

**Message by
Hon. Dr. Mariyam Shakeela,
the Minister of Environment
and Energy on the occasion
of Ozone Day 2012, 25th
anniversary of the
Montreal Protocol**

**OZONE DAY 2012 BICYCLE
RACE HELD**

**WORLD OZONE DAY
CELEBRATION WAS HELD**

**6TH MOP AND 11TH COP
MEETINGS START IN
HYDERABAD**

**WHAT CAN YOU DO
AGAINST OZONE DEPLETION?**





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Today, as we celebrate the Ozone Day, we are constantly reminded of our vulnerability to environmental threats and hence, the great challenges ahead of us. Maldives is reputed to be one of the most vulnerable countries to the predicted impacts of climate change and extreme weather events and yet we are resilient and determined.

As we celebrate the 25th year of the Montreal Protocol, I am proud to say that Maldives is determined to do what it can in order to overcome adverse impacts of environmental threats. We in the Maldives are continuously taking the necessary measures to build resilience of the islands and accordingly, the policies and actions of the government are linked towards achieving these goals. Becoming party to Montreal Protocol was one such action.

The Montreal Protocol is regarded as the most successful environmental protocol and it has achieved much of what it aimed for. It has also attained a unique status among the existing multilateral environmental agreements through universal participation, and has been regarded as the most effective agreement in UN history for meeting its targets ahead of schedule.

Maldives has been working in an exemplary manner in fulfilling the obligations and meeting the commitments of the Montreal Protocol. As a result, we have not only achieved the targets agreed under the protocol, but have moved faster in phasing out certain substances than what the protocol requires. Indeed, Maldives is one of the first countries to phase-out CFC, in 2008, and that was two years earlier than the target phase-out date set by the Montreal Protocol. The target date according to the agreement was 1st January 2010. Maldives is also the first country to commit to phase-out Hydrochloroflourocarbons (HCFCs) by 2020 and that would mean 10 years ahead of the actual accelerated phase-out schedule agreed by the member countries.

The HCFC phase-out schedule is aligned with the carbon neutral policy of Maldives. The strong desire of the Maldivian government to harness the dual goals of ozone layer and climate protection is one such example of our commitment towards protecting the environment and pursue sustainable development.

Maldives is the first country to link the HCFC Phase-out with the climate co benefit activities. It is estimated that the total phase-out of HCFC will contribute to eliminating 130,000 Mt equivalents of CO₂ emission, which is estimated to be 20% of the total carbon emissions of Maldives.

OZONE DAY 2012 BICYCLE RACE HELD



30 September 2012

The final event to mark this year's Ozone Day and the 25th Anniversary of the Montreal Protocol; the 'Ozone Day Bicycle Race 2012' was held at Hulhumale' on 30 September 2012. The bicycle race, organized jointly with the Maldives Olympics Committee, was aimed at creating awareness about the harmful gases released by the motor-vehicles into the atmosphere; create awareness about the Ozone layer and also to promote the use of bicycles in the Maldives. More than 90 competitors took part in the race in 8 age categories; under 9 mixed, under 11 mixed, under 13 mixed, above 16 mixed, under 19 Male and Female, under 21 Male and Female, above 21 Male and Female and above 40 mixed.

The event was held in partnership with Housing Development Cooperation, Maldives Police Service, Maldives National Cadet Co and Maldives Red Crescent who provided logistic and technical support to the event.

All participants were awarded certificates while winners from each category received bicycles, medals and cash prizes.

Prizes to the winners were awarded by the Honorary Chairman of Maldives Olympic Committee Mr. Zahir Naseer, State Minister of Environment and Energy Mr Abdul Matheen Abdullah, Deputy Minister of Environment and Energy Mr. Abdullahi Majeed, Director General Mr. Mohamed Zahir and Housing Development Cooperation Khadheeja Hassan.



WORLD OZONE DAY CELEBRATION WAS HELD



18 September 2012

World Ozone Day activities to mark the 25th anniversary of the Montreal Protocol on Substances that Deplete the Ozone Layer was held in Male' 16th September 2012. A children's evening was celebrated in Republic Square, and 25 students selected by the Swimming Association of Maldives swam from Male' Atoll Funadhoo to Male' carrying balloons with the Ozone Day theme.

