

**INTEGRATED SAFEGUARDS DATA SHEET  
CONCEPT STAGE**

Report No.:

**Date ISDS Prepared/Updated:** 04/05/2017

**I. BASIC INFORMATION**

**A. Basic Project Data**

Country: Dominica	Project ID: P162149	
	Additional Project ID (if any):	
Project Name: Dominica Geothermal Risk Mitigation Project		
Task Team Leader: Elvira Morella		
Estimated Appraisal Date: 10/09/2017	Estimated Board Date: February 15, 2018	
Managing Unit: GEE04	Lending Instrument: Investment Project Financing	
Sector: Energy & Extractives		
Theme: Energy		
IDA Amount (US\$m.): 9.5 CTF Amount (US\$m.): 10.0 DFID Amount (US\$m.): 7.0 SIDS DOCK Amount (US\$m.): 2.0 Other financing amounts by source: 15.0		
Environmental Category: A		
Simplified Processing	Simple [ ]	Repeater [ ]
Is this a transferred project	Yes [ ]	No [X ]

**B. Project Objectives:**

The objective of the proposed project is to help: a) diversify the domestic power generation mix in Dominica by integrating clean, renewable geothermal energy; and b) assess the viability of exporting geothermal-based electricity to regional islands.

The project has truly transformation potential. The diversification of the energy mix using more cost-efficient indigenous geothermal energy resources will allow Dominica to reduce and stabilize the long-term costs of electricity generation in the country, making Dominica's businesses and firms more competitive and relieving hardship for electricity consumers. In addition, by assessing the viability of a potential larger operation for regional electricity trade, the proposed Project will help explore new growth opportunities for Dominica, which would enhance the long-term development prospects for the country.

**Key Results**

The primary results arising upon completion of the proposed Project are expected to be:

- (a) Generation capacity of geothermal energy constructed under the Project (MW);
- (b) Increased share of renewable energy capacity in the domestic generation mix (percentage);
- (c) Preliminary feasibility ascertained regarding the prospects for regional electricity trade through exports of geothermal power; and
- (d) Estimated GHG emissions reduction compared to a business-as-usual baseline (tCO<sub>2</sub>e).

### **C. Project Description:**

The proposed Project is designed to build on efforts by the Government of the Commonwealth of Dominica (GoCD) to date to advance geothermal development in the Wotten Waven-Laudat field in the Roseau Valley, and help reduce risks and ease key barriers to a level that would attract a qualified private developer to partner with and undertake further expansion of the field. The Project will first develop a Small Geothermal Power Plant (SGPP) with an estimated capacity of 5-7 MW to serve domestic baseload needs, displacing an equivalent amount of costly diesel-based generation capacity. This alone has transformational potential as it will critically contribute to stabilize electricity costs in the country. Its operation will also help confirm operating conditions of the reservoir and its ability to support electricity production over an extended period. A contingent finance facility will be established to provide insurance against potential residual resource risks that may arise in a first-time, green-field operation of a reservoir. Once SGPP is fully functioning, the green-field will become a less risky brown-field operation, one that is better positioned for further expansion and development of a Large Geothermal Power Plant (LGPP) that would produce electricity for exports to neighbor islands. A comprehensive assessment will be needed to evaluate the viability of LGPP and develop a roadmap to move forward. The improved knowledge about the geothermal field, the proven operational capability of the reservoir, and the identification of a clear roadmap will altogether provide what is necessary make an informed decision about the approach to proceeding with LGPP. In addition, the GoCD will be in a better position to evaluate market conditions and structure a transaction that may secure the right private partner.

The project will be developed by the Dominica Geothermal Development Company (DGDC), which has been established by the GoCD under corporate law with the sole mandate to develop and operate the Wotten Waven-Laudat field.

The proposed project will comprise of three strategic components:

**Component 1: Development of Domestic Geothermal Power Generation Capacity (Estimated costs US\$34 million)** – This component will entail construction of a 5-7 MW power plant and associated steam above-ground systems (SAGS), based on the existing well inventory that has been drilled by the GoCD, plus the transmission interconnection to the nearest sub-station at Laudat<sup>1</sup> for dispatching electricity into the grid operated by DOMLEC (the national utility). Existing wells will be used for reinjection, which, together with the use of the existing transmission easement, will significantly reduce the environmental and social impacts associated with the Project.

