline E&S assessment, an evaluation of impacts, consideration of alternatives, a cultural heritage analysis, a brief assessment of cumulative impacts, and an Environmental Management Plan.
d. Should CDB financing be considered for the development of a production plant, additional analysis and additional baseline studies would be required. This should include further study on the wetland conversion, biodiversity impacts, and proposed compensation for land use loss, a detailed Stakeholder Engagement Plan, and detailed management plans pertaining to hazardous materials, air emissions and noise monitoring, emergency preparedness, and health and safety among others.

[4] While Dominica is at this advanced stage, clarity on the applicable regulatory framework is still needed, the absence of which hinders both developer and financier commitment going forward. Currently, while various versions of a Geothermal Bill have been drafted, no clear law exists that would provide clarity to investors and developers on the permitting, approval, and resource ownership structure for future development.

e. ***St Vincent****:* The Government in Saint Vincent and the Grenadines is actively pursuing the development of a 10-15MW geothermal plant (through the "La Soufriere Geothermal Project") with the support of the private sector. The geothermal resources in Saint Vincent have not been explored. Light and Power Holdings (based in Barbados) and Reykjavik Geothermal have conducted surface exploration and are getting ready to undertake exploratory drilling. While surface reconnaissance suggests that the resource is of high quality, more detailed information on the size and quality of the resources is needed to accurately estimate the potential cost of developing geothermal power. Since agreeing on a commercial framework and signing a project Letter of Intent (LOI) in early 2013, the Government and its project partners have completed a prefeasibility study, a geothermal resistivity study, the baseline study for the ESIA and began work on the ESIA for the project holding two rounds of stakeholder and community consultations. A third round of public meetings is being prepared for end of June 2015. An infrastructural assessment indicates that upgrades will be required to existing access roads and the cost has been estimated at around US$ 4 million.

4.6 **Wind:** Wind energy projects can result in adverse environmental or social impacts, which will vary in nature, intensity and duration based on the specific characteristics, location and size of the wind farm and social context. The most significant issues relate to bird and bat mortality, noise and land use concerns. Depending on the area, the construction of access roads and transmission lines to connect the wind farms to the grid could intensify the adverse impact of these projects. As no particular sub-projects have been identified, the general risks and impacts during construction could include: (i) habitat disturbance; (ii) soil erosion; (iii) dust generation; (iv)increased heavy traffic; (v) noise; (vi) loss of vegetation and; (vii) occupational health and safety hazards for the workforce. During operation, the risks and impacts could include: (i) bird and bat collision; (ii) loss of vegetation; (iii) accidental discharges of hazardous materials; (iv) community health and safety hazards; and (v) noise impacts caused by the wind turbines.

4.7 **Solar:** E&S impacts with solar facilities are more limited in comparison and during construction mainly relate to the installation of the solar panels, foundations, and transmission line as well as the substation and access roads. Main construction impacts are: (i) habitat disturbance; (ii) soil erosion; (iii) dust generation; (iv) increased heavy traffic; (v) loss of vegetation and; (vi) occupational health and safety hazards for the workforce. During operation, the main impacts can include: (i) loss of vegetation; (ii) community health and safety hazards; and (iii) water consumption.

4.8 **Energy Efficiency:** The ESHS risks and impacts are expected to be low to moderate, and relate primarily to the substitution of old technology and equipment, and the proper disposal, recycling and reuse of materials, especially those considered to be hazardous. In the context of this Facility, likely activities will focus on equipment replacement related to street lighting, government buildings, schools and hospitals. The possible impacts can include (i) inadequate disposal of gases used for cooling (i.e., chlorofluorocarbons), (ii) asbestos from old insulation, (iii) possible hazardous waste contained in old machinery/plant equipment, and (iv) health and safety risks associated with the disposal of such wastes, as well as the installation of new equipment.