The event was graced by His Excellency Dr. Mohamed Waheed and Madam Ilham Hussain. President Waheed awarded certificates to the participants of the swimming event, as well winners of the inter school essay writing competition held to mark the day. A plaque in recognition of the participation of Maldives in the Montreal Protocol was presented on behalf of the Ozone Secretariat by Ms. Zeba Bukhari, the Representative of UNICEF to HE President Waheed.



This year's International Day is celebrated under the theme "Protecting our atmosphere for generations to come". Hailed as the most successful treaty in UN history – for achieving universal ratification and meeting its targets ahead of schedule, the Montreal Protocol on Substances that Deplete the Ozone Layer will be celebrated its 25th anniversary. The Protocol, which was ratified by 197 countries, has enabled reductions of over 98 per cent of all global production and consumption of controlled ozone-depleting substances.

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The Protocol also oversaw the global phase-out of chlorofluorocarbon (CFCs) by 2010. Global observations have verified that atmospheric levels of key ozone depleting substances are going down and it is believed that with implementation of the Protocol's provisions the ozone layer should return to pre-1980 levels by 2050 to 2075.



6TH MOP AND 11TH COP MEETINGS START IN HYDERABAD

02 October 2012

The sixth meeting of the of the Conference of the Parties (COP) to the Convention on Biological (CBD) serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP 6) started yesterday in Hyderabad, India, and will continue until 5 October 2012. It will be followed by the eleventh meeting of CBD COP (COP11) which will meet from 8-19 October. COP/MOP 6 will address a number of substantive issues, including: capacity building; handling, transport, packaging and identification (HTPI) of living modified organisms (LMOs); notification requirement; unintentional transboundary movements and emergency measures; risk assessment and risk management; socio-economic considerations; monitoring and reporting; and the second assessment and review of the Protocol's effectiveness. The meeting will also address standing agenda items relating to the Compliance Committee; the Biosafety Clearing House (BCH); financial resources and mechanism; and cooperation with other organizations, conventions and initiatives. COP/MOP6 is also expected to consider the status of the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress.

CBD COP 11 will address the status of the Nagoya Protocol on access to genetic resources and benefit-sharing (ABS); implementation of the Strategic Plan 2011-2020 and progress towards the Aichi biodiversity targets; and issues related to financial resources and mechanism, cooperation, outreach and UN Decade on Biodiversity, operations of the Convention, and administrative and budgetary matters. Delegates will also review the programme of work on island biodiversity and address: ecosystem restoration; Article

8(j) (traditional knowledge); marine and coastal biodiversity; biodiversity and climate change; biodiversity and development; and several other ecosystem-related and cross-cutting issues. From 16-19 October 2012, the high-level segment will focus on: implementation of Strategic plan; biodiversity for livelihoods and poverty reduction; marine and coastal biodiversity; and implementation of the Nagoya Protocol on ABS.

Essay Competition Winners

WHAT CAN YOU DO AGAINST OZONE DEPLETION?

According to indisputable scientific evidence, a group of manufactured chemicals containing chlorine and/or bromine are currently causing catastrophic damage to our stratospheric ozone. These chemicals have been given the name "ozone depleting chemicals" (ODS)

At ground level, which is where we first discovered the many revolutionary ways in which they can be utilized, ozone depleting substances are deceptively stable and non toxic. Unfortunately, it is this very stability that allows them to travel all the way up to the stratosphere. It is there in the presence of the intense Ultraviolet light that they are broken down to their component substances chlorine and bromine that immediately set to work, ripping the ozone layer apart at an alarming rate, by removing an atom per ozone molecule. It is within the capabilities of one chlorine molecule, to break apart 100,000 ozone molecules.

(<http://www.epa.gov/ozone/science/q.a.html>)

Most of the time, it is the minor characters that bring about the major changes in the storyline. One does not have to be scientists to do the little things that make a big difference. I believe our actions can rewrite the "Ozone hole" story. First and foremost, we must be aware of the rules and the laws. For instance, it is illegal to recharge refrigerators, freezers and home/vehicle air conditioners with CFCs. Older vehicles (before 1995) with air conditioners, refrigerators, freezers, and home air conditioners must be serviced by a qualified technician who specializes in ensuring that the CFC is recaptured and recycled. Do the same if it is about to be scrapped. Know your fire extinguishers and be careful not to buy any that contain halons. We can also take it one step further by initiating local action against ODSs and conducting awareness programs at schools. On large scale, governments could minimize high altitude air craft flights and encourage the growth of plants while

discouraging deforestation.

