



PROJECT IDENTIFICATION FORM(PIF)

PROJECT TYPE: Medium-sized Project
 TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Promoting access to clean energy services in Saint Vincent		
Country(ies):	Saint Vincent and the Grenadines	GEF Project ID: ¹	5297
GEF Agency(ies):	UNDP(select)(select)	GEF Agency Project ID:	5146
Other Executing Partner(s):	Energy Unit of the Ministry of National Security; MOWHE, VINLEC	Submission Date:	2013-02-07
		Resubmission Date:	2013-03-08
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48
Name of parent program (if applicable):		Agency Fee (\$):	164,016
<ul style="list-style-type: none"> • For SFM/REDD+ <input type="checkbox"/> • For SGP <input type="checkbox"/> 			

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-Financing (\$)
CCM-3	GEFTF	1,726,484	23,351,779
Total Project Cost		1,726,484	23,351,779

B. INDICATIVE PROJECT FRAMEWORK

Project Objective: To promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused hydropower capacity, untapped wind resources and unrecovered waste heat power potential						
Project Component	Grant Type ³	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing(\$)
1. Clean energy policy framework	TA	1. Effective enforcement of approved clean energy enabling policy framework in SV&G	1.1. Approved recommended framework for long-term integrated energy resource planning, incorporating targets and milestones for renewable energy (e.g. hydroelectric power, recovered heat, wind) - Resource assessments with RE potential for each technology in line with national goals (30% RE by 2015) - Study of technology options with socio economic costs and benefits identified - Time schedule agreed to achieve action plan goals for each RETs	GEFTF	371,310	935,000

¹Project ID number will be assigned by GEFSEC.

²Refer to the reference attached on the [Focal Area Results Framework](#) when completing Table A.

³ TA includes capacity building, and research and development.

			<p>1.2. Approved procedures for renewable energy projects and scope of full feasibility studies and assessments to help Saint Vincent map resource, grid plans, and solutions (e.g. IPP, PPPs, feed-in-tariffs, etc)</p> <ul style="list-style-type: none"> - <i>National resource mapping targets</i> - <i>RE technology options review and selection of incentive mechanisms</i> - <i>Streamlined RE procurement guidelines and enforcement in place (one-stop-shop)</i> 			
2. Clean energy capacity development	TA	2. Clean energy technical and institutional awareness developed and implementation capacity in SV&G strengthened	<p>2.1. Completed RE technology-specific peer-to-peer learning and mentoring programmes, fostering exchanges of national and sub-regional developments</p> <ul style="list-style-type: none"> - <i>Training events on the benefits of RETs for key decision makers</i> - <i>Review of the impact of fossil fuel subsidies & their phase out/down</i> - <i>Selection of public/private mix of financial derisking instruments to attract RE investments</i> <p>2.2. Documented and disseminated best practices/lessons learned in clean energy solutions for SIDS amongst Eastern Caribbean utilities (e.g. CARILEC)</p> <ul style="list-style-type: none"> - <i>Regional energy consultations</i> - <i>Project site visits, webinars, other media</i> 	GEFTF	80,000	515,000
3. Clean energy RE-based electricity generation	Inv	3. Renewable energy solutions have been demonstrated to	3.1. Completed RE resource assessments	GEFTF	1,118,221	20,776,779

demonstrations		<p>befeasible, economically viable and have resulted in operational electricity generation investments in SVG</p>	<p>3.2. Completed feasibility studies of renewable energy technology applications (e.g. hydroelectric power, recovered heat, wind)</p> <ul style="list-style-type: none"> - <i>Definition of technical RET specifications</i> - <i>Selection of equipment and long lead items</i> - <i>Reduction of insurer premiums/contingencies</i> <p>3.3. Business plans, financing options and renewable energy development pipelines in Saint Vincent (wind, hydro, heat recovery)</p> <ul style="list-style-type: none"> - <i>Identification of government / public credit guarantees</i> - <i>Selection of equity / debt gearing ratios</i> - <i>Feed in tariff / market access mechanisms</i> <p>3.4. Successfully completed and operational renewable energy-based power generation installations of wind, hydro and recovered energy generation systems.</p>			
		Subtotal			1,569,531	22,226,779
		Project Management Cost (PMC) ⁴		GEFTF	156,953	1,125,000
		Total Project Costs			1,726,484	23,351,779

⁴To be calculated as a percent of subtotal.

