

# United States of America

by Drusilla Hufford

U.S. implementation of ozone protection began in 1987, when President Ronald Reagan personally supported it against the advice of key high-level officials. It has continued to be characterized by strong leadership: from the U.S. Congress in framing the visionary approach that guided the nation's response to ozone depletion; from key industry leaders who invested and shared information and took commercial risks; from strong voices in the environmental community; and from entrepreneurial government policy-makers.

The early years demanded a framework for success. The U.S. Congress supplied this by amending the Clean Air Act (CAA) to enable the Environmental Protection Agency (EPA) to carry out our Protocol commitments for phasing out ozone-depleting substances (ODS). It also specified domestic mechanisms that increased the transition's smoothness, speed and clarity, including a ban on nonessential products and a system for reviewing and approving safe alternatives.

As a result, the US has met requirements more rapidly, and at lower cost, than anticipated. By 1996, our phaseouts were occurring four years faster and covering 13 more chemicals than planned, while estimated costs dropped from \$3.55 to \$2.45 per kilogram. Such studies as the 2003 Thompson Report, developed by the U.S. Office of Management and Budget, show we are getting more health benefits through protecting ozone than from almost any other CAA program. Ending damage to the ozone layer is expected to prevent 6.3 million future U.S. deaths from skin cancer: benefits exceed costs twenty fold.

The U.S. has virtually completed phaseout of the most damaging ODS. Limited exemptions are tightly monitored and decline yearly: the use of CFCs in asthma inhalers, for example, has decreased by over 90% in the last decade. Among our biggest challenges has been phasing out the fumigant, methyl bromide (MeBr), due to unique conditions facing U.S. Agriculture – but we have made substantial progress here too: the U.S. now allocates less than one-fifth as much MeBr for critical uses as was used in 1991. We expect consumption to continue to decline as growers adopt alternatives, lower the proportion of MeBr in pesticide formulations, and reduce amounts needed for pest control.

The U.S. has also led in meeting the Protocol's requirements for phasing out hydrochlorofluorocarbons (HCFCs), the less-damaging transitional substitutes. In a "worst-first" approach, the U.S. phased out HCFC-141b, exceeding the 35% reduction required under the Protocol, a full year ahead of schedule. EPA sent consistent regulatory signals on the phaseout schedule as early as 1993, giving manufacturers ample time to make smart investments in alternative substances and technologies.

U.S. success stems from our market-based allocation system, allowing EPA to track compliance and control imports and exports while providing a



strong

mechanism for trading among companies. Its electronic data base tracks the thousands of annual transactions by the dozens of companies that trade in ODS under our allowance and exemption programs – ensuring not only that companies comply with CAA requirements but also that the U.S. reports accurate, timely data to the Protocol Parties.

Compliance assistance can help the adoption of the needed changes. EPA's guidance documents, training programs, and technical support - including videos for technicians topics like repair leaks of ODS and safely disposing of them – are sought not only within the U.S. but by other countries. When this fails, the Government pursues violators aggressively. Between January 1998 and July 2003, the U.S. Department of Justice brought 82 cases, convicted or obtained guilty pleas from 119 defendants, imposed over 76 years of imprisonment, assessed \$40,233,395 in fines, obtained \$30,156,260 in restitution, and seized about 1.25 million pounds of CFCs.

The companion mechanisms that Congress created have also been highly effective. Early bans on uses - such as aerosols, pressurized dispensers, and flexible foams - served to limit emissions and produce faster transitions for both CFCs and HCFCs. Assuring the availability of viable alternatives is also vital: the EPA's Significant New Alternatives Policy (SNAP) program has so far identified and reviewed over 300 alternatives in major industrial, consumer, and defense applications.

In all these areas, decisive leadership has been vital to U.S. contributions to the Protocol's global success. Continuing success in completing its important agenda of future work will rely just as heavily on partnerships, vision, and the willingness to make -and rigorously implement - difficult decisions.

# leadership



## China by Liu Yi

China completely phased out CFCs and halons by the end of June under its National Accelerated Phaseout Plan (APP) – in what is a big gift, solemnly presented by its government and people on the 20th Anniversary of the Montreal Protocol. This important milestone, a key step towards the Protocol's ultimate target, marks another big success for the treaty.

As the largest producer and consumer of CFCs and Halons among developing countries, China has remained serious and active in implementing the Protocol for the past two decades. It has achieved great progress, receiving common respect and praise from the international community. With such international support, China took the lead in adopting the phaseout mechanism in all of its twelve industrial sectors. It put its APP into effect to speed up its nationwide implementation of the framework Vienna Convention, with the additional aim of helping the whole world to implement the Protocol. People and enterprises in China endured great pressure and economic losses in hitting this target, but the government and the people believe firmly that this is necessary and worthwhile for the benefit of humankind. Thus, the country has never hesitated in speeding up its implementation measures.

