Saint Vincent and the Grenadines Unleashing the Blue Economy in the Caribbean (UBEC), World Bank

CREDIT NUMBER 7089-VC

Terms of Reference for Consultancy
SVG National Solid Waste Management Strategy
Update of Solid Waste Management Plan
SVGUBEC-C-QCBS-2

Contents

1.	BACKGROUND	1
2.	OBJECTIVE OF THE CONSULTANCY	2
	SCOPE OF THE CONSULTANCY	
4.	CONSULTANCY DURATION	4
5.	TASKS TO BE COMPLETED BY THE CONSULTANT	4
6.	REPORTING AND DELIVERABLES	9
7.	STAFFING AND QUALIFICATIONS	11
8.	PAYMENT SCHEDULE	12
9.	CONSULTANCY COORDINATION AND FACILITIES	13

1. BACKGROUND

St. Vincent and the Grenadines (SVG) is a multi-island state in the Eastern Caribbean comprising 32 islands. The entire nation has a land area of 389 km², of which 345 km² is on the main island of St. Vincent. Of the smaller islands that comprise the Grenadines, only nine (9) are inhabited of which the largest are Bequia, Mustique, Canouan, Mayreau and Union Island. The total population of SVG is about 109,000 inhabitants (2012 Census Report). The total population of the Grenadines is estimated to be 10,000 inhabitants.

The solid waste management sector is one of three sectors targeted by phase 1 of the Unleashing the Blue Economy in the Caribbean (UBEC) investment platform designed by the World Bank. The UBEC Program will be implemented as a Series of Projects (SOP) over a five to fifteenyear period (each project has a five-year period) as per projected country demand. Phase 1 of the UBEC project is to be implemented between 2022 and 2027 and is designed to stimulate economic recovery from COVID, generate additional and more diverse jobs, and improve marine and coastal resilience in SVG, St. Lucia, and Grenada by strengthening the sustainability and competitiveness of two critical, interconnected sectors - tourism and fisheries – and one underlying enabling infrastructure service, solid waste management. The link is clear between these three sectors in leveraging the vast and vulnerable ocean resources of these islands to stimulate and sustain economic growth and promote the general well-being of its people and the environment. In developing the solid waste activities to be implemented in phase 1 of the project in consultation with the World Bank, it was determined that developing a national solid waste management strategy is critical in defining a vision for the sector that can guide the Government regarding required investments in solid waste management to adequately support the overall development of the country.

The Waste Management Act (WMA)of 2000, is the principal legislation governing waste management activities in SVG. Regulations were also passed in 2006 to support the Act. The Act includes provisions for the development of a National Waste Management Strategy (NWMS) to be revised every 5 years. It delegates the leadership of this task to the Minister responsible for Health and the Environment and also requires the Minister to ensure the broadest stakeholder consultation in the preparation of the strategy. The main goal of the NWMS, as stated in the Act, was to achieve a 20% reduction of all solid waste generated in the state by 2010 and a 5% reduction per decade thereafter until an overall 50% reduction is achieved through source reduction, recycling, and composting activities. To this end, a draft NWMS was developed in 2003 that identified nineteen (19) action items for implementation between 2003 and 2008. However, the draft strategy was not advanced to the required final stage of approval at the level of the local Cabinet and therefore was not given sufficient national implementation priority.

The Central Water and Sewerage Authority (CWSA) is currently appointed by the WMA as the National Solid Waste Management Authority. The Solid Waste Management Unit (SWMU) was established in 1999 as a department within the CWSA to perform the solid waste collection and disposal functions in SVG. The operations of the SWMU are governed by the Waste Management Act. There is a separate Central Water and Sewerage Authority Act which was passed in 1991 that governs the water and sewerage functions of the CWSA. SVG is the only participating country in the Organization of the Eastern Caribbean States (OECS) Solid Waste Management Project (1995-2003) that elected to house the solid waste management

function within an existing institution instead of creating an independent entity. The strategic thinking then was to leverage the CWSA's well-established and strong institutional, technical and financial structure to ensure the sustainability of the solid waste management operations. The CWSA is a statutory institution that was providing the essential public services of potable water supply and sewerage treatment for some 30 years before the implementation of the OECS project.

