REQUEST FOR EXPRESSIONS OF INTEREST

Market Assessment for the Transition to Energy Efficient, Low Global Warming Potential (GWP) Refrigeration and Air-Conditioning (RAC) technologies in Saint Lucia

The Government of Saint Lucia is seeking a qualified professional (s) to provide consultancy services to undertake the *"Market Assessment for the Transition to Energy Efficient, Low Global Warming Potential (GWP) Refrigeration and Air-Conditioning (RAC) technologies in Saint Lucia"* consultancy.

The primary objective of this consultancy is to support Saint Lucia's transition to energy efficient, low or zero-global warming potential (GWP) refrigeration and air-conditioning (RAC) technologies through a targeted market assessment of RAC equipment and refrigerants, including analysis of market penetration, availability, technical and economic challenges, institutional and regulatory frameworks, safety requirements, servicing capacity, and other enabling conditions affecting their safe adoption.

Interested consultants are invited to submit an Expression of Interest, comprising both technical and financial proposals, via email. Submissions must be formally addressed to:

The Permanent Secretary
Department of Sustainable Development
Georgiana Court
John Compton Highway
CASTRIES

The subject line of the email must be clearly labelled:

CONFIDENTIAL – CONSULTANT FOR THE MARKET ASSESSMENT FOR THE TRANSITION TO ENERGY EFFICIENT, LOW GLOBAL WARMING POTENTIAL (GWP) REFRIGERATION AND AIR-CONDITIONING (RAC) TECHNOLOGIES IN SAINT LUCIA

All submissions must be made via email to **sustainable.devt@govt.lc** by ***9:00 a.m. on April 6, 2026.***

For further information, please contact the Department of Sustainable Development at telephone number **721-9163.**

TERMS OF REFERENCE

Market Assessment for the Transition to Energy Efficient, Low Global Warming Potential (GWP) Refrigeration and Air-Conditioning (RAC) Technologies in Saint Lucia

1.0 BACKGROUND

Saint Lucia, as an Article 5 country under the Montreal Protocol on Substances that Deplete the Ozone Layer, is implementing its Hydrochlorofluorocarbon Phase-out Management Plan (HPMP) Stage II to achieve the complete phase-out of Hydrochlorofluorocarbons (HCFCs) by 2030. In parallel, the country has commenced implementation of its Kigali hydrofluorocarbons (HFC) Implementation Plan (KIP) Stage I, which targets an initial 10 per cent reduction in HFC consumption by 2029. The refrigeration and air-conditioning (RAC) sector, particularly the refrigeration servicing sector (RSS), remains the primary user of HCFCs and HFCs in Saint Lucia.

Sector assessments undertaken during the preparation of HPMP Stage II and the KIP Stage I indicate that while significant progress has been made in reducing HCFC consumption, a portion of existing RAC equipment, especially split air-conditioning and some commercial refrigeration systems, continues to operate on HCFC-22. At the same time, newer installations largely rely on high global warming potential (GWP) HFC alternatives, resulting in a market largely dominated by HFC based equipment.

The implementation of the Kigali Amendment is expected to further accelerate the transition towards low and zero-GWP alternatives. However, uptake of these alternatives in Saint Lucia remains limited due to technical and safety considerations including issues related to flammability, toxicity, operating pressures, and skills requirements within the RSS. These challenges underscore the need for strengthened technical capacity, improved servicing practices, and enabling policy measures to support a safe and effective transition.

Energy efficiency has emerged as a parallel priority for Saint Lucia, as increasing cooling demand risks higher energy consumption within the RAC sector and associated emissions. Inadequate equipment selection, installation, or servicing can erode both ozone and climate benefits through higher energy consumption and refrigerant leakage. Ensuring that the transition to low-GWP refrigerants is accompanied by improved energy performance in the RAC sector is therefore critical.