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
Private Sector	St. Vincent Electricity Services (VINLEC)	In-kind	21,901,779
Bilateral Aid Agency (ies)	European Union/European Development Fund	Grant	935,000
Multilateral Agency (ies)	SIDS DOCK Platform (5Cs)	In-kind	300,000
GEF Agency	UNDP	In-kind	215,000
Total Cofinancing			23,351,779

D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (\$ (a))	Agency Fee (\$ (b))	Total (\$) c=a+b
(select)	(select)	(select)				0
Total Grant Resources				0	0	0

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

² Indicate fees related to this project.

E. PROJECT PREPARATION GRANT (PPG)⁵

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

	<u>Amount Requested (\$)</u>	<u>Agency Fee for PPG (\$)⁶</u>
• No PPG required.	<u>--0--</u>	<u>--0--</u>
• (upto) \$50k for projects up to & including \$1 million	<u>.....</u>	<u>.....</u>
• (upto) \$100k for projects up to & including \$3 million	<u>100,000</u>	<u>9,500</u>
• (upto) \$150k for projects up to & including \$6 million	<u>.....</u>	<u>.....</u>
• (upto) \$200k for projects up to & including \$10 million	<u>.....</u>	<u>.....</u>
• (upto) \$300k for projects above \$10 million	<u>.....</u>	<u>.....</u>

PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA (S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY

Trust Fund	GEF Agency	Focal Area	Country Name/Global	(in \$)		
				PPG (a)	Agency Fee (b)	Total c=a+b
(select)	(select)	(select)				0
Total Grant Resources				0	0	0

MFA: Multi-focal area projects; MTF: Multi-Trust Fund projects.

⁵ On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁶ PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

PART II: PROJECT JUSTIFICATION⁷

A. PROJECT OVERVIEW

A.1. Project Description. Briefly describe the project, including ; 1)the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario and any associated baseline projects; 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project; 4) incremental cost reasoning and expected contributions from the baseline , the GEFTF, LDCF/SCCF and co-financing; 5) global environmental benefits (GEFTF, NPIF) and adaptation benefits (LDCF/SCCF); 6) innovativeness, sustainability and potential for scaling up

i. THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

1. St. Vincent and the Grenadines import all of their primary energy in the form of fossil fuels, to generate electricity. Due to their persistently high costs, this leads to high generation costs and consequently high electricity tariffs. The high carbon content results in high per capita GHG emissions. As a result of the hike of oil prices, electricity tariffs have increased considerably in recent years. In 2007 households paid on average EC\$0.89/kWh including fuel surcharge (eq. US\$0.33/kWh), in 2008 this increased to nearly EC\$ 1.05/kWh (~US\$0.39/kWh), i.e. the average annual household bill for electricity increased to about EC\$ 1,700 (~US\$630). For every US\$ 10 increase in the price of a barrel of oil, the fuel surcharge increases by about US\$ 0.02/kWh. The electricity tariff augmented from a yearly average of EC\$0.09/kWh (~US\$0.03/kWh) in 1998, to EC\$0.52/kWh in 2008 (~US\$0.19/kWh), which represents an increase of more than 570%.
2. Despite the high baseline cost of electricity (and the current cost-competitiveness of renewable energies), limited clean energy developments take place in St. Vincent. Several barriers constrain the necessary drive to transform the country's renewable energy markets. Their comprehensive analysis will be included in the final project document at the CEO endorsement stage, confirming their extent, nature, root causes and interrelationship –at this stage, the key reason behind the lack of investment drive is the high cost of financing, created by high perceived risks that the project seeks to lower:

Barrier Type	Barrier Descriptions
<u>Regulatory Policy / Legal:</u> <i>National energy policies lack enabling instruments to implement some of the proposed action plans (eg pilots, funding)</i>	<ul style="list-style-type: none"> • Energy action plans on the planning and management of renewable energy resources have not resulted in the development of instruments or mechanisms to support their exploitation (e.g. PPPs, IPPs, PPAs), which would consider both supply and demand-side aspects and developmental concerns (e.g. local content, employment) • No incentives nor sanctions for utilities regarding the increase of existing renewable energy generation (current: 0.9MW hydro) • Energy policy decision-making monopolized by national utility (VINLEC), with limited influence by Saint Vincent's Ministry of National Security (overseeing energy planning) on forecasting, procedures or procurement. • No clear guidance on water and land use policy restrictions to be considered ahead of hydro and wind power developments • Limited clarity on procurement, tendering and licensing processes for electricity generation in St. Vincent and Grenadines
<u>Institutional / Technical:</u> <i>Limited expertise and unclear energy implementation arrangements</i>	<ul style="list-style-type: none"> • Limited hydropower maintenance capabilities, including lack of accountability over asset integrity/efficiency and decreasing reliability of equipment • Lack of energy expertise in Saint Vincent's Ministry of National Security (only one known senior officer with technical skills) • Limited sustainability of baseline projects, too dependent on donor involvement and funding to exist • Lack of awareness and information on the benefits of renewable energy sources of St. Vincent and the Grenadines • Partial knowledge of renewable energy endowments in Saint Vincent (no comprehensive resource assessment)
<u>Market / Financial:</u> <i>Lack of economies of scale and limited scope for clean energy investments suited to SIDS</i>	<ul style="list-style-type: none"> • Existing hydropower system equipment is already depreciated, but generates electricity at a seemingly lower cost, deterring additional investment, even if operating expenses keep increasing, and efficiency keeps decreasing • High electricity prices (avg. US\$0.40/kWh) not leading to increased clean energy access (93% coverage of fuel-generated electricity) because the upfront investment cost of renewables for the small isolated market of St. Vincent is still considered as too high • High upfront cost of new equipment required is discouraging the search for traditional and innovative financing • Market size leads to monopolistic context with no incentive for generation, transmission or distribution efficiency • Lack of coordination of available traditional and innovative financing mechanisms (SIDS DOCK, CDB, other)

3. The proposed project seeks to address the above-mentioned barriers, in order to transform the market for electricity generated from renewable energy in St. Vincent. With incremental GEF funds and UNDP support, the baseline projects are also expected to result in the attainment of global environmental benefits through various policy derisking instruments.

⁷ Part II should not be longer than 5 pages.

ii. THE BASELINE SCENARIO AND ANY ASSOCIATED BASELINE PROJECTS

4. VINLEC seeks to reduce the country’s dependency on fossil fuels. The Energy Unit of the Ministry of National Security (EUMNS) and the Ministry of Health, Wellness and the Environment (MOHWE) oversee energy and environmental policy implementation. The country aims to reduce GHG emissions, through investments in mini hydro, wind and heat recovered power generation as detailed below. The following baseline initiatives are taking place (as tabled below):

Component	Business-As-Usual / Baseline Scenario
<i>1. Clean energy enabling policy framework in small islands established</i>	Current multilateral donor support (e.g. European Union \$0.3m, European Development Fund \$0.6m) focuses on the implementation of the national energy policy (NEP). Yet the specific areas of support remain unclear, e.g. no indication that the assistance is sufficient to amend the Electricity Supply Act and provide for the introduction of IPPs per the 2010 energy action plan. <i>SUBTOTAL Component 1 = \$935,000</i>
<i>2. Clean energy technical and institutional capacity for SIDS strengthened</i>	Existing in-kind assistance (e.g. SIDS DOCK CariCom Climate Change Centre \$0.3m/ UNDP \$0.2m / Organization of American States) focuses on institutional strengthening processes (e.g. capacity development for policymakers, national/regional support platforms), which are not fully coordinated with St. Vincent’s NEP action plans for training, development or employment <i>SUBTOTAL Component 2 = \$1,640,000</i>
<i>3. Clean energy decentralized electricity solutions for small islands demonstrated</i>	VINLEC has renewable energy investments planned but investors (e.g. unidentified venture capitalists) and financiers (e.g. Caribbean Development Bank, local development banks or other IFIs) are yet to come forward with the required funding. Renewable energy is cost-competitive, yet the associated investment risks (e.g. lack of provisions for IPP, PPAs, licensing) remain high for the following proposals to go ahead: (a) SHP Expansion (2MW) \$12.4m; (b) Wind Farm Development (4x 900kW) \$6.5m; (c) Recovered Energy Generation (700kW) \$2.9m <i>SUBTOTAL Component 3 = \$20,776,779</i>
TOTAL = \$23,351,779	

iii. THE PROPOSED ALTERNATIVE SCENARIO, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