The SWMU currently provides curbside residential waste collection services to 12 collection districts through a combination of in-house resources and private sector contracts. Nine (9) of these collection districts are on the main island of St. Vincent and three (3) are in the Grenadines on the islands of Bequia, Canouan, and Union Island. The CWSA/SWMU also operates five (5) waste disposal sites, two landfills on the main island of St. Vincent and three (3) refurbished dumpsites on the aforementioned Grenadine islands. The refurbished dumpsites in the Grenadines have progressed to a stage where a more sustainable waste disposal solution is required to adequately meet the current and future waste disposal needs. An EU-funded consultancy was completed in 2007 that proposed a way forward in addressing this problem, however, competing national priorities and insufficient cost recovery have delayed the implementation of its recommendations leading to now a more urgent need for intervention.

The Government of St.Vincent and the Grenadines (GoSVG) in its National Economic and Social Development Plan (NESDP) for the period 2013 to 2025 desires to establish a comprehensive and effective recycling programme while also exploring waste to energy solutions as part of a sustainable waste management system. In 2013 a private sector company, All Islands Recycling Inc. (AIR), began purchasing plastic bottles from the populace supported by the provisions of the Environmental Levy Act passed in 1991. To date over 40 million bottles have been retrieved from the environment and shipped overseas for recycling. There are now over 600 collectors that regularly sell bottles to AIR Inc comprising approximately 60% women. The sustainability of this activity is threatened by the gradual closing of international markets. Therefore, it is desirable to explore the feasibility of recycling plastics locally, which may include a waste-to-energy solution.

As a Small Island Developing State, GoSVG aims to significantly reduce its dependence on the unstainable practice of landfilling as the primary method of waste disposal and to develop waste reduction, reuse, recovery, and recycling initiatives. This consultancy shall therefore seek to lay a firm pathway to be followed for the next 20 years towards achieving this objective. The preparation of a viable National Solid Waste Strategy will also form the basis for engaging prospective funding agencies by the GoSVG for financial support to implement the necessary solid waste management sector improvements.

2. OBJECTIVE OF THE CONSULTANCY

The overall goal of this consultancy is to assist the GoSVG in preparing and adopting a National Strategy Solid Waste Management Strategy to address current deficiencies and anticipated challenges in the solid waste management sector in Saint Vincent and the Grenadines. The Consultant will be required to propose viable and necessary legal, institutional and technical improvements to address the identified deficiencies and future challenges in the solid waste

management sector and then define the best means for implementing the proposed improvements. The objectives of this consultancy are to:

- a. Describe and assess the current SWM situations related to the collection, disposal, and disposal of all types of solid waste generated in SVG including domestic, commercial industrial, and hazardous waste. The evaluation will, at a minimum, include collection service coverage, frequency, and quality of waste management services. The consultancy will include an assessment of recycling processes and market conditions in SVG.
- b. Describe and assess current disposal and recovery practices and facilities in SVG and their operating status and compliance with the criteria and requirements of the Waste Management Act.
- c. Describe and assess existing institutional arrangements related to the management of all types of solid waste generated in SVG with the intent of ultimately establishing a sound and economically self-sustainable institutional framework to operate and supervise an effective SWM system.
- d. Review and assess the current SWM legal framework conditions, including all applicable national and local regulations and standards, and an analysis of compliance to regional and international conventions.
- e. Review current financial and economic conditions associated with SWM collection and disposal services and various options for achieving effective service sustainability once the system improvements have been implemented. This will include potential sources of revenue and user fees for the sustainability of the future SWM system. This will include the financial and economic aspects of any recommended waste recycling, recovery, and treatment processes and facilities.
- f. Identify constraints (technical, regulatory, institutional, economic, etc.) to achieve an environmentally sound and cost-effective integrated solid waste management system (ISWM) in SVG.
- g. Define a viable National Solid Waste Management Strategy within a 20-year period to achieve environmentally sound and the most feasible and realistic practices for SWM conditions in SVG by designing a strategic short, mid, and long-term plan for implementing the necessary improvements.
- h. Review current waste diversion and recycling activities in St Vincent and the Grenadines. Description of best options for on-island recycling through a feasibility study.
- Propose target outcomes, impacts, accomplishments, and indicators for addressing current SWM deficiencies. Key Performance Indicators (KPIs) will be presented for measuring progress in achieving all the intended results of the national strategy including improvements to current core waste collection and disposal services and recycling initiatives.