In this context, Saint Lucia is implementing the project **"Additional Activities to Maintain Energy Efficiency for the Servicing Sector"**, funded by the Multilateral Fund for the Implementation of the Montreal Protocol. The consultancy under **Component 1.1** seeks to strengthen the technical evidence base and policy framework required to support the safe uptake of energy efficient, low-GWP RAC

technologies. This includes assessment of current market conditions and the identification of suitable public sector sites for demonstration of Refrigerant-290 based technologies.

2.0 OBJECTIVE

The primary objective of this consultancy is to assess market conditions, availability, and regulatory considerations influencing the transition to energy efficient, low and zero-GWP RAC technologies in Saint Lucia.

3.0 SCOPE OF WORKS

The Consultant will be responsible for the following tasks:

Task 1: Inception and Work Plan

1.1 Participate in an inception meeting with the National Ozone Unit (NOU).
1.2 Prepare an inception report and detailed work plan outlining methodology, data sources and gathering, and stakeholder engagement.

Task 2: RAC Market Study and Assessment Report on Low and Zero - GWP Technologies

2.1 Conduct a desk based review of existing studies, RAC sector surveys, HPMP Stage 1 & 2 and KIP Stage 1 related assessments, import/export data, and relevant policy and standards documents.
2.2 An assessment of the availability and applications of low and zero-GWP RAC equipment currently on the national market, including natural refrigerant based technologies (including R-290, R-32, CO_2 etc.)
2.3 Analysis of market share and import trends of RAC equipment and refrigerants, including low and zero-GWP alternatives, for the period 2012–2025, disaggregated by equipment type where possible.
2.4 Identification of technical, economic, safety, regulatory, and awareness related challenges that may be obstructing wider uptake of these technologies
2.5 Assessment of policy overlaps, gaps, or inconsistencies, including safety requirements related to the import, storage, distribution, installation, servicing, and use of flammable or toxic refrigerants;
2.6 Assess the implications for energy efficiency, servicing practices, and refrigerant management in the RAC servicing sector.
2.7 Identification and characterisation of existing HCFC-22 based RAC equipment currently in use in Saint Lucia, including sectors, equipment types, their current applications and indicative operating conditions, to inform future end-user demonstration activities.

Task 3: Development of Demonstration Site Selection Framework

The Consultant shall develop a set of clear, transparent, and evidence based criteria to inform the identification and selection of public sector demonstration sites under Component 2 of the project.

This task shall include:

- Identification of key eligibility principles for demonstration sites (e.g. building type, usage profile, visibility, safety considerations)

- Consideration of energy efficiency, refrigerant safety, and end user readiness
- Alignment with findings from the market study and national policy priorities

This task is limited to analytical development of screening criteria based on secondary data and stakeholder consultations.

Task 4: Validation and Final Reporting

4.1 Present findings at a stakeholder validation meeting.
4.2 Incorporate feedback and finalise all reports.

Validation shall focus on market study findings, policy recommendations, and the proposed demonstration site selection framework.

Scope Clarification:

This consultancy is limited to analytical and advisory functions. Final selection of beneficiaries, procurement, installation, and performance monitoring will be undertaken under a separate consultancy for the end-user demonstration programme.

Note: The Consultant shall ensure consistency with relevant national strategies and ongoing initiatives, including the National Cooling Strategy, particularly with respect to proposed measures on energy efficiency, minimum energy performance standards (MEPS), and the promotion of low-GWP cooling technologies. The consultant shall also ensure alignment with outputs from the national ODS inventory project, including the ODS inventory data collection report, and shall utilise available data and findings where relevant. The Consultant shall work in close coordination with other consultants engaged under related Montreal Protocol projects to ensure coherence, avoid duplication of efforts, and maximise synergies across project components.

4.0 DELIVERABLES

The consultant will deliver the following outputs:

1. Inception Report
An Inception Report including a detailed work plan, proposed methodology, stakeholder engagement approach, and timeline for the assignment. The report shall reflect any revisions or adjustments arising from the inception meeting with the NOU.