5. The project will promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused hydropower capacity, untapped wind resources and unrecovered waste heat power. The approach proposed in the below project components address both the barriers previously identified, and tackle the root causes of the risks associated with the planned investments; that is, the underlying barriers affecting the finance costs and competitiveness often linked to renewable energy projects in developing countries, which the below UNDP/GEF de-risking measures would help address:
6. **Component 1: Clean Energy Policy Framework**—contributing to the effective enforcement of a clean energy regulatory framework in St. Vincent to reduce the probability of negative events affecting the investment environment:
- (1.1) *Approved recommended framework for long-term integrated energy resource planning, incorporating targets and milestones for renewable energy* – An action plan operationalizes the recent national energy policy, which includes concrete goals, measures and timeframes to increase electricity generation from hydropower, recovered heat and wind energy;
- (1.2) *Approved procedures for renewable energy projects and scope of full feasibility studies and assessments to help Saint Vincent map resource, grid plans, and solutions* –These procedures will support the amendment of the Electricity Supply Act, in order to streamline any required procurement, permitting and other policy de-risking instruments that enable investments to take place (e.g. rules for the introduction of IPPs, clear PPA tendering clauses, transparent procedures for feed-in-tariffs).
7. **Component 2: Clean Energy Capacity Development**—contributing to the strengthening of institutional and individual capacity for the support of clean energy developments in St. Vincent to streamline processes for investments to take place:
- (2.1) *Completed renewable energy technology-specific peer-to-peer learning and mentoring programs, fostering exchanges of national and sub-regional developments* – Local and sub-regional training & development activities (e.g. stakeholder dialogues, workshops with end-users/policy-makers, industry conferences) focus on wind, hydro and recovered heat power features that strengthen institutional (VINLEC, Energy Unit) and individual (e.g. staff, contractors, entrepreneurs) arrangements to locally support each step of their deployment (e.g. build-operate-transfer, as well as properly maintain);
- (2.2) *Documented and disseminated best practices/lessons learned in clean energy solutions for SIDS amongst Eastern Caribbean utilities (e.g. CARILEC)* –Knowledge about the solutions implemented by St. Vincent and/or the OECS sub-region is built and shared across countries through printed/audiovisual media, site visits and other platforms (e.g. awareness actions).
8. **Component 3: Clean Energy Renewable Energy-Based Electricity Generation Demonstrations**—mobilizing investments for the effective deployment of wind, hydro and recovered heat technology in St. Vincent:
- (3.1) *Completed renewable energy assessments* – wind resource assessments, river flow tests and recovered heat studies provide detail about actual renewable energy generation potential, to address associated risks to the climate resilience of the investment (e.g. wind intensity induced by storms or hurricanes linked to sea-temperature rise, prolonged dry spells/flooding).
- (3.2) *Completed feasibility studies of renewable energy technology applications (e.g. hydroelectric power, recovered heat,*

wind) –comprehensive knowledge about the physical specifications and recommended equipment of the investment, as suitable to the resource potentials identified, is a key step before determining their actual commercial and financial merit.

(3.3) *Business plans, financing options and renewable energy development pipelines in Saint Vincent (wind and hydropower, recovered heat energy)* –this documentation will summarize the commercial and financial elements of the planned investments, including their expected profitability, proposed pricing structure and suitable financial instruments. These plans will reap the benefits of the mix of public de-risking instruments selected, that will catalyze the required financial investments.

(3.4) *Successfully completed and operational renewable energy-based power generation installations of wind, hydro and recovered energy generation systems* –the proposed indicative investments are successfully undertaken, as follows:

- **Small Hydro Power:** technical feasibilities, engineering planning and design confirm adequate river flow, climate conditions and impacts suitable for the expansion of South Rivers stage 1 (from 870kW to 1,110kW @ 1.3 m3/s); the construction of South Rivers stage 2 (1,091kW @ 1.63 m3/s); and, rehabilitation of Richmond plant (1,100kW to 1,630kW, 2.0 m3/s). GEF funding will help lower the overall risk profile of the investments, by obtaining full technical and other specifications that better inform the associated insurance premiums (+/-1.5%) and contingency risks (5-15%) of these investments.