3. SCOPE OF THE CONSULTANCY

The scope of the proposed consulting services shall include, but not be limited to, all the activities required for the preparation of an effective National Solid Waste Strategy as stipulated in the Waste Management Act. The Consultant shall carry out all necessary technical and other studies, research, analysis, and related work to achieve the objectives presented

above. The Consultant shall identify and assess policy, legislative and institutional options and best practices for the design and implementation of an effective ISWM system (and its components) and make recommendations for mitigating existing SWM deficiencies in a technically sound, cost-effective, sustainable, socially acceptable, environmentally compliant manner applicable to SVG. Participatory methodologies will be utilized throughout the consultancy to provide government and stakeholder input into the work that they will have to be undertaken after completion of the consultancy.

The consultant shall also conduct a feasibility study for on-island recycling, describe the processes involve, required infrastructure, mechanical equipment and nature and application of final product.

The Consultant shall also consider issues of gender in all aspects of the assignment, identifying any areas of existing or potential gender inequality, and recommending measures for producing equitable results. The Consultant will be required to present initial findings to the GoSVG and stakeholders in a minimum of two consultation workshops as outlined below before completing the Final National Solid Waste Management Strategy Report.

4. CONSULTANCY DURATION

The assignment is expected to be conducted over a period of approximately ten (10) months. The expected duration includes the requirement for adequate stakeholder engagement and consultation during the consultancy period

5. TASKS TO BE COMPLETED BY THE CONSULTANT

The following describes the work tasks and activities that the Consultant will be required to complete in developing the National Solid Waste Management Strategy. Completing these work tasks and achieving the intended consultancy results will require the Consultant to provide sufficient and qualified staff functioning within a structured and competent consultancy work plan as presented by prospective Consultants in their tender proposals related to the consultancy. Individual work tasks and related activities include the following:

Work Task 1 - Prepare and Submit a Consultancy Inception Plan - Following the award of the consultancy contract, the Consultant will prepare and submit a consultancy Inception Plan to describe the project management approach that will be utilized in accomplishing this assignment. This detailed inception plan shall be submitted to the Authority within four (4) weeks of the award of the contract. At a minimum, the Inception Plan will include all proposed logistical procedures to accomplish all consultancy tasks as well as establish the communication and reporting means required to secure necessary and timely input and approvals from the Authority and stakeholders throughout the consultancy. The Inception Plan will also describe the process by which the Consultant will gather all required information to achieve the intended results of the consultancy and will include a stakeholder engagement plan.

The Inception Plan must clearly indicate how communication between the Authority and the Consultant will be accomplished including the coordination with the Authority on all assigned work tasks involving other stakeholders.

As a condition of this Inception Plan, the Consultant shall, at a minimum, provide monthly status reports to the Authority concerning all progress or impediments associated with the Consultant's work to achieve the objectives of the consultancy. Additional information related to the nature of the consultancy output deliverables and reports is presented later in these Terms of Reference. (It should be noted that all deliverables submitted to the Authority will be initially designated as draft submittals subject to review and comment by the Authority followed by

finalization of resubmittal by the Consultant based on the comments received from the Authority).

Work Task 2 – Data Collection and Review –To accomplish this task, the Consultant will:

- a. Gather and review all existing legislation, policy, institutional, technical, and economic information related to solid waste collection, disposal, recycling and environmental management in SVG.
- b. Gather and review all existing studies related to the history and status of solid waste management in SVG. To the degree possible, all relevant legal/institutional instruments, previous reports, waste data, etc. will be provided in digital form by the Authority for use by the Consultant.
- c. Complete a gap analysis, after review of all existing data and information provided, to identify further areas of research and/or data collection that may be necessary to achieve the required outcomes of the consultancy.

