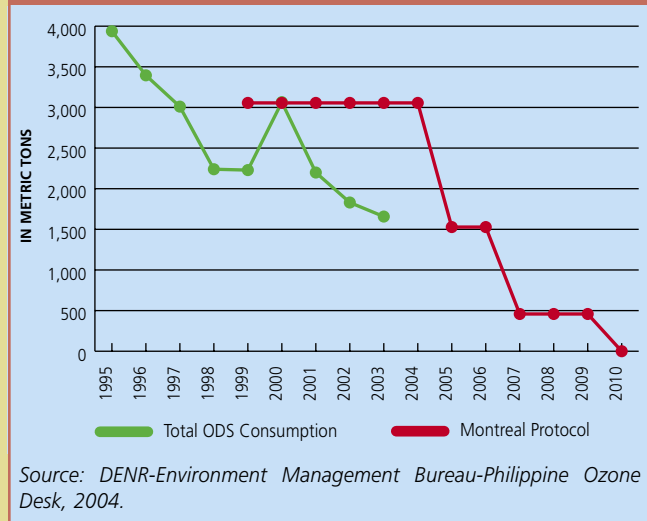


The Philippines is committed to implementing international environmental agreements. It is working closely with international and local partners to meet global commitments. Notable among such partnerships is the country's program to support the Montreal Protocol. Additionally, in 2003, the government also ratified the Kyoto Protocol and the Stockholm Convention.

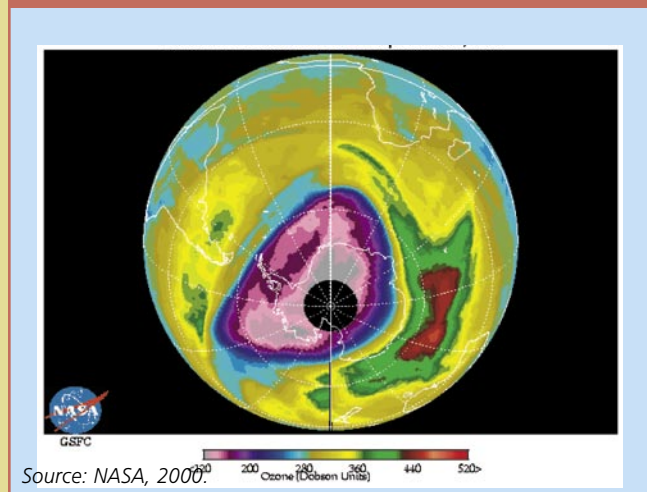
Montreal Protocol. In 1991, the Philippines ratified the Montreal Protocol, committing to progressively phasing out the use of Ozone Depleting Substances (ODS), specifically chlorofluorocarbon (CFCs), until a complete phase-out by 2010. In order to meet this goal, CFC consumption must be reduced by 50 percent by 2005, and 85 percent by 2007 (from a baseline of about 3000 MT in 1999). From 1995 to the end of 2003, CFC consumption fell by 58 percent, from 3,382 to 1,422 MT, thus meeting the target ahead of schedule. This performance was possible due to the strict implementation of the quota system, import licensing, and the National CFC Phase-Out Plan, with active participation of Bureau of Customs, the Technical Education and Skills Development Authority of the Department of trade and industry (Figure 22).

Further reduction in CFC consumption will be addressed through the voucher system. Financial assistance will be given to accredited refrigeration and service shops to purchase tools and equipment for better servicing, maintenance, and installation of appliances, and air-conditioning in motor vehicles. Piloted in November 2004, and to be implemented nationwide in 2005, the voucher system targets the servicing sector, which accounts for 75 percent of the total CFC consumption in the country. Other sectors to be regulated are foam and refrigeration manufacturing and the metered-dose inhalers. To control and regulate use, importation, and distribution

Figure 22. ODS Consumption in the Philippines and Montreal Protocol Phase-Out Schedule



Earth Probe TOMS Total Ozone September 16, 2000



of methyl bromide,⁵⁶ DENR and the Department of Agriculture's Fertilizer and Pesticide Authority jointly developed a strategy, and have started to review modified licensing and permits to purchase methyl bromide.

UN Framework Convention on Climate Change and the Kyoto Protocol. Philippines ratified Kyoto Protocol in 2003. Climate change and

⁵⁶ Another ODS and a broad spectrum pesticide.



global warming are critical issues for the Philippines because of its extensive coastline. Initial studies on the impact of climate change in the Philippines show that temperatures could rise by as much as 2.2 degrees in the last quarter of this century. Moreover, many of the scientific models confirm an increase in rainfall in the wet seasons and a marked decline in dry seasons. Preliminary maps show that Mindanao is most vulnerable to projected temperature increase, while Luzon is likely to be affected most by changing rainfall patterns. Areas in Metro Manila could see a rise in sea level ranging from 0.3 to 2 meters. This rise could eventually impact freshwater aquifers and make coastal communities increasingly vulnerable to floods. A crop failure in Region II in the summer of 2003, and the bleaching of corals off Southern Luzon, have both been attributed to temperature changes.