**Component 2: Contingent Drilling to Insure against Resource Risk (Estimated costs US\$9 million)** – This component is meant to further mitigate resource risks that may affect the operation of SGPP and raise concerns over the capability of the geothermal field. Specifically, funds will be set aside to finance the

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<sup>1</sup> The transmission interconnection to Laudat will include the construction of a new transmission line to the existing hydro power station, covering a distance of about 300 meters. If there are other transmission upgrades required for integrating SGPP into the domestic power system, these will be identified during project preparation.

drilling of additional (make-up) production and/or reinjection wells if the productivity of the existing production well declines below an acceptable level and/or the injectivity of the reinjection well does not adequately support power production. The contingent drilling would help restore the steam field's operational capacity; it would also provide additional knowledge about the field characteristics that would inform the scope and design of LGPP.

**Component 3: Technical Assistance for Advancing LGPP to Development Status and Soliciting Private Sector Investment (Estimated costs US\$2.5 million)** – This component will finance a comprehensive set of analysis that will help make an informed decision on expanding the geothermal field and identify a clear roadmap for developing LGPP. Specifically, the following key activities will be carried out: (i) additional geological surveys and scientific studies to better identify the likely boundaries of the larger geothermal resource at Wotten Waven-Laudat; (ii) preliminary assessment of the feasibility of the transmission infrastructure (the transmission lines and undersea cables) that would be likely needed to transfer electricity to neighbor islands (Guadeloupe and/or Martinique); (iii) feasibility study to confirm the viability of LGPP including defining its potential scope, need for additional delineation drilling, and its “bankability”; (iv) based on results of studies in (iii), preparation of an Environmental and Social Impact Assessment (ESIA) that meets international standards; and (v) development of an investor prospectus and market outreach to solicit private sector interest to invest in LGPP. With these studies in hand and investor interest peaked, the GoCD would be able to fully engage the market and identify and select a qualified private partner with the expertise needed to take on the next, larger, and more complex investments in the Wotten Waven-Laudat field, and unlock its potential for further transformational impact.

**D. Project location and salient physical characteristics relevant to the analysis of environmental and social risks and impacts (if known):**

The Wotten Waven geothermal field is located in the southwestern part of the Caribbean island of Dominica, in the Roseau Valley about 5 to 6 km east of the capital Roseau. The valley lies inland from the coast and is mainly covered by forest with rich vegetation. Mountains surround the valley on three sides and the entrance to the valley is marked by narrow cliffs. The mountains located farthest to the West belong to the Mornes Trois Pitons National Park (MTPNP), which was established in 1975 under the National Parks and Protected Areas Act. In 1997, MTPNP was also declared UNESCO World Heritage Site, inscribed on the World Heritage List under natural **criteria viii** (“To be outstanding examples representing major stages of the earth’s history, including the record of life, significant on-going geological processes in the development of landforms or significant geomorphic or physiographic features”) and **criteria x** (“To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation”). MTPNP is a main tourist attraction and is close to the Wotten Waven-Laudat field. Other touristic attractions in or close to the Roseau Valley include: the hot springs at Wotten Waven; the Trafalgar Falls; the Boiling Lake; the Titou Gorge; the Valley of Desolation; and the Freshwater Lake.

The assessment of the geothermal resource of the Wotten Waven field has been based on the results of geoscientific investigations carried out during 1997-2008 and the exploration drilling program conducted by the Government. Three boreholes (slim holes) were drilled from three separate well pads in 2011 and 2012 (WW-01 located along the Trafalgar-Wotten Waven link road; WW-02 and WW-03 located in the Laudat area). In 2013/14, a production well (WW-P1) was drilled in the same pad as WW-03; and a reinjection well (WW-R1) was drilled in the south-western boundary of the resource.