(<http://www.bcairquality.ca/101/individual-ozone-depletion.html>)

On a more personal note, I am proud to say that in 2012, the Maldives greatly reinforced its commitment to carbon neutrality with a declaration by our former president Mohamed Nasheed to phase out HCFCs, a substitute for CFC. A small island nation though we may be, in my opinion we are no less capable of being at the forefront in the ongoing battle to protect the ozone layer. And so we should, as that we may need to find a new abode should rising sea levels threaten us, in a very real possibility.

Today, some scientists are predicting that the stratospheric ozone will recover 1980 ozone levels by the year 2050, as most nations have been abiding by international agreements to phase out products with ozone depleting chemicals, such as CFSs and halons. However, this appears implausible due to the inexplicable and competing effects of further climate change. In order to mitigate this problem and undertake this mighty task, further cooperation and understanding among all countries of the world is essential.

1st Place

Aminath Anana Mohammed, G. Bandeyri koshi 205, Sithimava Hingun, Villa International High School

“PROTECTING OUR ATMOSPHERE TO GENERATIONS TO COME”.

Since the beginning of human life four million years back, there has been great advancements in everyday human life. As today's tenants we have forgotten that we do not have the sole ownership of this planet. We have forgotten that the generations to come have an equal share of all the resources on earth. This is also important for coming generations of plants and animals. It is important for us to think about our descendants in the future.

The first step to save our generation is to believe that the world is truly at risk. We must ensure that all and every human in this planet believes in changes in climate. We cannot ignore the facts such as thinning of the ozone layer, rising of sea level and increasing global warming. Temperatures are rising globally and have increased by 0.75 degree Celsius over a period of about 150 years (AS Geography for edexcel, oxford). We cannot make a change and bring a stop to such events unless we really believe that these events are taking place.

Secondly every individual in his society must play his role in conservation of the planet. We as individuals must stop using Chlorofluorocarbon (CFC) based products. Will the shops continue selling such products? If we all start to reject the use of plastic bags will our supermarkets still offer them? So the campaign for protecting the atmosphere from harmful gases and other such materials can be started by each one of us.

It is also important to find environmental friendly items to replace the CFC products. Similarly eco friendly ways of generating power can reduce the emission of harmful gases into the atmosphere. Clean, more efficient and sustainable technologies such as generating power from renewable sources can help to reduce the use of fossil fuels. Maldives being a country gifted with abundance sunlight, being surrounded with water and wind can easily replace our menacing fossil fuel based power houses with renewable energy.

More over the government and industrialists can play a major role in protecting our environment for the future generations. Imports of harmful gases and carbon based products can be restricted. Industries can find other alternatives which is less harmful for the atmosphere. Likewise government and various Non-governmental Organizations can make the people more aware about such environmental issues. Carbon sinks such as forestation projects can be carried out throughout the country. Government can also attempt to create international awareness on environmental issues.

If nature is not taken care of, the nature will deceive us one day. We must start action to fight against climate change as soon as possible. If we do not take action now our beautiful islands may be submerged due to the increasing sea level. If we do not strive to foster sustainable future we may find humans endangered to extinction. Thus let us all join our hands for the future of our country planet.

2nd Place

Ahmed Misbah, Asseyri/ Th.Gaadhifushi, Majeedhiyya School

THE OZONEHOLE- CAN IT BE PATCHED?

I have always been captivated with the perfection executed in the creation of the Earth. The almighty God has created our planet in such a way that all of the processes are regulated by Mother Nature. Needless to say, there could not have been a more heavenly spot. However, this thought was short lived. The need of human is discontent and eventually their everlasting

greed dominated. The use of non renewable resources in turn released a massive amount of baneful gases into the atmosphere, altering one crucial balance created by the God; the ozone cycle.