The Clean Development Mechanism (CDM) is a cooperative mechanism established under the Kyoto Protocol, to promote environmentally friendly projects for sustainable development in developing countries. The DENR, as the National Authority, will undertake the assessment and approval of CDM projects and monitor their implementation. To date, DENR has endorsed four environmental projects for Certified Emission Reduction credit purchase under

the PCF (Box 13). Related initiatives of the LLDA are described in Box 14.

Stockholm Convention on Persistent Organic Pollutants. Ratified in February 2004, a National Implementation Plan that describes how the Philippines will phase out sources of Persistent Organic Pollutants (POPs) and remediate contaminated sites in the country, is being prepared. An inventory of POPs and the assessment of national infrastructure and institutional capacity are being finalized. In addition, a pilot project using non-burn technology to treat polychlorinated biphenyls (PCBs) has been prepared for possible GEF funding.

Basel Convention Hazardous Wastes. The DENR-EMB, regulates the movement of hazardous wastes to ensure that they are handled, collected, treated, and disposed of in an environmentally sound manner. Regular monitoring of the actual treatment and disposal needs to be undertaken to ensure against risks to people and the environment. The DENR has registered 3,015 generators, 308 transporters, and 92 treaters/recyclers in 2004. Transboundary movement of hazardous wastes for treatment and disposal outside the country, import/export clearances, and notifications are being issued.

Box 13. Clean Development Mechanism (CDM) initiatives under the Prototype Carbon Fund (PCF)

The PCF was created to pioneer emission reduction purchase transactions, and to support projects that generate high quality certified emission reductions (CERs) suitable for registration with the United Nations Framework Convention on Climate Change (UNFCCC) as meeting targets for Kyoto Protocol. To date, DENR through the Inter-Agency Committee on Climate Change has endorsed the following renewable energy projects for CER credit purchase: (1) 25 MW Ilocos Norte Wind Farm Power Project; (2) 30 MW First Farmers Bagasse Cogeneration Project, Talisay, Negros Occidental; and (3) 50 MW Victorias Bagasse Cogeneration Project, Victoria, Negros Occidental. Of the three, the Ilocos Norte Wind Farm Power Project is at an advanced stage and will be ready for commissioning by the first quarter of 2005. The Ilocos Norte Windfarm Power Project is located in the remote part of Luzon, in Bangui, Ilocos Norte. The first of its kind in Southeast Asia, it is a zero-emission wind energy technology that displaces diesel-based power generation and thereby reduces carbon dioxide and other greenhouse gas (GHG) emissions. The PCF will purchase an average of 47,000 tons of CO₂ equivalent or TCO₂ in each of the first 10 years of the project. The project's Emission Reduction Purchase Agreement (ERPA) was signed by the World Bank and the Northwind Power Development Corporation (NWPDC) in December 2004. The PCF is also considering other renewable energy sources, including the 42 MW PNOC-EDC North Luzon Wind Power Project, 20 MW Palinpinon Geothermal Optimization Project in Negros Oriental and the 40 Northern Negros Geothermal Project in Negros Occidental."

Source: Authors



Convention on Biological Diversity. Since the adoption of NIPAS in 1992, biodiversity conservation programs including the establishment and management of Wildlife Rescue Centers are being implemented all over the country. The National Bio-safety Framework Project and the Philippine Biodiversity Conservation Priority Setting Project represent the second iteration of the NBSAP. The following policies have also been issued and implemented: a) RA 9147—Philippine Wildlife Resources Conservation Act; b) RA 9072—National Caves and Cave Resources Management and Protection Act; c) EO 430, creating the National Committee on Bio-safety of the Philippines, including the signing of the Cartagena Protocol on Bio-safety; and d) EO 111, establishing the Guidelines for Ecotourism Development in the Philippines.

Ramsar Convention on Wetlands (RAMSAR).

A total of 133 wetlands have been identified as critical to biodiversity conservation and proclaimed protected areas. Four of these sites, listed below, are included in the RAMSAR list of Wetlands of International Importance.

- Olango Island Wildlife Sanctuary,
- Naujan Lake National Park,
- Agusan Marsh Wildlife Sanctuary, and
- Tubataha Reefs National Marine Park

Olango Island Wildlife Sanctuary and Naujan Lake National Park are also recognized internationally as ShoreBird and Anatidae Site Networks, respectively,⁵⁷ while Tubattaha National Marine Part has been designated a World Heritage Site. Efforts to mainstream wetland conservation activities within national land use planning continue to be undertaken as part of the Philippine Wetland Action Plan. The “Philippine Wetlands Conservation Award” seeks to

⁵⁷ An international program nominating key sites of global importance to shorebirds and anatidae populations in the East Asian-Australasian and East Asian Flyways, respectively.