About 1,800 people live in the Roseau Valley, with nearly 1,000 in Trafalgar and Shawford, and the remaining in the hamlets of Wotten Waven/Casseau, Copthall, and Laudat. A fairly robust process of stakeholder consultations and dialogue was carried out primarily in 2013. The consultations documented community concerns with regard to potential risks associated with the geothermal plant; the potential impacts (which can be both positive and negative) on ecotourism that is a key economic activity in the valley; and the prospects for job creation, among others. These social impacts and risks as well as mitigation strategies when necessary will be the focus of the Environmental and Social Impact Assessment (ESIA) that will be carried out during project preparation. The ESIA will conduct further consultations as well as formulate a Stakeholder Engagement Strategy.

#### **E. Borrower's Institutional Capacity for Effective ESMS:**

The proposed project will be implemented by the Dominica Geothermal Development Company (DGDC), which has been specifically established to develop and operate the Wotten Waven geothermal field. DGDC is founded under the Companies Act (1994) and is a private entity in all respects. As such, it is intended to serve as a special purpose vehicle to attract a private partner. Given its nature, the company meets the criteria envisaged under Operational Policy 4.03 Performance Standards for Private Activities for application of the Performance Standards. DGDC will be responsible for the proposed project investments, including construction, testing, commissioning, operation and ownership of all infrastructure financed under the project. It will operate autonomously on a commercial basis, with the day-to-day management entrusted to a management team within the company. The nascent nature of DGDC and the limited geothermal development expertise available in Dominica to undertake the proposed project make it necessary to strengthen the capacity of DGDC. The company has a clear and dedicated mandate to develop the proposed project and its strategy calls for significantly augmenting its capacity through internationally reputable consultancies with extensive experience in designing and overseeing geothermal investments, as well as through local/regional specialists. With support from the Government of New Zealand (GoNZ), DGDC has acquired the services of Jacobs Engineering Group, who will assist the company throughout preparation and implementation of the project. Jacobs is a global consultancy firm with international experience in geothermal development and familiar with the application of performance standards. The GoNZ will also fund the position of a Project Manager/Chief Operating Officer recruited internationally, who will have in-depth, applied experience related to all aspects of geothermal development, including safeguards compliance. DGDC will be staffed with at least one Safeguard Officer. The GoNZ is closely coordinating its support with the World Bank, in order to ensure compliance with good industry practices and the requirements under the Performance Standards.

#### **F. Environmental and Social Safeguards Specialists on the Team:**

Ximena Herbas Ramirez, Senior Environmental Specialist  
Judith Lisansky, Senior Social Specialist Consultant

## II. PERFORMANCE STANDARDS THAT MIGHT APPLY

Performance Standards <i>(please explain why)</i>	Yes	No	TBD
<b>PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>	X		
<p>The project is proposed for risk category A on the basis of the screening criteria envisaged under World Bank's Operational Policy 4.03. Geothermal development is usually environmentally beneficial since often displaces more harmful, fossil-based alternatives for base-load power generation, improving the local environment as well as contributing to reduce global GHG emissions. In addition, a small geothermal power plant as the one that will be constructed under the proposed project has a limited environmental footprint. This includes potential drilling activities that may be required under Component 2. Nonetheless, the A categorization is recommended given the fact that the reinjection lines and the power plant are located on the periphery of Mornes Trois Pitons National Park (MTPNP) (an area with internationally designated legal protections). In addition, the project's direct area of influence could be located in high value biodiversity areas (KBAs and IBAs as designated by international conservation organizations). This will be further assessed during project preparation, and if confirmed, action will be taken accordingly.</p> <p><b><u>Environmental and Social Assessment.</u></b> The GoCD previously developed two Environmental Impact Assessments (EIAs) related to the drilling of exploration (slim hole), production and injection wells. The scope of the EIAs were:</p> <ul style="list-style-type: none"> <li>• Phase 1: EIA for the Exploration Drilling Process – prepared by Caraibes Environment Development (2011). Three slim hole wells were drilled (WW1, WW2 and WW3);</li> <li>• Phase 2: EIA of Geothermal Production and (Re) Injection Drilling Wells in Dominica –prepared by Caraibes Environmental Development (2013). Two full diameter wells were drilled – WW-P1 (production well) and WW-R1 (injection well).</li> </ul> <p>The EIAs were approved by the Physical Planning Department of Dominica's Ministry of Agriculture and Environmental Protection.</p> <p>An Environmental and Social Impact Assessment (ESIA) will be prepared for the proposed project as part of project preparation, encompassing the activities described in <b>Component 1</b> and <b>Component 2</b>:</p> <p>Activities under <b>Component 1</b> entail construction of: (i) 5-7 MW small geothermal power plant (SGPP); (ii) associated steam above-ground system (SAGS), consisting of roughly 4 km of cross-field pipelines to reinject hot brine back into wells; (iii) transmission line of approximately 300m from the power plant to the nearest sub-station at Laudat (the interconnection to DOMLEC grid may require additional work on the substation); and (iii) supporting infrastructure for primary and ancillary equipment, cooling system, road transport and water/waste water supply. Remedial works will have to be performed on the well pads for site improvement, slope stabilization, drainage, fencing, and lighting. Additional transmission upgrades that are required specifically due to the project (associated or linked project), if any, will be determined during project preparation based on a technical assessment conducted in coordination with DOMLEC, and will be included in the ESIA.</p> <p>Activities under <b>Component 2</b> entail drilling of one or more make-up production wells in case the productivity of the existing well declines below an acceptable level. If such additional drilling is deemed to be necessary, the well(s) would be drilled from the existing well pads, but targeted in a different</p>			