The Protocol is one of the few recognised successes for common goals through the cooperation of all nations in the history of the human development and of the United Nations. Its implementation over the last two decades may be only flash in the long unfolding of human development - but it serves as a shining spark too. It also provides a rich classroom, through which so many lessons can be learned.

Its success relies on advanced science, giving all the world's people a common understanding on the protection of the ozone layer and demonstrating that we have no time for delay if we are to protect the earth on which we live. The world has maintained the principle of "common but differentiated responsibilities" under which the parties to the Protocol implement their commitments and responsibilities. The United Nations has established and successfully operated the Protocol's Conferences of Parties, the Convention's Secretariat and the Multi-lateral Fund ExCom/Secretariat. The international implementing agencies - including UNEP, World Bank, UNDP and UNIDO, and the National Ozone Units of the Article 5 (developing) countries - have formed an efficient organism for implementing the Protocol. This is a big ozone family filled with consolidation, cooperation and harmonization.

Helped by strict rules, flexible policies, the continuing reform of the operational mechanism and powerful financial and technical support, the parties involved in implementing the Protocol have been well led and organized fully to cooperate and contribute. This has created a shining example of the UN's outstanding work, and proved a great inspiration for implementing other environmental, political, military and economic conventions.



# Argentina

## by Romina Picolotti

Few countries in the world are as grateful as Argentina for the extraordinary progress of the Montreal Protocol in its ability to protect the Ozone layer, and to allow for its regeneration. The decomposition of the ozone directly over the southern cone of South America - as a result of the massive amounts of noxious chemicals released by human activities into the atmosphere, - has directly affected my country's health, environment, and economy. We will continue to feel these impacts for some years, but I sleep better knowing that my children, the children of Argentina, and future generations will not suffer from this menace. The ozone is slowly but surely re-weaving its natural fabric, and will protect us once again from the damaging rays of the sun.

Because of the direct impacts it has suffered, Argentina has made its implementation of the Montreal Protocol an environmental priority. In 1990 it demonstrated its international commitment by ratifying the Vienna Convention and the Montreal Protocol on Substances that Deplete the Ozone Layer. Since then, we have prohibited establishing new CFC producing plants, producing CFC aerosol spray propellants (with electronic and medical use exceptions), and importing halogens.

The Government's implementation of the Protocol has allowed Argentina not only to meet the target of reducing CFC consumption by 50 per cent in 2005, but also to achieve the much greater emissions reduction of 65 per cent. This is mainly a result of converting industrial technologies that used CFCs to alternative substances, less harmful to ozone. We have delivered equipment and the necessary tools for good refrigeration practices to small workplaces that would never have been able to adopt the new measures and technologies without assistance. We have also reduced the tobacco sector's consumption of methyl bromide by nearly 80 per cent - an important goal for Argentina - as our professionals were able to develop new technologies that allowed us to cut the cost of alternatives.

Argentina's success is based on hard work and dedication, but it could not have been achieved without the support we received from the Protocol's financing and technical support mechanisms. We are now pleased to have been nominated for an award of excellence for our national licensing system.

Conscious that ozone-depleting substances also contribute to global warming, Argentina and Brazil jointly proposed an adjustment to the Protocol last March to accelerate the phase-out of HCFCs. This would both maximize the treaty's benefits for climate change, while protecting ozone even further. Substitutes for HCFCs are available, but it is critical to ensure that only the most climate-friendly ones are used if the benefits of an accelerated phase-out are to be captured. This will require donor countries to provide appropriate levels of financial assistance through the Multilateral Fund to cover the incremental costs of transition to such substitutes. It will also be essential to send clear regulatory signals to industry to encourage and reward technological innovation.

Argentina recognizes that incorporating climate priorities into the Protocol will breathe new life into its extraordinary ability to drive innovation, and thus spur the development of new ozone- and climate-friendly chemicals and technologies. The potential benefits of the Protocol for the climate represent one of the best and most cost effective strategies for achieving significant and rapid reductions in greenhouse gas emissions, thus providing valuable insurance against the threat of abrupt climate change.

Argentina believes that the global community must leverage the Montreal Protocol's experience and resources - including its sophisticated and robust network of ozone officers in every country and its effective financial framework for implementation. Its experiences and success are valuable lessons for all environmental treaties, and could be particularly helpful in global efforts to confront the challenge of climate change. The Protocol gives us precise regulatory tools to help control the climate problem. The new regime that is needed for when the current phase of the Kyoto Protocol ends in 2012, could blend Montreal's regulatory approach with the market-based cap and trade system. We need both, and ultimately we need to make them work together.