V. Management and Monitoring of Environmental and Social Impacts

5.1 CDB's current Environmental and Social Policies and Review Procedures (ESRP) were approved at the end of June 2015. Their procedures include a set of nine environmental and social performance standards (PS) that reflect the principles, core policies, standards and best practice approaches adopted and used in the treatment of sensitive environmental and social issues by the multilateral financial and development community. As a matter of practice, under this Facility, sub-projects will be reviewed against the IFC Performance Standards and World Bank Environmental, Health and Safety (EHS) Guidelines.

5.2 Through a previous loan to CDB (RG-L1018) approved in 2012[5], IDB sought to specifically encourage alignment of CDB's safeguard policies with that of IDB with respect to operationalizing CDB's Information Disclosure Policy (IDP). CDB has since operationalized the IDP and project appraisal reports including environment and social analysis are disclosed on the Bank's website prior to Board approval with a minimum of two weeks prior notice. CDB has also recently put in place a mechanism for managing project complaints, which is consistent with international good practice. Further detail and specific implementation measures for this grievance mechanism will be carried out through 2015.

5.3 CDB has stated, to its knowledge, that it has no financial liabilities in its existing portfolio, related to environmental, social and health and safety issues. CDB has stated that it has no outstanding environmental, social, health and safety concerns, through involvement in projects, companies or activities considered unacceptable to the IDB that could potentially generate significant public opposition or concerns, for example due to inappropriate development location. CDB has also stated that its finance application and analysis process is equitable, fair, and unbiased in terms of social factors (e.g. gender, age, ethnicity, or cultural heritage).

5.4 The E&S team supports on all CDB operations (including TA, grant, and country study preparation), though dedicates most significant attention to the 10-12 projects approved annually where projects are brought in line with CDB's Environmental and Social Policies. Similar to IDB, CDB incorporates E&S covenants into contracts, monitors project E&S performance, and when necessary prepares Corrective Action Plans. The majority of projects financed have been Category B operations. There is limited experience with Category A operations and no experience with geothermal. In the past five years, CDB financed one Category A project, the Montserrat Power Plant, and applied the WB EHS Guidelines in evaluating performance.

5.5 Since IDB's last loan, responsibility for environment and social safeguard compliance is now the responsibility of eight E&S and gender specialists. Specialists are assigned to a group of countries and are responsible for work on projects in those countries throughout all phases of the project cycle. Through partnerships with European Investment Bank and Department for International Development, CDB has expanded its work programme specific to energy audits and climate vulnerability assessments. There is, however, a recognized capacity gap specific to geothermal E&S analysis, which is being addressed under this Facility through the provision of technical capacity support provided by an external consultant specific to the financial, regulatory, risk, and E&S aspects specific to geothermal projects.

[5] http://www.iadb.org/en/projects/project-description-title,1303.html?id=RG-L1018

Process stages for hand-in-hand due diligence

5.6 IDB and CDB have agreed that for all Geothermal high risk sub-projects (Category A and B+), IDB will undertake due diligence alongside CDB's team throughout the project preparation, appraisal, and monitoring phases.[6] The objective of this hand-in-hand due diligence is to help build E&S capacity in CDB's analysis of high risk geothermal projects, and ensure that project impacts are adequately mitigated according to the IFC Performance Standards and WB EHS Guidelines. The process steps defined below will be incorporated into the Operating Manual for this Facility developed between IDB and CDB, and are designed to correspond with CDB's existing credit and approval process stages. Recognizing that funds from CDB, and by extension IDB, can be used at either grant (feasibility study, slim hole) or loan stages (exploration, production, plant construction and operation), the process steps are customized accordingly.

5.7 For the Grant approval project cycle (applying exclusively for geothermal sub-projects) for 3G or slim hole drilling, the corresponding E&S procedures are:

CDB Grant Approval Cycle	CDB E&S Role	IDB E&S Role
1. Grant application received (may or may not include E&S analysis)	• CDB reviews E&S analysis, if any, presented by project sponsor/developer • CDB determines validity / eligibility of grant application. If advancing, provides IDB with corresponding E&S documentation, and pre-classification	• IDB receives application and corresponding E&S analysis, if any.
2. CDB defines/reviews Terms of Reference (TOR) for pre-investment activities eligible for grant funding (3G analysis, E&S analysis, infrastructural assessment, slim hole drilling)	• CDB prepares TOR for E&S Scoping Analysis as either a component of wider TOR or a separate document • Sends TOR to IDB for review and comment	• IDB reviews and inputs into prepared E&S TOR scope, and coordinates comments with IDB review of wider TOR *Formal Sign-off* • IDB returns TOR with comments within five working days.
3. Grant Awarded	• CDB informs IDB of selected consultant, and liaises with consultant in execution of the work. CDB engages IDB on an as needed basis for advice/offer of opinion. • CDB visits site on an as-needed basis to evaluate progress and specific impacts • CDB confirms environmental pre-classification and sends near-final draft of Scoping Analysis to IDB.	• IDB informed of any particular E&S risk concerns (in event of project visit). • IDB provides comment, if any, on near-final draft of Scoping Analysis.

[6] Category A projects in sectors that are not in geothermal or associated with a geothermal project will come to IDB only for non-objection.

4. Completion of Analysis/Pre-Investment Activity	• CDB receives final report / analysis and sends to IDB. • On basis of successful analysis, CDB informs IDB of possible second phase (loan).	• IDB reviews final products and reports.

5.8 For the Loan approval project cycle (applying to all Category A and B+ geothermal sub-projects), the project proponent may be undertaking exploratory drilling, developing production and reinjection wells, constructing power plants, sub-stations, or transmission lines. As the investment activities are more significant in scope with the potential for greater E&S impacts additional process stages apply. As such, the corresponding E&S procedures are:

CDB Loan Approval Cycle	CDB E&S Role	IDB E&S Role
1. Preparation of CDB Concept Note	• CDB makes pre-classification and proposes E&S strategy for due diligence	*Formal Sign-Off* • IDB provides input into strategy and clearance on pre-classification.
2. Project preparation and definition of Terms of Reference (TOR) second stage investment (exploratory drilling, development of production/reinjection wells, plant construction, etc.)	Scenario 1: ESIA prepared • Where ESIA is available, CDB conducts analysis of the adequacy of the documentation, identifies gaps with regard to IFC PS and WB EHS Guidelines, and proposes plan to IDB for additional analysis/ engagement of consultants/ etc. so that gaps are addressed and sends draft TOR if applicable. • CDB initiates coordination with IDB for project due diligence during Appraisal Scenario 2: ESIA not prepared • CDB prepares a comprehensive TOR to define scope of ESIA, and sends to IDB for review/comment/approval. • Project Appraisal stage for E&S is on hold until ESIA is prepared and is made publicly available.	Scenario 1: ESIA prepared • IDB reviews ESIA, gaps identified, and TOR prepared. Coordinates comments with wider IDB preparation of TOR. • IDB coordinates with CDB on project due diligence. Scenario 2: ESIA not prepared • IDB reviews TOR prepared and provides comments, coordinating with wider IDB preparation of TOR.
3. Appraisal	• CDB and IDB conduct formal due diligence of risks, impacts, and mitigation measures. • CDB liaises with consultants in finalizing the Environmental and Social Appraisal document, Environmental and Social Management Plans, and any necessary Action Plans. CDB sends final documentation, including final environmental	• IDB participates in formal due diligence on E&S issues. • IDB confirms categorization, reviews Environmental and Social Appraisal and approves management and action plans • IDB is kept abreast of negotiations.