- **Wind Farm Development:** planning studies and resource assessments inform wind turbine type and suitability to extreme weather conditions (e.g. storms, hurricanes) and ecosystems (e.g. birds, bats) for the construction of the Wind Park Ribishi Point area (4 x 900kW). GEF funding will help confirm annual wind speed predictions (2007: 7.78m/s-8.87 m/s @ 10m).

- **Recovered Energy System:** recommended spare parts, design and performance tests and onsite training sustain the commissioning of a 700kW waste heat recovery system at the Lowman’s bay power plant, providing uninterrupted supply.

iv. INCREMENTAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF/SCCF AND CO-FINANCING

9. These activities are expected to result in the following incremental outcomes with GEF-grant support to the baseline:

Component	GEF-supported alternative
<i>1. Clean energy enabling policy framework in small islands established</i>	Integrated regulatory environment with existing and new national energy and environmental sustainability policies, which are consistent with the reduction of electricity production costs and prices, dependency on fuel imports, and emissions of GHG, as well as in line with broader-based green, low emission and climate resilient development strategies (e.g. enabling aquatic life, protecting riparian flora and minimum required river flows vis-à-vis drought risks)
\$1,306,310	<i>SUBTOTAL Component 1 = BAU (\$935,000) + GEF (\$371,310)</i>
<i>2. Clean energy technical and institutional capacity for SIDS strengthened</i>	Developed national capabilities to ensure energy safety and security is maintained, increased clean energy output efficiencies and electricity capacity and reduced probability of mechanical equipment failures, which is consistent with local content, employment generation and sustainable development strategies. Capacity development processes clarifies roles and responsibilities of government, regulators, private developers and the national utility for institutional strengthening.
\$1,876,953	<i>SUBTOTAL Component 2 = BAU (\$1,640,000) + GEF (\$236,953)</i>
<i>3. Clean energy decentralized electricity solutions for small islands demonstrated</i>	De-risked policy and institutional environment is promoting the participation of the national utility and local engineering companies, in partnership with international firms, for the successful implementation of renewable energy projects in St. Vincent & Grenadines that demonstrate GHG emission reductions, clean energy equipment reliability / efficiencies, and cost-effectiveness versus rising electricity costs linked to the country’s fuel surcharge (recently averaging US\$0.02/kWh for every \$10-increase per barrel of oil), with adequate billing and financing mechanisms in place (e.g. FiT, IPP, PPPs, other).
\$21,895,000	<i>SUBTOTAL Component 3 = BAU (\$20,776,779) + GEF (\$1,118,221)</i>
GRAND TOTAL:	\$25,078,263

v. GLOBAL ENVIRONMENTAL BENEFITS (GEFTF, NPIF) AND ADAPTATION BENEFITS (LDCF, SCCF)

10. The corresponding global environmental benefits associated to the above outcomes are estimated below. The expected MtCO2e emission reductions will be confirmed during the project preparation stage of this proposal:

GHG emission reduction	Activity * OECS Emission Factor: 0.9 tCO2e/MWh (avg.) ** VINLEC Load Factor: 51.83%	Annual energy output (MWh) **		Total generation, MWh	GHG emission reduction, tCO2e*		Abated (US\$ / tCO2e)
		BAU	Project		Annual	Total	
Direct ***	Small Hydro Power (0.3MW South Rivers 1 / 1.1MW South Rivers 2 / 1.6MW Richmond)	8,944	17,394	8,450	7,605	22,815	
*** 3yr project lifetime	Wind Farm Development (4 x 900kW Brighton Wind Park Area Ribishi Point Investment)	-	16,345	16,345	14,710	44,130	
	Recovered Energy Generation System (700 kW Lowman’s Bay Power Plant 3yrs of operation)	-	3,178	3,178	2,860	8,580	