Work Task 3 - Analysis of Current Solid Waste Management System, future trends, and options for addressing deficiencies - To accomplish this task, the Consultant will:

- a. Assess the current solid waste management system in SVG as it relates to waste collection, disposal, recycling, etc., and identify deficiencies in the system.
- b. Assess all current collection and transport services provided by the Authority and its private contractors in all collection districts within SVG. At a minimum, this will include an assessment of service delivery schedules and routing, equipment and staff utilized, and waste generator interface issues associated with the waste collection process. This activity will include an assessment of the level of service quality in each of the collection districts.
- c. Inspect and evaluate the function of the five (5) waste disposal facilities throughout the state to determine the effectiveness and compliance with the Waste Management Act and sound international standards and best practices. Health, safety, operational and environmental issues to be assessed, at a minimum, include the waste receipt inspection and data collection procedures, the application of daily and intermediate cover, compaction practices, presence and activities of waste pickers, utilization of appropriate equipment, environmental impact and aesthetic issues, etc. The possibility of expanding the disposal capacity of these facilities shall also be considered in the site assessment.
- d. Undertake a detailed review and assessment of the operation of All Islands Recycling Inc (AIR) to determine the best option for the on-island recycling of plastics. The assessment will also consider synergies with other islands to achieve economies of scale and for sustainability. In exploring synergies, any legislative and operational barriers shall be identified along with the solutions to overcome such barriers.
- e. Assess the current policy, institutional, legal and regulatory framework for the management of all waste generated including, but not limited to, residential, commercial, industrial, ship-generated, hazardous, and medical wastes. The technical, institutional, and regulatory assessment of the SWM sector must include a complete analysis of the current management practices of all types of solid waste. A regulatory

impact assessment will be a component of this work task to consider the impact of current laws and regulations on current SWM practices and facilities and any new infrastructure and processes recommended in the development of the National Solid Waste Management Strategy. This work task will also include an assessment of the existing technical and institutional capacity of the Authority to manage all aspects of the integrated solid waste management system to result from the implementation of the intended National Strategy.

- f. For benchmarking and planning purposes, gather information related to the factors/characteristics of similar SWM systems in other island nations within the Caribbean region. This will include a description of 1) the technical approaches utilized for the collection, recycling/recovery, and disposal of solid waste, 2) the legal and institutional framework associated with solid waste management in these locales, 3) the cost of collection, treatment and disposal services, 4) how, if, and the level of user fees collected, and 5) the extent of recycling and the market conditions affecting existing recycling and recovery processes and facilities.
- g. Assess environmental and social issues associated with all existing collection, treatment, and disposal functions and facilities.
- h. Assess SVG's waste generation trends and patterns including, but not limited to demographic changes and unit waste generation rates associated with residents and visitors/tourists. This shall include a review of historical waste data for disposal of all types of solid waste in SVG.
- i. Analyze population and economic growth impacts and trends to project solid waste generation for all types of solid waste over the 20-year planning period. To the degree possible, this will include solid waste to be generated in each of the existing collection districts and to be generated from large-scale commercial and industrial sources. The analysis must also consider the islands in the Grenadines where the SWMU does not currently operate and where there are either residents and or commercial activities (e.g. Mustique, Palm Island, Mayreau and Petit St. Vincent).
- j. Identify and characterize all technical options for mitigating current solid waste management problems and deficiencies identified and achieving all target integrated solid waste management objectives related to waste reduction, collection, transport, recycling/recovery, treatment, and disposal functions. A high priority should be placed on defining alternative and effective ways to reduce the amount of all types of solid waste generated in SVG to meet the targets set in the Waste Management Act.
- k. Identify and characterize the options and requirements for siting future waste disposal and processing facilities, if necessary. If possible, a shortlist of potential future waste disposal sites will be prepared, along with a preliminary characterization of the strengths and weaknesses of each siting option.
- 1. Describe any other physical infrastructure requirements to provide waste management services in St Vincent and the Grenadines.
- m. Assess the viability and options for landfill gas collection, treatment and utilization at the landfills and the closed Arnos Vale disposal site to determine the potential for landfill gas emission reduction or enhanced management activities to manage gas generation and minimize GHG emissions.
- n. Identify and evaluate viable waste diversion opportunities to reduce landfill disposal reliance including processes associated with, at a minimum, source separation and

separate collection of recyclables and organic components of the residential waste stream, waste processing, and treatment (thermal, composting, etc.).

