

# ***Partnership to Strengthen the Montreal Protocol with Military Logistical Know How and Collaboration in Collecting and Destroying Unwanted Ozone-Depleting Substances (ODS)***

## **THE PROBLEM AND THE OPPORTUNITY**

Billions of tonnes of CO<sub>2</sub>-equivalent are needlessly emitted to the atmosphere because used and unwanted ozone-depleting substances are not collected and destroyed. The United Nations Environment Programme (UNEP) estimates that it is technically and economically feasible to recover and destroy unwanted ozone-depleting chemicals equivalent of 6 billion tonnes or more of carbon dioxide, which is equal to 3 years of global Kyoto targets.

## **PARTNERSHIP**

The United States Environmental Protection Agency (EPA) in cooperation with partners in the Australian Ministry of Defence, the Netherlands Ministry of Defence and the United States Department of Defense--proposes to form a global public-private partnership to cooperate in efforts to collect and ultimately destroy unwanted ozone-depleting substances (ODS) that are also potent greenhouse gases. This cooperation is significant because military organizations have developed technology, logistical strategies, and management practices that minimize cost and chemical emissions.

## **HOW THE PARTNERSHIP WILL WORK**

This partnership has a two pronged “Start and Strengthen” approach to support collection and destruction: 1) Sharing of information and, 2) Consulting on logistics.

### **1. Sharing Information**

Partners will collect and organize existing technical and operational information on the website portal maintained by DOD/EPA and will match owners of usable surplus ODS with important customers (offsetting supply from new production).

### **2. Consulting on Logistics**

Military and other logistical experts will work as volunteer consultants to create an on-line library of best practices, laboratory techniques, and business strategies, with direct links to companies offering equipment and services for collection and destruction of surplus military ODS. This information would be made widely available to the Multilateral Fund, Parties to the Montreal Protocol, and other interested stakeholders for use as necessary.

Partner experts will provide information to Parties to the Montreal Protocol and the United Nations Framework Convention on Climate Change as described above and enterprises seeking to properly collect and redeploy or destroy unwanted ODSs. Experts will provide information-- focusing first on least cost solutions-- including: secure storage guidelines to accumulate quantities suitable for shipment or destruction on site, ways to design umbrella contracts for destruction at favorable costs, and redeployment of usable surplus.

Membership will be open to all countries and organizations committed to working together to reduce ODS and greenhouse gas emissions through improved ODS management, collection and destruction.

### **FOUNDING PARTNERS**

Argentina Ministry of the Environment  
Australia Department of Defence  
Australia Department of the Environment, Water, Heritage and the Arts  
Institute for Governance & Sustainable Development (IGSD)  
International Network for Environmental Compliance & Enforcement (INECE)  
Mauritius Ministry of Environment  
Netherlands Halon Bank Association  
Netherlands Ministry of Defence  
United Nations Development Programme  
United Nations Environment Programme  
US Department of Defense  
US Environmental Protection Agency

### **BACKGROUND**

The partners strongly support voluntary efforts by developed and developing countries to collect and destroy ozone-depleting substances.

Partners have identified opportunities to encourage increased rates of ODS recovery with some portion redeployed to servicing and the unwanted portion destroyed. Absent economic or regulatory incentives to recover CFC and HCFC from thermal insulating foam, the most significant opportunity is in large refrigeration and air conditioning equipment where destruction can be integrated in programs to reduce leaks and increase recycling.

The proposed project will be organized as a voluntary partnership of military, UNEP, industry, and NGOs and will document best practices and cost-effective strategy for collection and destruction of ODSs. The project would consolidate written materials and provide networking opportunities to answer questions and connect stakeholders.

The US Department of Defense (DoD) Defense Logistic Agency (DLA) is extremely experienced in the technical, logistical, and contractual details of collection and destruction. In cooperation with the US EPA and the governments of Australia, Netherlands and other organizations, DLA has written laboratory manuals, logistical guidelines and contract documents.

EPA's Climate Protection Partnerships Division has developed the project in cooperation with DoD, DLA, The United Nations Environment Programme (UNEP) United Nations Development Programme (UNDP), several non-governmental organizations (NGOs), and respected environmental authorities from Argentina, and Mauritius.

#### **THE POTENTIAL OZONE AND CLIMATE BENEFITS**

The Technology and Economic Assessment Panel ("TEAP") estimates that end-of-life measures across all sectors could recover approximately 300,000 Ozone Depleting Potential ("ODP") tonnes and approximately 6 billion tonnes of CO<sub>2</sub>-eq.

The most accessible portion amounts to 194,038 tonnes of CFCs, equivalent to approximately 2 billion tonnes of CO<sub>2</sub>-eq., and 454,887 tonnes of HCFCs, equivalent to approximately 770 million tonnes of CO<sub>2</sub>-eq.

#### **WHY THE PROPOSED PROJECT IS NEEDED NOW**

Action is needed now because ODSs that leaks cannot be recovered from the atmosphere. The TEAP estimates that by 2015, approximately 90% of the CFCs and 50% of the HCFCs in "reachable" refrigeration and air conditioning banks in non-A5 Parties, and over 75% of the CFCs in these banks in A5 Parties, will have been emitted.

#### **BENEFITS BEYOND CLIMATE AND OZONE LAYER PROTECTION**

*Better Treaty Coordination.* The UNEP Ozone Secretariat has agreed to act as coordinator with the Basel Convention Secretariat and other conventions to ensure the transport of unwanted ODSs to countries with destruction facilities is correctly permitted. This activity itself will be helpful because it will streamline the desirable shipments of chemicals to proper destruction facilities.

*Improved Public Relations.* Local military authorities will have the desirable experience of working with local environmental authorities, helping with state and community relations on other environmental issues faced at overseas bases.

*More Efficient and Cost-Effective Waste Management.* The partnership will coordinate an international "clearinghouse" to match supply with demand by connecting countries requiring ODS destruction to those having proper destruction facilities available. They will make every effort to minimize transport distances and maximize effectiveness. By having a global clearinghouse, small quantities can be aggregated for maximum destruction cost-effectiveness.