TOTAL Direct:						75,525	26.48
Indirect **** 20yr	Policy/institutional/investment de-risking leads to additional RE projects (60% causality factor)	-	36,917	22,150	19,935	398,700	5.02
TOTAL Direct + Indirect:						474,225	4.22

vi. **INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP**

11. This is the first GEF funded climate mitigation project (excluding enabling activities) in St. Vincent that will apply the UNDP/GEF derisking approach in SIDS. As a SIDS taking steps to realize some of its ambitious mitigation actions, captured in its national communication and technology needs assessment, the impacts intended by the project are expected to be notable (i.e. the shift from focusing only on climate adaptation, and considering clean energy as key to pursue sustainable development goals. Financial and institutional sustainability will be ensured by improved investment conditions, resulting in lower cost of financing, translating in more affordable tariffs for consumers and financially sound investments that are self-sustaining. The entrance of IPPs will confirm the effectiveness of the project's derisking measures, resulting in an electricity sector with a stronger financial position, and an increased and more diversified generation capacity. Wind and hydro developments are expected to be scaled up (to approximately 5-10MW of additional capacity to be developed in previously identified sites on the Wallibou and Buccament rivers; these sites were identified by the Caribbean Renewable Energy Development Project) once the UNDP/GEF intervention takes place. The EUMNS will ensure the enabling derisked environment is maintained beyond project closure by overseeing the application of selected public/private instruments to ensure IPP interest in new projects.

A.2. Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project preparation:

12. The project will be executed by the Energy Unit of Ministry of National Security (EUMNS), with VINLEC as the responsible implementing party, guidance from the MOWHE and support from UNDP, in liaison with a range of actors:

Type	Examples	Expected Roles
<i>Government</i>	EUMNS	Key government partner with mandate over Saint Vincent's national energy policy, and responsibility over its implementation.
	MOHWE	National interface with the GEF, and key government partner with mandate over Saint Vincent's national environmental policy.
<i>Donor partners</i>	UNDP	GEF agency that will provide implementation oversight, project assurance and support, in addition to co-financing.
	SIDS DOCK	The platform hosted by the Caribbean Community Climate Change Centre (5Cs) and supported by UNDP and the World Bank will provide technical and financial assistance.
	European Union / EDF	European bilateral support through grants and technical assistance will focus on the policy and capacity development aspects of the proposal.
<i>Private sector</i>	VINLEC	Key project proponent and St. Vincent's electricity provider tasked to undertake the planned investments.
	Contractors	Local service providers are expected to support the planned installations.
	Financiers / Insurers	Development banks (e.g. CDB, IDB, ECCB) and potential venture capitalists will provide financing once the risks of planned investments are addressed.

A.3. Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

13. The approach set forth for this project faces a number of inherent risks, not all of which can be fully mitigated at the project design stage. Particular attention will be paid to the following five (5) risks during the project preparation stage:

Risks	Likely	Remedial actions
1. Climate variability leading to changed rainfall patterns, unexpected flooding, severe storms, hurricanes or drought	High	Wind and hydropower resource assessments, technical, socioeconomic and environmental feasibility and screening processes will focus on the resilience, vulnerability and sustainability of all planned investments in the face of climate change. This will ensure clean energy developments consider the specific circumstances of small island developing states. For a country like St. Vincent, the regular monitoring of this information will be central to address the perceived risks and corresponding costs (e.g. insurance premiums, contingency) of the investments.

2. Uncoordinated support from institutions directly involved in the project, whose political will and investment drive are crucial for the policy changes, planned installations and capacity development process to effectively take place	Low	The project will ensure the coordination and integration of support and activities spearheaded by the Energy Unit, at the Ministry of National Security, VINLEC and the GEF Focal Point Office, at the Ministry of Health, Wellness and the Environment, both as part and outside of established monitoring and reporting platforms (e.g. project inception, start-up launch/implementation, steering committee meetings, progress reports, national/sub-regional fora)
3. Hydro (altered river flows) and wind (blade movements) power operations adversely impact humans and ecosystems (e.g. domestic/recreational water use, aquatic organisms, birds/bats)	Medium	Hydropower generation will ensure adherence to recommended minimum residual flows to ensure natural fish migration is not impacted, prevent the concentration of pollutants and the occurrence of vectors causing water borne diseases; and, wind operations will implement the recommendations from the environmental impact assessments; all in line with the observance of UNDP's social and environmental safeguards.
4. Marginal costs of diesel generation fall below the level (ranging 12-20US cents/kWh) that would make clean energy investment cost-competitive to investors and consumers	Low	The trend of fuel prices will be regularly monitored during project execution, to check that they remain above this level as currently, amid dwindling oil resources worldwide and their corresponding high price. There is a high probability that fuel prices will continue increasing in the short-to-medium term. Were this risk to materialize, the financing terms for the RE investments would be adjusted to accommodate this.
5. Lack of technology expertise available to participate or support project formulation, preparation, start-up, monitoring and evaluation activities.	Medium	The risk of low quality civil works and equipment, or time overruns due to inappropriate construction methods, will be reduced with the careful selection of contractors, and reference to UNDP's international procurement practices; knowledge networks, technical rosters and engage qualified professionals throughout the project, as needed.