	categorization to IDB for review and approval. • On IDB's review and reply of documentation, CDB initiates negotiations with proponent for inclusion in Loan Documentation. • CDB ensures ESIA is publicly disclosed and available in the respective Country and at a minimum 30 days before the Project is considered for approval by CDB's Board.	
4. Approval	• CDB prepares Loan Documentation with inclusion of all agreed E&S requirements. • A summary of the Environmental and Social Appraisal is simultaneously disclosed on CDB's project webpage and to CDB's Board at a minimum 10 days prior to Board's meeting.	*Formal Sign-off* • IDB provides non-objection on E&S requirements, E&S legal covenants, and related material as necessary. IDB coordinates E&S sign-off with wider IDB non-objection.
5. Funding agreements, and legal E&S covenants	• CDB incorporates necessary E&S covenants per agreed management plans/action plans into loan agreement.	•
6. Supervision	• CDB prepares TOR for supervision and E&S audit of sponsor's management of E&S issues. CDB conducts supervision of E&S management on an annual or bi-annual basis depending on severity of risk and impacts. Supervision costs for consultant are paid for by CDB's project budget. • When necessary, and on the recommendation of external consultant, CDB may require the sponsor to adopt a Corrective Action Plan (CAP) where particular risks become present.	• IDB reviews TOR for supervision, and E&S audit, and provides comments if required. IDBparticipates as necessary in subsequent supervision missions. • Copies of Supervision reports provided to IDB. • In case of a CAP, IDB will review and approve the defined CAP.

5.9 As part of the sub-project pre-classification and classification process described above, the below table provides general and indicative parameters to ensure the accurate categorization of sub-projects. Both CDB and IDB recognize that final categorization will depend on the sub-projects' specific impacts. For other non-geothermal Category A projects, which are unlikely under this Facility, IDB and CDB will agree on a case by case basis a due diligence process, but which will include at a minimum a two stage non-objection process at the concept and appraisal stages. This table below will be also incorporated in the Operating Manual.

Category	Project examples and general parameters

Category A	• Geothermal exploratory drilling, production and reinjection drilling, power plant construction, and construction of pipelines • New transmission lines in excess of 30 km in areas of high conservation value linked to Geothermal • Wind farms greater than 50 MW in capacity • Projects with high social impacts, in indigenous communities, involving significant resettlement, or in areas of conservation value linked to Geothermal
Category B+	• Small-scale geothermal (less than 7MW) on existing degraded sites with no social/natural habitat impacts • Early stage geothermal slim hole drilling • New transmission lines in excess of 15 km • Wind farms between 20-50MW in capacity, or with natural habitat impacts • Solar projects greater than 50 MW, or with natural habitat impacts
Category B	• Solar projects below 50 MW with no natural habitat impacts • Energy efficiency projects with management of hazardous wastes
Category C	• Energy efficiency projects with no management of hazardous wastes

VI. Requirements to be included in the Legal Agreements

6.1 For this operation which will involve on-lending for the development of renewable energy and energy efficiency projects, IDB will require CDB as part of the Loan Agreement to:

A. Throughout the Life of the Loan:

i. Comply with all applicable national environmental, social, health and safety, and labor regulatory requirements, and in relation to the financing of sub-projects with IDB's proceeds ensure that each sub-project complies with: (a) CDB´s Environmental and Social Policies and Review Procedures; (b) in-country regulations; (c) the IDB List of Excluded Activities; (d) the Fundamental Principles of the Rights at Work; and (e) the IFC Performance Standards and World Bank Environmental, Health and Safety Guidelines.

ii. For all high risk (Category A and B+) geothermal sub-projects , follow the specific procedures as defined in paragraphs 5.6-5.9 of this document. This includes, among others, notifying IDB of new operations, presenting an initial classification, providing for comment draft Terms of Reference for E&S analysis, coordinating due diligence and supervision when and as necessary, and receiving IDB's non-objection at defined stages.

iii. Simultaneously disclose environmental and social documentation (summary of the environmental appraisal) with other Board papers at a minimum of 10 days prior to the consideration by the CDB Board of Executive Directors, and provide details of where the EIA or SIA may be consulted. Final approval will take into consideration any material concerns raised during the above mentioned disclosure period.

iv. Ensure adequate provision of financial resources as a component of CDB's project costs for supervision and independent review of environmental and social performance for high risk geothermal and Category A sub-projects.

v. For other non-geothermal Category A projects, IDB and CDB will agree a due diligence process on a case by case basis. At a minimum, this will include non-objection at the concept and appraisal stages per the project cycle.

vi. Notify IDB within five days in any instance of sub-project non-compliance with regard to any environmental, social, health and safety issues, and Loan Agreement Requirements, agreed Action Plans, or other pertinent legal covenants.

vii. Ensure the EIA or SIA is publicly disclosed and available prior to CDB's (and IDB where required) appraisal mission, in whichever case is greater: (i) conformance with the time required by the laws of the respective country or (ii) 30 days prior to the CDB Board of Directors.