Performance Standards <i>(please explain why)</i>	Yes	No	TBD
<p>subterranean direction to access a new productive volume within the reservoir. If required, while the rig is mobilized, work-overs could be carried out on existing wells.</p> <p>The key environmental, health and safety (EHS) impacts and risks associated with the project's construction and potential drilling activities are: (a) potential contamination of surface and ground water and soils from drilling water, geothermal fluids, muds, and cuttings, if more wells are drilled as part of Component 2; (b) increased water consumption due to drilling, well testing, and construction activities; (c) potential air emissions, noise, and solid and hazardous waste generated from construction activities and/or accidental spills; (d) increased hazards associated with transportation of heavy equipment and machinery; (e) potential health risks to construction workers due to working under extremely hot conditions and handling and operating heavy equipment and machinery; and (f) incremental impacts associated with the easement and construction of the associated transmission line. Once SGPP is in operation, the key environmental, social, health and safety (ESHS) impacts and risks associated with the project are: (g) potential soil and water contamination from the re-injected water and drilling wastes (muds, cuttings); (h) increased emissions of potentially hazardous (and malodorous) air pollutants such as hydrogen sulfide (H<sub>2</sub>S) and mercury; (i) community and worker exposure to explosions, well blowouts, pipeline failures, induced seismicity and/or ground subsidence; (j) increased water consumption associated with power generation activities (primarily for operation of cooling systems); and (k) hazardous working conditions for plant personnel (e.g. increased risks of exposure to toxic gases; working in confined spaces or heights; exposure to heat, high pressure gases, and noise). These impacts and risks can be managed with existing pollution prevention and control technologies and with standard environmental management practices, such as those described in the World Bank's EHS Guidelines: <a href="http://www.ifc.org/ehsguidelines">http://www.ifc.org/ehsguidelines</a> and the EHS guidelines for Geothermal Power Generation <a href="http://goo.gl/W3hvY6">http://goo.gl/W3hvY6</a>.</p> <p>Due to the proximity of the production well and likely of SGPP (although the exact location of the power plant remains to be determined) to MTPNP, the ESIA will include considerations of biodiversity aspects at and around the sites, including assessment of direct, indirect and cumulative impacts on biodiversity values and development of mitigation actions as it may be required.</p> <p>The ESIA will be developed so as to comply with Dominica's laws and regulations, World Bank's Performance Standards and the applicable and relevant World Bank Group (WBG) environmental, health and safety guidelines and the guidelines for Geothermal Power Generation. The ESIA will be consulted and disclosed in line with the requirements prescribed for Category A projects.</p> <p>Activities under <b>Component 3</b> entail technical assistance (TA) to evaluate the viability of LGPP, including the potentially associated inter-island transmission line(s) for evacuating electricity to Guadeloupe and/or Martinique. The TA will also include assessment of the potential environmental and social impacts of LGPP and associated infrastructure, and the design of an adequate management framework.</p> <p>While the TA activities themselves do not have direct adverse impacts, the outcomes of the TA could involve investments with significant environmental and social implications depending on scope, site locations, and required follow-on actions. Accordingly, each of the identified infrastructure investments will be screened for potential social and environmental impacts. These assessments would identify which performance standards would be triggered, and in turn, the category of the Environmental Impact Assessment and consultation and disclosure required for a potential future LGPP operation.</p>			

