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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Forty-first Meeting  
Montreal, 17 -19 December 2003

**PROJECT PROPOSAL: SAINT LUCIA**

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Refrigeration:

- Refrigerant management plan update Canada

**PROJECT EVALUATION SHEET  
SAINT LUCIA**

SECTOR: Refrigeration ODS use in sector (2002): 2.8 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

**Project Title:**

(a) Refrigerant management plan update

<b>Project Data</b>	<b>RMP update</b>
Enterprise consumption (ODP tonnes)	
Project impact (ODP tonnes)	
Project duration (months)	36
Initial amount requested (US \$)	73,450
Final project cost (US \$):	
Incremental capital cost (a)	
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	73,450
Local ownership (%)	100
Export component (%)	0
<b>Amount requested (US \$)</b>	<b>73,450</b>
Cost effectiveness (US \$/kg.)	
Counterpart funding confirmed?	
National coordinating agency	Ministry of Planning, Development, Environment and Housing
Implementing agency	Canada

<b>Secretariat's Recommendations</b>	
Amount recommended (US \$)	73,450
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	9,549
Total cost to Multilateral Fund (US \$)	82,990

## PROJECT DESCRIPTION

### Background

1. In 2002, the total CFC consumption in Saint Lucia was estimated at 2.8 ODP tonnes used for servicing domestic refrigerators and MAC units. The CFC baseline for compliance is 8.3 ODP tonnes.

### Servicing Sector

2. The refrigeration and air-conditioning sector is serviced by approximately 90 trained technicians employed by large service agencies and 20 technicians employed in the larger hotels, car dealerships and industrial establishments. Forty five of these technicians received training in good refrigeration/air-conditioning management practices and were issued with certificates. The informal sector comprises approximately 100 persons generally operating on their own; they have not received formal training, but acquired skills working with others.

3. MAC systems are serviced by two car dealerships as well as technicians from both the formal and informal sectors. Most of the servicing involves topping up of systems with leaks. One of the car dealerships has acquired a recovery/recycling machine; however, in general CFCs are vented during service practices, particularly by technicians in the informal sector.

4. As part of its policy, from 2007 and beyond, the Government of Saint Lucia considers it essential to provide training to servicing technicians who have not been exposed to this training and to technicians in the informal sector who are also interested.

5. The current prices of refrigerants are: US \$10.21/kg for CFC-12 and US \$19.61/kg for HFC-134a.

### Report on the implementation of the RMP project

6. At its 23<sup>rd</sup> Meeting, the Executive Committee approved the RMP project as a bilateral contribution by the Government of Canada. The following activities have been implemented:

- (a) Establishment of an ODS import/export licensing system, based on the Montreal Protocol Act of 2001 and the Substances that Deplete the Ozone Layer Regulations of 2002;
- (b) So far, 37 persons (customs trainers and inspection personnel) have been trained in monitoring and control of trade in CFCs and CFC-based equipment. Training for the remaining customs officers commenced on September, 2002 and will continue through to the end of 2003, by which time all officers should have been trained. In addition, the Customs Department has been provided with leak detectors and ODS identifiers to assist with inspections;
- (c) In 1998, the train-the-trainers programme in good refrigeration servicing practices

was implemented by Environment Canada and in 1999 service technicians were trained by local trainers. As a result, 55 technicians have received training in good refrigeration practices; the local Community College has included a module in good refrigeration management practices, and a total of 0.11 tonnes of CFC-11 have been phased out' and

- (d) The training in recovery/recycling operations was held in January 2002 with assistance from Environment Canada. A total of 3 recovery and recycling machines and 6 recovery machines were provided (2 recovery and one recovery and recycling machines were assigned to the Sir Arthur Community College where 12 refrigeration technicians are being trained each year). In addition, a recycling centre was established at the Sir Arthur Lewis Community College. Another four recovery machines are still in storage as technicians from the formal sector are showing no interest in acquiring them on condition that any refrigerant that is recovered will be recycled at the Community College before it is reintroduced into the market (technicians prefer to wait until they can purchase their own recovery/recycling unit rather than having to work around the convenience of the College). It has been estimated that 0.5 metric tonnes of CFC-12 and 0.05 metric tonnes of R-502 has been recovered.

#### Proposed activities for the RMP update

7. The RMP update includes additional training for refrigeration servicing technicians (US \$30,000) to cover the untrained technicians in the formal sector and any of the technicians in the informal sector who is willing to be trained; procurement of 11 recovery and recycling units for the larger service agencies, including five units for servicing MAC units (US \$30,450); and an incentive programme (US \$13,000), to provide a small subsidy to owners of CFC based refrigeration equipment to retrofit to non-CFC refrigerants.

8. The RMP project was submitted with an official letter from the Government of Saint Lucia (signed by the Permanent Secretary of the Ministry of Physical Development, Environment and Housing) stating the Government's commitment to achieve, without further request for funding, at least the 50 per cent reduction in consumption of CFCs by 2005 and the 85 per cent reduction by 2007.

### **SECRETARIAT'S COMMENTS AND RECOMMENDATION**

#### **COMMENTS**

9. The Secretariat noted that at the time of the submission of the RMP project proposal, the Government of Saint Lucia had not yet reported its ODS consumption for 2002 under Article 7 and had not yet submitted the 2002 progress report on the implementation of the country programme to the Multilateral Fund. Subsequently, with the assistance from the Government of Canada, relevant reports on ODS consumption were submitted to the Fund and Ozone Secretariats.

10. Taking into consideration the limited numbers of refrigeration equipment for which recovery and recycling is feasible, the Secretariat suggested that the Government of Canada examine the merits of providing a fewer number of recovery machines and use those resources for purchasing basic service tools for the majority of the technicians in Saint Lucia.

11. Subsequently, the Government of Canada proposed to combine the request for equipment in the training programme for technicians and the complementary recovery and recycling programme (for a total of US \$42,950) under one overall budget dedicated to the provision of a mix of equipment and service tools (such as recovery units, MAC recovery/recycling machines, brazing equipment, vacuum pumps, leak detectors and other basic tools) to be selected on the basis of the needs identified over the 3-year project implementation time-frame. For instance, in the event of a steep rise in the price of CFCs which would incite technicians to recover and recycle, more recovery machines may be provided. In the event that technicians experience difficulties in implementing good practices because they lack basic equipment, then the budget could be directed to equip as many technicians as possible with basic servicing tools. Thus, the objective would be to continuously monitor and survey the needs of technicians and adapt the project accordingly.

## RECOMMENDATION

12. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below:

	<b>Project Title</b>	<b>Project Funding (US\$)</b>	<b>Support Cost (US\$)</b>	<b>Implementing Agency</b>
(a)	Refrigerant management plan update	73,450	9,549	Canada