2. RAC Market Study and Assessment Report on Low and Zero - GWP Technologies
A comprehensive report presenting the findings of the market study, including:

- Analysis of RAC equipment and refrigerant import trends
- Assessment of the availability, market penetration and applications of low and zero-GWP RAC technologies
- Identification of key barriers and opportunities related to safety, servicing capacity, energy efficiency and market readiness
- Implications for the safe adoption of energy efficient, low-GWP RAC equipment in Saint Lucia.

- Overview of existing HCFC-22 based RAC equipment in use, including key sectors, applications, and indicative suitability considerations to inform future demonstration activities.

4. Demonstration Site Selection Framework

A technical note outlining the criteria and methodology to be applied under Component 2 for the identification and selection of eligible public sector demonstration sites, including considerations related to safety, energy efficiency potential, and visibility.

5. Stakeholder Validation Workshop and Summary Report

Delivery of one (1) stakeholder validation workshop to present and discuss the draft findings and recommendations. A summary report shall be prepared documenting:

- Key feedback received
- Agreed revisions
- Recommendations for implementation.

The workshop agenda, participant list, and presentation materials shall be appended to the report.

6. Final Consolidated Reports

A final consolidated report incorporating all revisions and approved content, including:

- Final RAC Market Study and Assessment Report on Low and Zero-GWP Technologies
- Integrated analysis of existing HCFC-22 based RAC equipment to inform future end-user demonstration activities.
- Final "Demonstration Site Selection Framework".

5.0 QUALIFICATIONS AND EXPERIENCE

The consultant should possess the following qualifications and experience:

1. A university degree in Environmental Management, Mechanical / Energy Engineering, Environmental Science, Public Policy, or a related field
2. A minimum 10 years' experience in RAC, energy efficiency, or refrigerant expertise.
3. Demonstrated knowledge of low-GWP refrigerants and related safety considerations.
4. Experience conducting market assessments and policy or procurement reviews, preferably in Caribbean contexts.
5. Strong stakeholder engagement, analytical and report writing skills.

6.0 REMUNERATION

The Consultant is required to submit a bid for evaluation, following which negotiations will be held with the successful applicant. In the assessment of submissions, consideration will be given to technical competence, qualifications and experience, demonstrated local and regional experience on similar assignments, proposed cost and existing commitments.

7.0 REPORTING

All reports shall be submitted electronically in English in Microsoft Word and PDF format. The first submission of each deliverable is considered a draft. Client comments on each deliverable must be submitted to the consultant within the stated timelines. The final version of each deliverable addressing client comments must be submitted within two weeks of receipt of client comments.

All reports, documents and data collected relevant to the Consultant's services shall become the property of the GoSL.

As such, all data collected and generated during the assignment will be submitted to the GoSL in the format required for its transfer to relevant country databases by secure electronic means.

8.0 WORKING ARRANGEMENTS

The consultant will be directly supervised by the Department of Sustainable Development's (DSD) National Ozone Unit. Throughout the consultancy, the consultant is expected to participate in both virtual and in-person meetings, as necessary, to facilitate information exchange, provide progress updates, and receive feedback. These meetings will include, but are not limited to, an introductory briefing and a final close-out meeting.

The consultant shall primarily work remotely from their own location and is expected to utilize their own resources, equipment, and facilities. Occasional in-person reporting to the DSD office may be required, based on the needs of the assignment.

9.0 DURATION

The consultancy is expected to be completed within **four (4) months** from the date of commencement. This timeframe accounts for the analytical nature of the assignment, stakeholder consultation and validation, as well as client review periods of draft deliverables.

10.0 SUBMISSION

Interested consultants are invited to submit an Expression of Interest, comprising of both technical and financial proposals, via email. Submissions must be formally addressed to:

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9.0 EVALUATION CRITERIA

Proposals will be evaluated based on the following criteria:

1. Demonstrated experience and qualifications of the consultant.
2. Clarity and feasibility of the proposed methodology.
3. Appropriateness of the proposed timeline and budget.

For further information, please contact the Department of Sustainable Development at telephone number 721-9163. All queries must be submitted ***no later than March 31, 2026, to nousaintlucia@gmail.com.***