Performance Standards <i>(please explain why)</i>	Yes	No	TBD
<p><b>Environmental and Social Management System (ESMS):</b> Given that DGDC has been established only recently, it does not have an ESMS. The company will have to develop and maintain throughout project implementation an ESMS adequate to address the level of environmental and social risks and impacts associated with the project. Key elements of the ESMS include: (i) policy; (ii) identification of risks and impacts; (iii) management programs; (iv) organizational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review. Some of the environmental and social management plans and procedures that need to be developed as part of the ESMS are: Stakeholder Engagement Plan including a Grievance Mechanism; Local Hiring and Training Plan; Security Management Plan; Community Health Management Plan, Cultural Heritage Management Plan; and Biodiversity Management Plan. DGDC should also prepare plans and procedures to address environmental accidents and health and safety emergency situations, as well as to mitigate the associated adverse environmental, health, safety and social impacts. The ESMS should include a clear allocation of responsibilities and a sound process and actions for dealing with emergencies. The ESMS will be part of the ESIA.</p> <p><b>Organizational Capacity and Competency:</b> Given the nascent nature of DGDC and the limited geothermal development expertise available in Dominica to undertake the proposed project, strengthening DGDC's capacity is paramount. The company has a clear and dedicated mandate to develop the proposed project and it will be staffed with at least one Safeguard Officer. In addition, the company has enlisted an array of internationally reputable consultancies to gain support throughout project preparation and implementation. Among these there is Jacobs, a world leader in the field of geothermal engineering and development, which is also very familiar with the application of performance standards. This support is being funded by the Government of New Zealand in coordination with the GoCD and the World Bank.</p> <p><b>The project's socioeconomic baseline</b> has benefited from previous EIAs (2009 and 2011); a Gap Analysis carried out by the World Bank in early 2013; and a subsequent ESIA social, physical and biological baseline survey (ESIA Baseline Study) carried out between 2013 and 2015. This addressed some of the gaps identified on the previous work; it carried out a stakeholder analysis and collected baseline socio-economic information. The baseline survey also included 3 public meetings in Laudat, Trafalgar and Wotten Waven in the Roseau Valley, as well as 25 stakeholder interviews in December 2013. About 1,800 people live in the Roseau Valley, of which nearly 1000 in Trafalgar and Shawford, and the remaining in the hamlets of Wotten Waven/Casseau, Copthall, and Laudat. Many livelihoods in the Valley depend on tourism, as this is one of the main tourist sites in the country, primarily for hot springs and nature activities; on small-scale agriculture; as well as jobs in the capital. The 2013 consultations documented community concerns for the potential risks associated with a geothermal plant; potential impacts (which can be both positive and negative) on ecotourism – a key economic activity in the valley; and potential for job creation, among others. The ESIA to be conducted for the proposed project will build upon previous studies and complete any remaining gaps, primarily concerning community engagement; community health risks; land acquisition and potential involuntary resettlement; livelihood issues; and cultural heritage. A Stakeholder Engagement Plan (SEP), including a grievance mechanism, is being prepared. An Environmental and Social Management Plan (ESMP) will be prepared and include action plans as needed, and the ESMS developed as highlighted above. The Bank team has reviewed the draft TORs for the ESIA and the SEP.</p>			
<b>PS 2: Labor and Working Conditions</b>	<b>X</b>		
The more detailed description of the proposed civil works, the operation of SGPP and of the steamfield,			

