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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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**ANALYSIS OF USE OF HCFC TECHNOLOGIES
IN FUND-ASSISTED PROJECTS**

INTRODUCTION

1. This paper is submitted by the Fund Secretariat which has been requested "to produce a paper containing figures on an analysis of what projects were being submitted for funding using HCFC technologies, to see whether there existed any trend towards or away from HCFC use in specific sectors, particularly the foam sector;"

(Decision 23/20)

2. The Executive Committee considered at previous meetings two papers prepared by the Secretariat on HCFC related issues.

METHODOLOGY EMPLOYED IN THIS EXERCISE

3. A database search is done to examine the sector/sub-sector where HCFCs are used and the split between HCFCs vs. non HCFCs on an annual basis by tonnage, percentage and region.
4. The results of this search are presented as follows:
 - (a) Table I presents the data by year and by sub-sector.
 - (b) Figure I shows the use of HCFCs in relation to the total use of HCFCs and non-HCFCs and to the use of non-HCFCs.
 - (c) Figure II shows the trend of HCFC applications on a sub-sector basis over the years.

FINDINGS

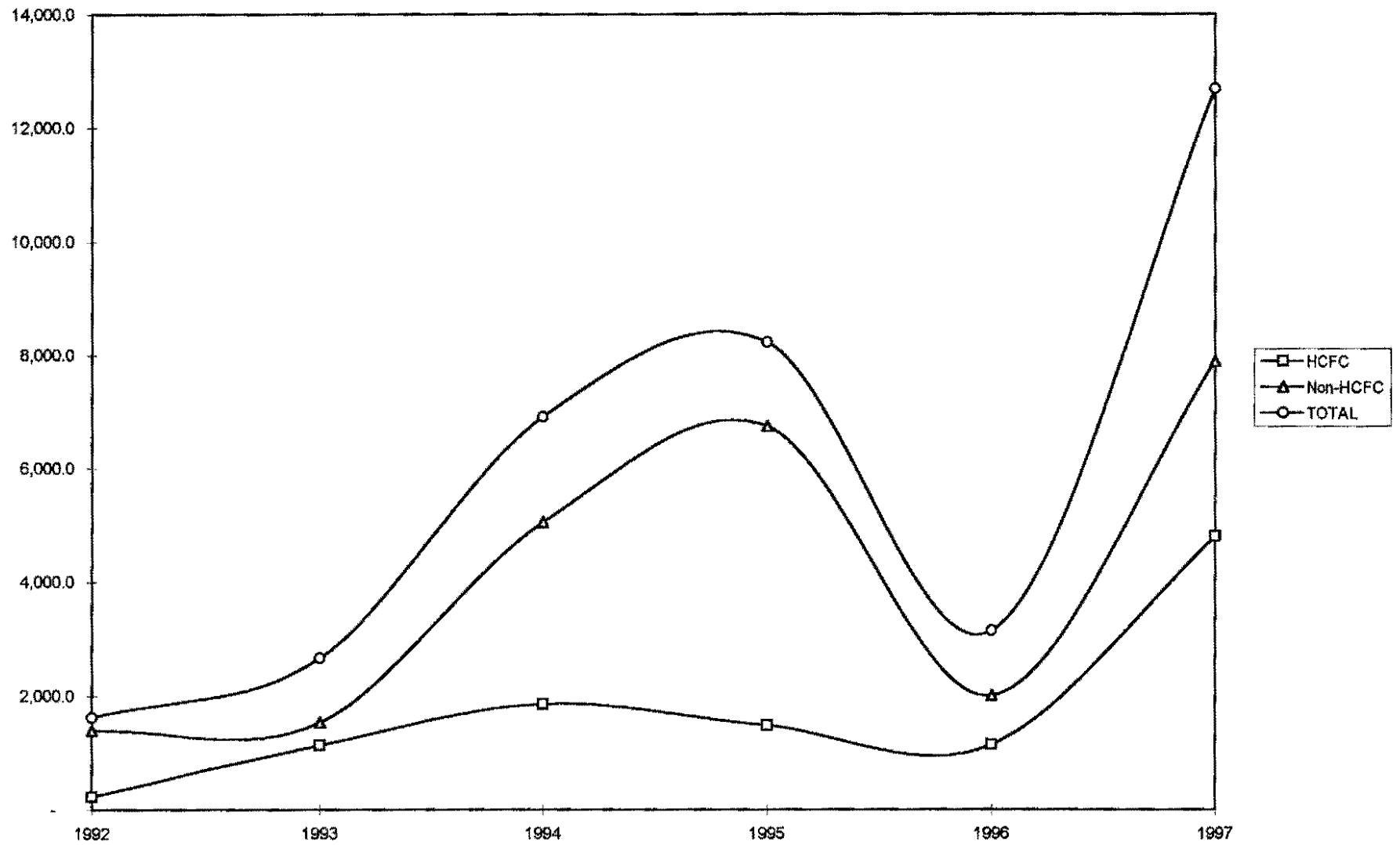
5. HCFCs are used only in the foam sector (integral and rigid) and the refrigeration sector (refrigeration insulation).
6. The use of HCFCs comprises about 30% (30.2%) of the total substitutes approved for the two sectors.
7. In the integral skin foam sub-sector it is observed that the use of HCFCs has been on a decreasing trend between 1993 and 1997.