Box 14. The Laguna de Bay Community Carbon Project

The Laguna de Bay Community Carbon Project provides Carbon Emission Reduction (CER) credits for environmental interventions under the Laguna de Bay Institutional Strengthening and Community Participation (LISCOP). Within the framework of the Clean Development Mechanism of the Kyoto Protocol, LISCOP-funded subprojects and/or those identified in the Lake Environmental Action Planning (LEAP) shall be developed and CERs accounted for crediting under the Community Development Carbon Fund (CDCF) and/or BioCarbon Fund (BCF). Under the project, the Laguna Lake Development Authority (LLDA) shall serve as the carbon intermediary for various community activities that result in verifiable CERs. Pilot subprojects that are being developed include: (1) Tanay Microwatershed Streambank Rehabilitation and Ecological Enhancement, and (2) Tanay Solid Waste Composting Facility. Initial estimates indicate that these pilots would result in CER of 5,000-10,000 tons of atmospheric CO₂ equivalent (TCO₂e) for 20 years and 4,039 TCO₂e/year over 10-year project lifetime, respectively. Other potential eligible community activities include communal biogas digester, reforestation, assisted-natural regeneration, and agro-forestry.

Source: Authors.



Shoreland migratory birds, such as egrets are commonly found in Olango waters.

Source: DENR-Public Affairs Office.

generate public and private interest in the wise use of wetlands granted during the annual celebration of World Wetlands Day.

Convention on International Trade in Endangered Species of Flora and Fauna (CITES). The implementation and monitoring of





Long-tailed monkey, *Macaca fascicularis*.
Source: DENR-Public Affairs Office.

wildlife trade regulations has been strengthened by the creation of 15 Regional Wildlife Monitoring Teams. From 1995 to September 2004, 673 CITES and 940 non-CITES permits were issued by PAWB, generating an average income of PhP4.9 million and PhP0.4 million respectively. Restaurants serving exotic food are regularly monitored for infraction of the Convention.

Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS).

The Philippines has worked toward the inclusion of five species of migratory birds under the 2002 Conference of the Parties. These are: *Gorsachius goisagi*, *Platalea minor*, *Tringa guttifer*, *Eurynorhynchus pygmeus*, and *Sterna bernsteini*.

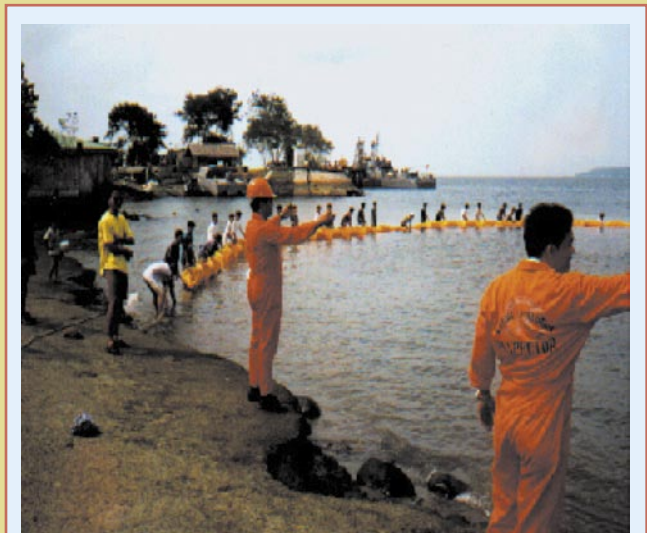
A landmark Memorandum of Understanding on the conservation of marine turtles was signed by South and East Asian nations in 2001.

United Nations Conference on the Law of the Sea (UNCLOS). The National Marine Policy was formulated to serve as the umbrella framework for addressing ocean and marine concerns. A

comprehensive program is being developed to manage marine and coastal resources, and to ensure the implementation of UNCLOS provisions.

International Convention for the Prevention of Marine Pollution from Ships (MARPOL).

The Philippine Coast Guard is responsible for the prevention and control of pollution in the country's territorial waters. In 1998 it established the Marine Environmental Protection Command to ensure compliance with marine pollution laws. The country is an active participant in the implementation of regional agreements, including the ASEAN Oil Spill Response Action Plan (OSRAP), and Oil Spill Preparedness and Response (OSPAR) Project; and in the maintenance of OSPAR equipment and information network system. There are four oil-spill response centers in Manila, Cebu, Palawan, and Davao. The coast guard continues to enhance its capability through research on oil analysis, and providing adequate response to abatement, containment, and recovery of major- and medium oil spills.



Containment and recovery of oil spill.
Source: PCG-Marine Environmental Protection Command.