Performance Standards <i>(please explain why)</i>	Yes	No	TBD
<p>as well as the related labor requirements and working conditions will be further documented in the ESIA.</p> <p><b>Human Resources (HR) Policies and Procedures.</b> DGDC will need to draft and implement human resources regulations following Dominica’s Labor legislation and the requirements of PS2, specifically articulating the workers’ rights to form and join workers’ organizations, and procedures for workers to express their grievances and protect their rights without retaliation or discrimination.</p> <p><b>Occupational Health and Safety.</b> A comprehensive set of plans, standards, procedures and work instructions should be prepared and adopted by DGDC to cover all aspects of occupational health and safety. Risks to the occupational health and welfare of personnel involved in the project implementation should be assessed and mitigated following a risk management process in accordance with DGDC’s adopted requirements. Contractors will be required to comply with the occupational health and safety procedures.</p> <p>A Security Management Plan will be developed to safeguard project, workers and property and to ensure that safeguarding activities are carried out in a legitimate manner that avoids or minimizes risks to the community’s safety and security, as per PS2 and PS4.</p> <p>The WBG team will review the specific HR processes and practices for the project to ensure compliance with the requirements of the PSs, including contracts for third party employers, the provisions for a grievance mechanism and occupational health and safety practices.</p>			
<b>PS 3: Resource Efficiency and Pollution Prevention</b>	<b>X</b>		
<p>As part of the ESIA preparation, DGDC will need to develop project-specific pollution prevention and control and waste management procedures both for the construction and operation phases of SGPP , in consistency with international industry practice and following the requirements of PS3 (i.e. minimize or reduce adverse impacts on human health and the environment).</p> <p>Impacts on air quality require particular attention, especially with regards to the emission of hydrogen sulfide (H<sub>2</sub>S) during power plant operations. H<sub>2</sub>S emissions already occur naturally in geothermal areas and the cumulative effects of the natural emissions and the power plant need to be considered in terms of both actual impacts and the existing baseline. Use of <i>surface water and/or ground water</i> for the project activities and impacts to the resource require careful analysis. In addition, due to the importance of tourism in Dominica, it is important to assess <i>visual</i> and <i>noise</i> generated impacts on adjoining communities, tourist areas and cultural heritage sites.</p> <p>DGDC should ensure that resource conservation and energy efficiency is implemented in the project. The company will need to examine the different phases of the project (construction and operation), and monitor the mitigation measures for resource conservation and energy efficiency and set indicators to benchmark the performance of the project on these aspects following best practices for the industry.</p>			
<b>PS 4: Community Health, Safety, and Security</b>	<b>X</b>		
<p>The ESIA should evaluate the potential impacts and risks of the project to the nearby communities (Laudat, Trafalgar, Wotten Woven). Potential risks include: fire; seismic activity (natural and induced); subsidence (induced); flooding; exposure to escaping H<sub>2</sub>S from hot water or steam; transportation-related accidents and contamination of drinking water supplies. The ESIA should address these risks and emphasize the need for coordinating emergency response with local and central government</p>			