Work Task 4 – Feasibility Study for On-Island Recycling – To accomplish this task, the Consultant will:

- a. Establish standards and procedures to be implemented in the reduction, recycling of, recovery, reclaiming and re-use of waste and the use of recycled substances.
- b. Conduct a feasibility assessment of on-island waste recycling programs and the use of recycled substance. The Consultant shall, amongst others, present detailed description of the process(es), infrastructure requirements, equipment, personnel and conduct an economic analysis of the presented programs.

Work Task 5- Stakeholder Engagement - To accomplish this work task, the Consultant will:

- a. Identify and characterize all key SWM stakeholders in SVG that have a relevant role in the country's current solid waste management system.
- b. Make recommendations for gender-inclusive stakeholder engagements and awareness for achieving all objectives associated with the proposed National Strategy Waste Management Strategy.
- c. Consult with relevant stakeholders including from the public and private sector, civil society etc., to seek input into the assessment of current solid waste management in SVG and their roles, responsibilities, and activities that impact solid waste management.
- d. Consult with the operators responsible for the current collection, disposal and recycling operations, and general public representatives in order to identify deficiencies in the solid waste management sector and propose solutions.
- e. Organize two (2) workshops to seek the views of relevant government officials involved directly or indirectly in waste management as well as other stakeholders that may have a role in solid waste management. The first workshop shall be conducted upon completion of Work Task 3 to present the Consultant's findings on existing solid waste management conditions and deficiencies in SVG and the options for improving them. The second workshop will be conducted upon completion of the Draft National Waste Management Strategy report to present the proposed National Strategy implementation report.
- f. Develop effective and gender-aware public communication and awareness materials for use by the Authority in its public awareness and education program aimed at achieving the objectives of the proposed strategy.

Work Task 6 - Financial and Economic Analysis - To accomplish this task, the Consultant will:

a. Undertake an economic analysis of the current costs of collection and disposal undertaken by the Authority. Describe projected CAPEX and OPEX costs for current and recommended new or expanded infrastructure and processes to mitigate existing issues and problems associated with current solid waste management services will also

be presented. An economic analysis will also be presented on the findings of the feasibility study of the on-island recycling program. Projected cost for the 20-year proposed National Waste Management Strategy planning period shall be provided. The financial analysis will provide an estimate of the potential waste user fees and revenues for services provided by the Authority

- b. Conduct a preliminary economic feasibility assessment of the alternative integrated solid waste management options including all proposed solid waste management service improvements.
- c. Develop a financial model that will incorporate revenue, operating cost, capital cost, and financial assumptions. The financial model's worksheets and statements will meet the parameters and hierarchy of donor banks, potential equity investors, and private lenders.
- d. Identify and evaluate alternative financing mechanisms and models for the implementation of the proposed integrated solid waste management system and all new or upgraded/expanded components. Through this work task, the Consultant will identify potential financing sources that may be utilized to develop and implement all recommended infrastructure and services.
- e. The Consultant will advise on the structuring and likely financing plan for implementing the necessary improvement required to mitigate existing deficient conditions. The recommended financing plan will be based on experience with similar projects and the realities of the current financial marketplace for solid waste management sector projects, including information obtained from a possible query of financing sources and financing results.

Work Task 7 – Draft and Final National Waste Management Strategy Report - The Consultant will prepare a detailed National Waste Management Strategy report that presents all findings associated with the consultancy work task results. At a minimum, the draft and final report will include:

- a. An assessment of current solid waste management practices and operations of the existing collection, recycling/recovery, processing, and disposal system including existing solid waste management system issues to be addressed by the National Waste Management Strategy.
- b. Recommend changes or improvements to current solid waste management-related policies, legislation, and/or regulations for achieving the integrated solid waste management objectives including those associated with waste collection, recycling/recovery, treatment/processing, and final disposal.
- c. Recommend procedures for addressing current deficiencies associated with municipal waste collection and transport.
- d. Recommend procedures and targets for reducing the amount of all types of solid waste generated in SVG including the support of policies aimed at creating a circular economy approach to waste generation and management.
- e. Make recommendations concerning the potential waste treatment and disposal options for SVG for maximizing waste diversion from landfill disposal. (For each option, state the assumptions and present the advantages and disadvantages, potential environmental

impacts, and likely estimated capital and operational costs associated with viable alternatives over the 20-year planning period.