B. Prior to First Disbursement:

i. Implement the Operating Manual designed for this Facility as a condition for first disbursement, and specifically apply the contractual conditions detailing particular environmental and social procedures and standards as defined within this ESMR.

C. Reporting, Monitoring and Supervision:

6.2 During the life of the Loan Agreement, CDB will prepare and submit an Environmental and Social Compliance Report (ESCR), in form, content and frequency acceptable to IDB. This is expected to be annual, and include a list of individual investments each with their environmental and social impact and risk categorization, a summary of key impact and risk issues identified during screening, a summary of mitigation measures agreed, as well as the status of compliance with these mitigation measures (for those projects that have moved into execution/supervision), and/or status of compliance with a CAP (if any).

6.3 The IDB will supervise the environmental, social, health and safety, and labor aspects related to the use of the proceeds of the Facility semi-annually/annually. This supervision will be conducted by an in-house specialist (and as needed, with the assistance of an external independent environmental and social consultant).

Annex 1:

Map 1: Dominica Map with Production and Reinjection Wells

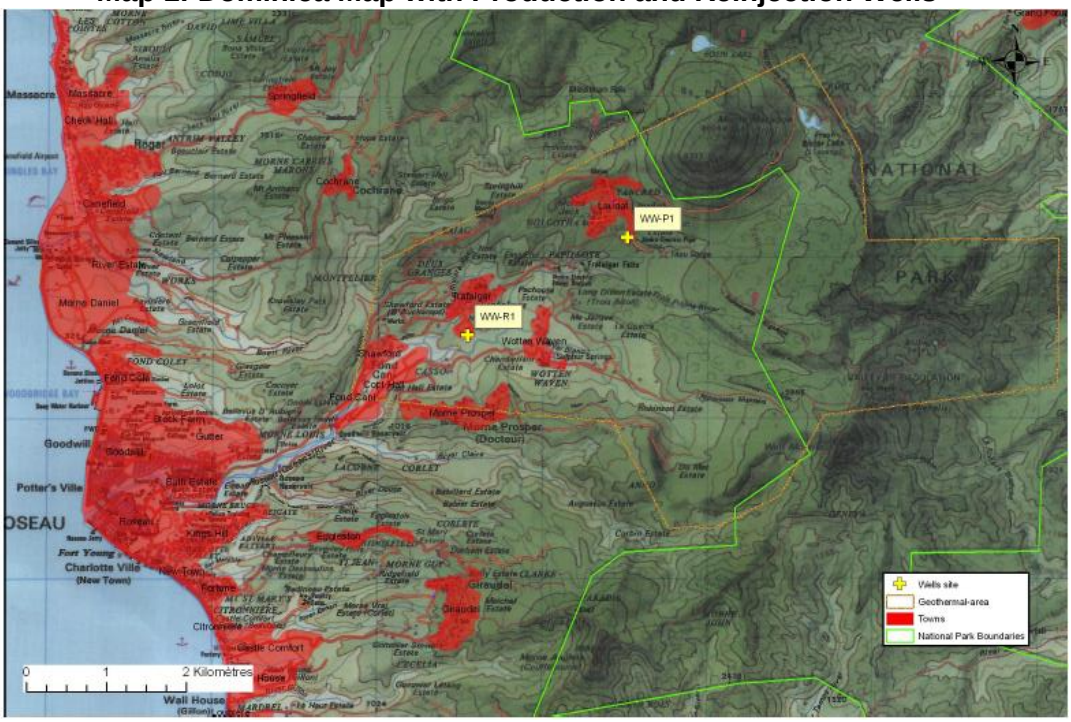

Figure 144: Location of urban areas in the Roseau Valley

Map 2: Nevis Map detailing proposed site and concessional area