<b>Performance Standards (please explain why)</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
<p>authorities.</p> <p>DGDC's ESMS should include: a Health Management Plan to address matters regarding the health and wellbeing of construction workers, project staff and nearby communities; a Transport/Road Safety and Logistics Management Plan with measures to ensure safety of road users during construction; an appropriate Emergency Response Plan that include procedures to respond to accidental leaks, spills, emissions, fires, and other unforeseen impacts (including natural disaster events such as landslides, unstable terrain, seismic activities, volcanic eruptions and floods). Issues pertaining to management of security personnel should also be appropriately specified in line with the related PS.</p>			
<b>PS 5: Land Acquisition and Involuntary Resettlement</b>	<b>X</b>		
<p>For Component 1 (construction of the 5-7 MW SGPP supplying domestic demand) the project will require primarily the acquisition of small amounts of land for the power plant and the reinjection system. The locations for these are not yet determined, but will be identified during project preparation. There is also a small possibility that the project activities will require involuntary resettlement/relocation and cause adverse livelihood impacts. For the activities under Component 3, which entail preparation of a potential larger geothermal operation (LGPP) to be implemented in the future (after this project), the anticipated activities are mostly studies (including another ESIA for the potential larger operation) and planning. Lastly, three plots of land were already acquired prior to the project where the existing slim holes and production wells are installed. It is also pertinent that the Roseau Valley is relatively sparsely populated and that the Government has already carried out numerous consultations and outreach there at various points over the past six years, as is documented in the previous two EIAs (2009 and 2011), a Gap Analysis (2013) and the ESIA Baseline Study (2013-2015). The ESIA to be carried out for the proposed project will complement these previous studies and complete any remaining gaps. In addition, a Stakeholder Engagement Plan is being prepared. The DGDC team informed the Bank that the objective is to avoid physical relocation and adverse livelihood effects for potentially affected persons as much as possible. It was agreed that prior to appraisal DGDC will: (i) carry out and publicly disclose an Audit of the previous land acquisition to ensure compliance with World Bank Performance Standard 5; (2) if new site locations are decided beforehand, prepare and publicly disclose a Resettlement Action Plan (RAP) and/or Livelihood Restoration Plan (LRP) for any known locations of civil works anticipated under the project prior to appraisal; and (3) prepare and publicly disclose a Resettlement and/or Livelihood Restoration Framework for sites that will be determined during project implementation.</p>			
<b>PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>	<b>X</b>		
<p>Due to the proximity of the production well and likely of SGPP to the Mournne Trois Pitons Natural Park, and the fact that the project will be implemented in the direct area of influence of high value biodiversity areas (KBAs and IBAs as designated by international conservation organizations), the ESIA should include a proper biodiversity assessment at and around the sites including assessment of impacts on biodiversity values and development of mitigation actions to address any impacts including direct, indirect and cumulative effects. Consultations would include international and local specialists in ecology and biodiversity to provide expert input into the design and location of the pilot investments.</p>			
<b>PS 7: Indigenous Peoples</b>		<b>X</b>	
<p>A screening (including information from the 2013-2015 ESIA Baseline Study) concluded that project activities in the Roseau Valley, which is located in the southwest of Dominica, will not affect indigenous communities, which are located in the northeast of the island. In Dominica there are approximately 3,000 Kalinago indigenous peoples who live in a collectively owned 3,700 acre territory spread out over</p>			

<b>Performance Standards (please explain why)</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
eight hamlets on the northeastern coast of the island. Together these eight villages are known as the Kalinago Territory (please see <a href="http://kalinagoterritory.com">http://kalinagoterritory.com</a> ). Formerly known as the Carib Territory, the peoples' and territory's name were officially changed on February 20, 2015.			
<b>PS 8: Cultural Heritage</b>	<b>X</b>		
The ESIA should have a robust cultural baseline to assess whether any of the project activities are located in areas with cultural or architectural significance (tangible features). It should also include a consultation process with local people so that the potential impact on unique natural features or intangible forms of culture are identified and understood. The ESMP should include a chance finds procedure, and depending on the findings of the baseline assessment, more project specific mitigation measures in impacted areas may be necessary. UNESCO will be consulted to ensure that there is no potential impact to the designation of the nearby World Heritage Site (the Mornes Trois Pitons National Park) nor inconsistency with any existing or planned management plans for the core area and surroundings.			

### III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the ESRS would be disclosed and the PAD-stage ISDS would be prepared: July, 2017
- B. For Category C or Category FI projects that do not require an ESRS, the target date for preparing the PAD-stage ISDS:
- C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>2</sup> should be specified in the PAD-stage ISDS: May to September 2017

### IV. FOR MORE INFORMATION CONTACT:

<http://projects.worldbank.org>

### V. APPROVALS

<b><i>Signed and submitted by:</i></b>		<b>Date</b>
<b>Task Team Leader:</b>	<b>Elvira Morella</b>	<b>May 4, 2017</b>
<b><i>Approved by:</i></b>		
<b>Regional Safeguards Coordinator:</b>	<b>Noreen Beg</b>	<b>May 8, 2017</b>
<b>Comments:</b>		
<b>Sector Manager:</b>	<b>Antonio Barbalho</b>	<b>May 9, 2017</b>
<b>Comments:</b>		

<sup>2</sup> Reminder: The Bank's Access to Information Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.