- f. Preparation of a detailed Plan of Action inclusive of indicative costing and timelines for implementing all recommended improvements and systems. At a minimum, this plan will include a description of the optimum process for implementing each component of the upgraded integrated solid waste management system. A viable projected implementation schedule in Gantt Chart format will be prepared and presented with due consideration on how the Authority can implement all aspects of the Plan of Action. The Consultant will present the recommendations and planned actions as short, medium, and long term. The proposed Plan of Action shall also identify and describe Key Performance Indicators (KPIs) by which to gauge progress in achieving all objectives of the proposed National Waste Management Strategy.
- g. Information related to the current and future generation of all types of solid waste to be managed during the target minimum 20-year planning period.
- h. A policy, institutional and regulatory assessment of the solid waste management sector in SVG as well as recommendations for improvements to support the target integrated solid waste management system including required technical and managerial capacity.
- i. Presentation of a capacity assessment and capacity building plan for personnel and institutions involved in executing the strategy to include an outline of capacity building courses.
- j. An economic assessment of the cost and user fee/revenue implications of all recommended service and infrastructure improvements.
- k. A financial assessment presenting potential sources of financial resources for the implementation of the Consultant's recommendations.

6. REPORTING AND DELIVERABLES

For all deliverables, the Consultant will present six (6) hard copies of each required deliverable described below. All reports shall also be submitted digitally in Word and PDF format. Copies of all data used in the preparation of the reports shall also be submitted as Annex materials, if necessary, to support the recommended National Waste Management Strategy report content and recommendations. The Authority will provide comments on the draft strategy and action plan report within fourteen (14) days of receipt and the Consultant will revise the report according to the comments received and resubmit the report for final approval by the Authority within 10 calendar days. The required reports and deliverables are presented in the following table. In addition to these reports, the Consultant will submit monthly reports to the Authority describing all progress and activities associated with the consultancy in the preceding month. The monthly report shall also identify any issues that may be impeding the completion of consultancy work tasks. All monthly reports will be submitted no later than 1 week after the end of each month during the project term.

SUMMARY OF CONSULTANCY REPORTS AND DELIVERABLES					
Task	Task/Deliverable	Timeline/Weeks (7 days per)	Description of the Submittal		
1	Consultancy Inception Plan	Week - 4	The inception plan shall describe the Consultant's approach to accomplishing all work tasks associated with this consultancy. The inception report shall contain a proposed outline of the draft National Solid Waste Management Strategy.		
2	Data Collection and Review	Week 12	The Consultant shall submit a report outlining the data collection and review process and outcome in accordance with Work Task 2 above.		
3	Analysis of Current Solid Waste Management System, Future Trends and Options for Addressing Deficiencies. Consultation Workshop No. 1	Week 28	The consultant shall submit a report on the current state of solid waste management in the island including an assessment of future trends and a projected solid waste generation rate for the 20-year planning horizon. The report should also propose options for mitigating the problems and deficiencies identified. The consultation workshop shall present the findings of the consultancy covering tasks 2 and 3.		
4	Stakeholder Engagement	Week 32	The Stakeholder Engagement report shall present all findings associated with the various stakeholder meetings and workshops that occur during the consultancy. This report will present workshop results and comments related to the content of the Consultant's findings concerning the solid waste management situation in SVG and the content of the draft National Waste Management Strategy report. The stakeholder input will serve to inform the findings and recommendations of the National Strategy report to be presented to the GoSVG for adoption.		
5	Financial and Economic Analysis	Week 36	The Consultant shall prepare a report detailing the financial and economic analysis of the waste management functions of the Authority. The report should, inter alia, present an analysis of the proposed cost for implementing the improvements identified in Task 3.		

	Management Strategy Report	Consultation Workshop No. 2 to the relevant stakeholders and will include the findings, results, and recommendations of the Consultancy. The report should, at a minimum, include a problem statement, background information, planning concept, technical and financial viability of alternatives, and recommended Integrated Solid Waste Management elements to address current solid waste management deficiencies and issues. On acceptance of the draft report, a final report shall be prepared to incorporate all comments and suggestions from the Authority and stakeholders.
8	Feasibility Study of On-Island Recycling	The Consultant shall assess the feasibility of on-island waste recycling programs and the use of recycled substance. The Consultant shall, amongst others, present detailed description of the process, infrastructure requirements, equipment and conduct an economic analysis of the presented programs.

