



**United Nations  
Environment  
Programme**



Distr.  
LIMITED

UNEP/OzL.Pro/ExCom/20/20  
17 September 1996

ORIGINAL: ENGLISH

Executive Committee of  
the Multilateral Fund for the  
Implementation of the Montreal Protocol

Twentieth Meeting  
Montreal, 16-18 October 1996

**PROJECT PROPOSALS: CÔTE D'IVOIRE**

This document includes the Comments and Recommendations from the Fund Secretariat on the following projects:

Aerosol

- Phasing out CFCs at Sicobel
- Phasing out CFCs at Parfumerie Gandour D.A.F.

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# **PROJECT EVALUATION SHEET** **CÔTE D'IVOIRE**

SECTOR: **AEROSOL** ODS use in sector (1994): 89.5 ODP tonnes

Sector cost-effectiveness thresholds: US \$4.4/kg

**Project Titles:**

- (a) Phasing out CFCs at Parfumerie Gandour D.A.F.
- (b) Phasing out CFCs at Sicobel

| Project Data                        | Aerosols                                       |                                                |
|-------------------------------------|------------------------------------------------|------------------------------------------------|
|                                     | Parfumerie Gandour                             | Sicobel                                        |
| ODS phase-out (ODP tonnes)          | 66.0                                           | 20.8                                           |
| Proposed project duration (Yrs)     | 1                                              | 1                                              |
| Incremental capital cost (US\$)     | 268,000                                        | 104,500                                        |
| Contingency (%)                     | 10                                             | 10                                             |
| Incremental operational cost (US\$) | (161,939)                                      | (45,329)                                       |
| Total project cost (US\$)           | 106,061                                        | 59,171                                         |
| Local ownership (%)                 | 100                                            | 100                                            |
| Export component (%)                | 0                                              | 0                                              |
| Amount requested (US\$) {Original   | 199,669                                        | 90,671                                         |
| {Revised                            | 106,061                                        | 59,171                                         |
| Cost effectiveness (US\$/kg)        | 1.61                                           | 2.84                                           |
| National Coordinating Agency        | Ministère de l'Environnement et<br>de Tourisme | Ministère de l'Environnement et<br>de Tourisme |
| Implementing Agency                 | UNIDO                                          | UNIDO                                          |
| Technical review completed?         | Yes                                            | Yes                                            |

**Secretariat's Recommendations:**

|                                          |         |        |
|------------------------------------------|---------|--------|
| Amount recommended (US \$)               | 106,061 | 59,171 |
| Project impact (ODP tonnes)              | 66.0    | 20.8   |
| Cost effectiveness (US \$/kg)            | 1.61    | 2.84   |
| Implementing Agency support cost (US \$) | 13,788  | 7,692  |
| Total cost to Multilateral Fund (US \$)  | 119,849 | 66,863 |

### **PROJECT DESCRIPTION**

1. The projects are for the replacement of CFCs with hydrocarbon propellant used in manufacturing aerosol household products at two enterprises: Parfumerie Gandour and Sicobel. Approval of the two projects will lead to the elimination of 88.8 tonnes of CFC-12.
2. Parfumerie Gandour produces different sized presentations of deodorants (1.2 million cans/year), and hair spays (10,000 cans/year). Sicobel produces deodorants (650,000 cans/year), using its own formulations.
3. The present aerosol filling lines in each enterprise consists of two semi-automatic filling machines, manual can loading table with conveyer system, manual placing of the valve, crimper and gas filler.
4. The enterprises will convert to HAPs technology. Conversion entails installation of an open air filling station including crimping, propellant handling and filling, a water bath for testing filled cans, HAP storage and purification system, gas detectors and a fire control system. In addition, a conveyor system, explosion-proof lighting and ventilation system is requested for Parfumerie Gandour.
5. Technical assistance will be provided for performance and supervision of engineering designs, equipment installation and commissioning of the plant. Training in production, quality control and safety procedures will also be provided.

### SECRETARIAT'S COMMENTS

1. The Côte D'Ivoire country programme listed four aerosol fillers in the country, namely Simopa, Seewards, Separco, and Sicobel, with a total CFC-12 consumption of 88 tonnes. Entreprise Parfumerie Gandour was not listed in the country programme, even though the company was established in 1976 and is the main aerosol producer, consuming 66 tonnes of CFCs (73% of total consumption in the sector).
2. The Fund Secretariat, recalling decision 17/2 of the Executive Committee on significant difference between ODS data contained in a project and data in a country programme, informed UNIDO that the Government of Cote D'Ivoire should be made aware of the Executive Committee policy and requested to update the ODS consumption figures in its country programme for the aerosol sector, and submit the revised figures and a detailed explanation of the reasons for the variation.
3. UNIDO reviewed the project proposals in accordance with discussions with the Fund Secretariat. Cost of some pieces of equipment (water bath and purification system) were adjusted according to the size of the enterprises. Consultancy service fees were also adjusted as a lump sum to cover the services for the two aerosol plants.
4. The capital cost of conversion is US \$268,000 for Parfumerie Gandour and US \$104,500 for Sicobel including 10% contingency. The operational savings (NPV) for four years are US \$161,939 for Parfumerie Gandour and US \$45,329 for Sicobel.
5. The enterprises will finance costs associated with land acquisition for gas storage and open air filling room and civil works, estimated at US \$430,000 for Parfumerie Gandour and US \$500,000 for Sicobel. The Fund Secretariat has not reviewed these costs, some of which would not be eligible.

### SECRETARIAT'S RECOMMENDATIONS

1. The Fund Secretariat recommends approval of the projects with associated support costs at the funding levels indicated, subject to the condition in Recommendation 2 below:

| Project                                | Project Cost<br>US \$ | Support Cost<br>US \$ | Implementing Agency |
|----------------------------------------|-----------------------|-----------------------|---------------------|
| Phasing out CFCs at Parfumerie Gandour | 106,061               | 13,788                | UNIDO               |
| Phasing out CFCs at Sicobel            | 59,171                | 7,692                 | UNIDO               |

2. The Fund Secretariat recommends that approval of the projects be subject to any decision of the Executive Committee at the 20th Meeting in relation to the differences between sectoral consumption data reported in a country programme and data in a project.