



ANALYSIS

The Montreal Protocol's multilateral fund and sustainable development

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Received 31 October 2003; received in revised form 4 December 2004; accepted 17 January 2005
Available online 12 April 2005

Abstract

The 1987 *Montreal Protocol* is widely seen as a global environmental accord that has produced tangible results in terms of reductions in ozone-depleting substances. In addition, there have been other benefits, largely unrecognized and undocumented, that can best be characterized in a sustainable development framework based on a review of 50 out of 931 projects implemented over a 13 year period by one of the four implementing agencies of the Multilateral Fund for the Implementation of the Montreal Protocol. All investment projects have reduced ozone depleting potential and global warming potential. Some projects have reduced atmospheric emissions and contamination of groundwater. Other projects have increased the competitiveness of enterprises in domestic and international markets and have sustained and in a few cases created employment opportunities. Others, fewer in number, have potentially contributed to environmental problems, have initially created difficulties in maintaining productivity and quality standards and have decreased the number of employment opportunities because of the need to rationalize manufacturing processes.

The potential contributions from Multilateral Fund investment projects to sustainable development could probably have been amplified with project design guidance for the technical staffs of all three implementing agencies executing investment projects. In thinking about other multilateral environmental agreements, one can see the need for similar guidance for Global Environment Facility funded projects supporting the focal areas of climate change, international waters, ozone depletion and persistent organic pollutants. Some of them have the potential to generate multiple beneficial

Abbreviations: CO₂, carbon dioxide; CFCs, chlorofluorocarbons; GEF, Global Environment Facility; GWP, global warming potential; HAPs, hydrocarbon aerosol propellants; HCFCs, hydrochlorofluorocarbons; HFCs, hydrofluorocarbons; IPCC, Intergovernmental Panel on Climate Change; LDC, liquid carbon dioxide; MLF, Multilateral Fund for the Implementation of the Montreal Protocol; ODP, ozone depleting potential; ODS, ozone depleting substances; UNDP, United Nations Development Programme; RMP, Refrigeration Management Plan; UNEP, United Nations Environment Programme; UNEP/OS, United Nations Environment Programme/ Ozone Secretariat; UNIDO, United Nations Industrial Development Organization; USEPA, United States Environmental Protection Agency.

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¹ The views in this paper reflect those of the authors and not necessarily those of UNIDO.

impacts in addition to their stated environmental objective if designed and implemented within a sustainable development framework.

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Keywords: Global; Global Environment Facility; Montreal Protocol; Multilateral environmental agreements; Sustainable development and technology transfer

1. Introduction

The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (Protocol) is widely seen as a global environmental accord that has produced tangible results (Anderson and Sarma, 2002). Implementation of the Protocol has reduced the consumption of ozone-depleting substances (ODS) by more than 90% (UNEP/OS, 2004). By the end of 2002, industrialized countries have reduced their ODS consumption by more than 99% and developing countries have reduced their consumption of ODS by slightly more than 50%. Most of the reduction in ODS consumption in developing countries is attributable to projects implemented by the four multilateral implementing agencies (UNDP, UNEP, UNIDO and World Bank) of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF).

What is surprising in reading about the impacts of the MLF in reducing consumption of ODS in developing countries is how narrowly focused are the descriptions of the results of ODS phase out projects. The reports that are available from the Executive Committee of the MLF and the three agencies executing MLF funded investment projects, UNDP, UNIDO and World Bank, focus almost exclusively on the amount of ODS consumption reduced and the costs and cost effectiveness of various measures. The annual reports of the MLF Executive Committee, the latest is November 2003, describe total reductions in ODS consumption and costs as well as a host of fund raising and administrative matters (UNEP, 2003); the sectoral evaluations undertaken by the MLF Secretariat over the past few years (aerosols, compressors, foams, solvents and refrigeration) only mention in passing other environmental issues and economic (productivity) and social aspects of ODS phase out projects (UNEP/MLF, 1999, 2001a,b,c, 2002). The World Bank, which has

received the most funding from the MLF, has only recently evaluated its implementation of MLF projects (World Bank, 2004) (Table 1). The focus of its evaluation is almost exclusively on administrative matters, particularly those with financial intermediaries that disperse investment funds for plant level conversions. The initial report by UNIDO on its 10 year history in implementing MLF funded projects focused almost exclusively on the effectiveness and efficiency of UNIDO's sectoral programmes for phasing out ODS in the manufacturing and agricultural sectors (UNIDO, 2002, 2003). The United Nations Development Programme, which uses the Office of Programme Services to disperse funds for plant level conversions, is only now undertaking a review of its implementation of MLF funded projects (Carvalho, 2004). In all of these published or planned reports, there is virtually no mention of the other environmental impacts or of potential economic and social benefits or dis-benefits of plant level conversions. The lack of descriptions and reporting on the part of the implementing agencies is even more surprising given the decade long attention to sustainable development, particularly the United Nations Conference on Environment and Development (Rio,

Table 1
Multilateral fund expenditure and ozone depletion potential reduced by implementing agency (as of December 2003)

Agency	Expenditure of MLF ^a (US\$ million)	ODP consumption and production eliminated ODP tons ^b
UNDP	332.1	38,400
UNEP	63.8	200
UNIDO	295.8	30,700
World Bank	526.9	117,700
Sum	1218.6	187,000

Source: UNEP/MLF, 2004a,b,c,d,e.

^a This allocation includes agency support cost.

^b Less than 1000 ODP tons eliminated by the collective funding of France, Germany, USA and UNEP.

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