8. In the rigid foam sub-sector the use of HCFC was on a downward trend between 1993 and 1995. However, the percentage of HCFC used went up in the year 1996 and 1997. The approval of two large projects from one country in 1997 contributed significantly to the abnormal situation in that year. This is also due to the significant increase in the number of smaller sized projects submitted during these two years, including two umbrella projects from two other countries in 1997, each comprising several small-users. The concern for the cost and safety of hydrocarbon technology for these small users has resulted in the choice of HCFCs as the substitute technology.
9. In the refrigeration insulation sub-sector a clear downward trend in the use of HCFCs was observable between 1993 and 1997.

TABLE 1: HCFC Applications in Approved Portfolio of the Multilateral Fund

Sub-sector	HCFC	Non-HCFC	Total	%HCFC	%Non-HCFC
1992					
Flexible	55.0	859.0	914.0	6.0%	94.0%
Integral skin					
Rigid					
Insulation refrigeration	175.0	530.0	705.0	24.8%	75.2%
TOTAL	230.0	1,389.0	1,619.0	14.2%	85.8%
1993					
Flexible	-	450.0	450.0	0.0%	100.0%
Integral skin	50.0	-	50.0	100.0%	0.0%
Rigid	200.0	46.0	246.0	81.3%	18.7%
Insulation refrigeration	881.0	1,036.0	1,917.0	46.0%	54.0%
TOTAL	1,131.0	1,532.0	2,663.0	42.5%	57.5%
1994					
Flexible	25.0	2,539.0	2,564.0	1.0%	99.0%
Integral skin	36.0	14.0	50.0	72.0%	28.0%
Rigid	345.0	541.0	886.0	38.9%	61.1%
Insulation refrigeration	1,451.3	1,957.2	3,408.5	42.6%	57.4%
TOTAL	1,857.3	5,051.2	6,908.5	26.9%	73.1%
1995					
Flexible	2.0	1,510.1	1,512.1	0.1%	99.9%
Integral skin	129.0	319.0	448.0	28.8%	71.2%
Rigid	386.3	1,980.0	2,366.3	16.3%	83.7%
Insulation refrigeration	964.2	2,936.3	3,900.5	24.7%	75.3%
TOTAL	1,481.5	6,745.4	8,226.9	18.0%	82.0%
1996					
Flexible	-	539.8	539.8	0.0%	100.0%
Integral skin	115.9	185.2	301.1	38.5%	61.5%
Rigid	671.6	437.0	1,108.6	60.6%	39.4%
Insulation refrigeration	351.1	848.0	1,199.1	29.3%	70.7%
TOTAL	1,138.5	2,010.0	3,148.6	36.2%	63.8%
1997					
Flexible	89.0	3,028.0	3,117.0	2.9%	97.1%
Integral skin	131.0	612.0	743.0	17.6%	82.4%
Rigid	2,929.0	366.0	3,295.0	88.9%	11.1%
Insulation refrigeration	1,651.0	3,876.0	5,527.0	29.9%	70.1%
TOTAL	4,800.0	7,882.0	12,682.0	37.8%	62.2%
GRAND TOTAL					
Flexible	171.0	8,925.9	9,096.9	1.9%	98.1%
Integral skin	461.9	1,130.2	1,592.1	29.0%	71.0%
Rigid	4,531.9	3,370.0	7,901.9	57.4%	42.6%
Insulation refrigeration	5,473.6	11,183.5	16,657.0	32.9%	67.1%
TOTAL	10,638.3	24,609.6	35,247.9	30.2%	69.8%

FIGURE 1: USE OF HCFC AND Non-HCFC IN THE PROJECTS(in Tons)



**FIGURE 2: USE OF HCFC BY SUBSECTOR
(IN PERCENTAGE)**