A.4. Coordination. Outline the coordination with other relevant GEF financed and other initiatives

14. The project will coordinate with activities overseen by the Conservation and Sustainable Development Unit (CSDU) of the MOHWE, responsible for the implementation of all multilateral environmental agreements St. Vincent and the Grenadines is party to. UNDP has assisted the CSDU in other GEF-funded enabling activities, including the NCSA, and the Assessment of Capacity Building Needs and Country Specific Priorities. The project will ensure the capacity building recommendations put forward are taken into account during implementation. UNDP's implementation support will also ensure scientific, technical and financial coordination with the Caribbean Community Climate Change Centre and the World Bank, as partners in the SIDS DOCK initiative, with bilateral donor support from Denmark and Japan (the project is not part of the current SIDS DOCK pipeline, but is eligible to grants as St. Vincent is a SIDS DOCK member).

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:

15. The 2000 Initial NC of St. Vincent and the Grenadines underscored the country's heavy reliance on fossil fuel imports, poor management and limited human resources in energy generation, which this project will help address. The TNA considered the energy sector as a priority to develop appropriate national responses to climate change, due to its impact on other sectors. The Second NC under preparation is also paying attention to the barriers to be removed for the deployment of renewable energy. The project is also in line with the 2009 National Energy Policy (NEP) of St. Vincent and the Grenadines, and the multilateral environmental agreements (MEA) signed by St. Vincent, contributing to its goal of strengthening the national economy through the reduction of the dependence on fossil fuel imports. The project will contribute to the goal of 30% of projected electricity output to come from renewable energy by 2015, and 60% by 2020.

B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:

16. The project is in line with St. Vincent's clean energy ambitions and consistent with GEF-5's Climate Change Mitigation Objective no. 3 (Promote investment in renewable energy technologies). It will result in an effective policy framework, institutional capacity and operational installations for renewable energy-based electricity generation (e.g. hydro, wind).

B.3. The GEF Agency's comparative advantage for implementing this project:

17. The project is consistent with UNDP's implementing mandate, capacity and presence, as captured in the 2007 GEF Council document on comparative advantages (GEF/C.31/5). Its emphasis of environmental finance for market transformation is in line with UNDP's Strategic Plan 2008-2011/13 followed in over 150 countries worldwide. The project GEF focal area falls under UNDP's Energy and Environment priority area on "Access to sustainable energy


services”. UNDP’s capacity in this area has been recently codified in the UNDP-GEF Profile document and the UNDP-GEF publication on “Transforming On-Grid Renewable Energy Markets”. This project is in line with the Signature Programme no. 1 on clean energy (small hydro, wind and solar), with the proposed policy and financial de-risking interventions targeting the island of Saint Vincent. It is also central to the 2012-2016 UNDAF for Barbados and the Organization of Eastern Caribbean States (OECS), contributing to a key priority of UNDP’s work in the region (UNDAF Outcome 1 “Environment, Energy, Climate Change and Disaster Risk Reduction”) with a direct impact on Millennium Development Goal (MDG) no. 7 to “ensure environmental sustainability”.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

NAME	POSITION	MINISTRY	DATE(MM/dd/yyyy)
Ms. Yasa BELMAR	Environmental Resource Analyst	MINISTRY OF HEALTH, WELLNESS AND THE ENVIRONMENT	01/21/2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE(MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu UNDP/ GEF Officer-in-Charge		March 8, 2013	Raul Alfaro-Pelico, Regional Technical Advisor, EITT	+5073024500	raul.alfaro@undp.org