7. STAFFING AND QUALIFICATIONS

At a minimum, the Consultant will have relevant and sufficient experience in municipal solid waste management in the areas of strategic planning, SWM service delivery related to collection, recycling/recovery, treatment, and disposal processes and facilities.

The technical expertise required for the consultancy shall, at a minimum, include project management; SWM systems planning and operational assessment; civil and environmental engineering; environmental impact assessment; social impact assessment; gender analysis and gender impact assessment; institutional assessment; and financial and economic analysis capabilities.

Team members should possess educational and/or professional qualifications appropriate to their specified discipline and responsibilities. The minimum level of relevant qualifications and professional experience is presented in the table below for the Consultant's key personnel to be assigned to the project.

KEY PERSONNEL MINIMUM QUALIFICATIONS				
STAFF POSITION	KEY EXPERIENCE			
Team Leader	Graduate degree in civil, environmental, mechanical, or solid waste management engineering and over 15 years of experience managing solid waste management projects and consultancy assignments. Knowledge of or experience within the Caribbean region's solid waste			

KEY PERSONNEL MINIMUM QUALIFICATIONS				
STAFF POSITION	KEY EXPERIENCE			
	sector will be an asset including experience in the development of waste management strategies.			
Safeguards & Communications Specialist	Graduate degree in social/behavioral science, mass communication, or other relevant fields. Over 10 years of experience in the development and implementation of communication strategies, particularly in small island states. Proven experience in community engagement/outreach and awareness building.			
Solid Waste Management Technical Specialist	Over 15 years of experience in waste collection, recycling/recovery, processing, and disposal including experience in the site development for final disposal and waste treatment technologies and facilities and in assessing the function of existing waste management systems and facilities related to waste collection, transport, recycling/recovery, treatment, and disposal processes.			
Financial/Institu tional Specialist	Over 15 years of experience in solid waste management, financial and institutional analysis of waste management facilities, and service implementation and operations. Experiences in solid waste management, public-private partnership, and environmental-related projects shall be essential.			
Civil Engineer - Cost Specialist	Over 5 years of experience practicing civil engineering with extensive experience in estimating costs for civil works construction and landfill construction/closure activities including preparing detailed cost estimates and analyses related to all types of solid waste management infrastructure and services.			
Legal and Policy Specialist	Over 15 years of experience in assessing and developing legal and policy frameworks and instruments for the administration and regulation of solid waste management systems and processes in island countries and a demonstrated capacity to draft legal instruments for British Commonwealth-type legal systems.			

8. PAYMENT SCHEDULE

The Consultant will be compensated according to the following payment schedule:

- 1. First payment: Upon contract signature (Mobilization) -10% against an advance payment bank guarantee, insurance and submitted invoice.
- 2. Second payment: Upon approval of the Inception Report (Task 1) 10%;
- 3. <u>Third Payment:</u> Upon approval of Data Collection and Review Report (Task 2) 15%
- 4. Fourth Payment: Upon approval of the Analysis Report (Task 3) 20%
- 5. Fifth Payment: Upon approval of the Stakeholder Engagement Report (Task 4) 10%;
- 6. <u>Sixth Payment</u>: Upon approval of the Financial Economic Analysis Report (Task 5) 15%

7. <u>Final payment</u>: Upon the acceptance of the final National Waste Management Strategy (Task 6) - 20%.

9. CONSULTANCY COORDINATION AND FACILITIES

The CWSA is the Executing Agency for this consulting assignment. The Consultant shall report to the CWSA through its Project Coordinator identified in the consultancy contract. The GoSVG will facilitate the issuance of any permits required for the Consultant to carry out their duties. All consultancy services shall be conducted in SVG and the home country of the Consultant. The Consultant team members are expected to provide their own equipment for use while in SVG. The Authority will provide office accommodation for two (2) consultant staff during the execution of the assignment. While the Authority will provide direct supervision, the Consultant will be required to liaise closely and directly with other key stakeholders and GoSVG agencies as may be necessary to accomplish all stipulated consultancy work tasks and activities.