In the stratosphere, which is a part of the Earth's atmosphere, a thick blanket of ozone covers the Earth shielding it from the detrimental UV rays of the Sun, ensuring that an optimum temperature is maintained on the surface of the Earth. With the release of manmade gases, the ozone began to break apart thinning the protective layer. Hence, the Earth was more vulnerable to the Sun and the temperature began to rise, leading to more global complications. To make matters worse, in May 1985, an immense hole was discovered in the ozone layer. It is now evident that the ozone hole needs to be patched up but the question on everybody's lips is; is it possible? I believe so and in fact it is being patched up as we speak.

Preventing is better than cure. In the case of our ozone layer, prevention is the cure. The release of toxic vapor into the atmosphere must be stifled by finding alternate methods. Following this very same train of thought, in 1987, more than 180 countries signed the Montreal Protocol banning the use of products that harm the ozone layer. Even since, environmental- friendly products have been manufactured. Hence, I am delighted to state the healing process of the hole has accelerated. Moreover, if we continue to do so, scientists predict that the ozone layer will be as good as new by the year 2050.

Perhaps we could dig deeper to find the root of ozone depletion. Every year, more than a billion ton of waste are being burnt which release one ozone-depleting gas known as chlorofluorocarbons. The aim is to reduce the amount of ozone-depleting substances in the atmosphere. If waste such as refrigerator parts are not disposed properly or managed, it releases these substances posing significant threat to the ozone layer. Therefore, responsibility must be taken up by individuals and the councils and enforce proper waste management in the society.

I strongly believe that such a global issue can be solved if the “carbon neutral” spirit is in the heart of all the industries. Having said that, I also believe each individual can make a difference for example by confirming that the products you use in your household do not release greenhouse gases. Imagine if every being performed their individual duties, there would be a great escalation in the curing of the ozone layer making it impossible for the ozone hole to not be patched.

3rd Place

Aishath Thihnan Solih, H. Thedhu Ofi, Karanka magu, Villa International High School

PROTECTING OUR ATMOSPHERE FOR GENERATIONS TO COME

When future generations look back at our times, what might they consider the most significant sustainable development actions we have taken, with far-reaching benefits?

We can only speculate, but the saving the ozone layer will surely be among those they will recognise. It is an extraordinary and still on-going success story of governments, experts and ordinary people coming together, responding to scientific findings, and acting resolutely to protect all life on Earth from the Sun's harmful ultraviolet rays.

Present generations are also struggling to address another global environmental problem — the problem of climate change.

The Montreal Protocol on Substances that Deplete the Ozone Layer provides an inspiring example where the global community is truly succeeding in reaching sustainable development objectives. It has been recognized as contributing to the realization of Millennium Development Goal 7, environmental sustainability.

As we mark the 25th anniversary of the Montreal Protocol the once endangered ozone layer is recovering. It is expected to return to pre-1980 levels by mid-century, assuming all countries continue to meet their compliance commitments.

The credit for this remarkable achievement in intergovernmental cooperation and environmental governance is widely shared. It was possible thanks to the passion, dedication and hard work of thousands of individuals in government, the private sector, academia, and civil society. Their efforts have literally helped save the protective ozone shield on our sky – and prevented millions of cases of skin cancer and cataracts and it also has made a significant contribution to climate change.

In a quarter century of successful implementation, the Protocol has been continuously strengthened to cover the phase out of nearly 100 ozone depleting substances. It is the world's most widely ratified treaty, with 197 signatories. Its Multilateral Fund has enabled an unprecedented transfer of ozone friendly technologies to developing countries assisted by a powerful network of well-trained national ozone

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officers in every country of the world. This unique on-the-ground asset, has been critical for ensuring that the Montreal Protocol has delivered on its promises.

The Protocol is widely hailed as a classic case of science-based policy making and action to protect a global commons. The officials, diplomats, corporate leaders and others who negotiated the Protocol built on cutting edge science.

Three scientists – Paul Crutzen, Sherwood Rowland and Mario Molina – shared the 1995 Nobel Prize for chemistry for their trail-blazing work done in the mid-1970s. A decade later, in 1985, the discovery of the Antarctic ‘ozone hole’ created news headlines and galvanized international action that culminated in Montreal in September 1987.

While much has been accomplished in this time, there is still unfinished business.

Efforts to protect the ozone layer and to combat climate change are mutually supportive. The most recent adjustments to the Montreal Protocol, adopted in 2007, accelerate the phase out of hydrochlorofluorocarbons, or HCFCs. These gases – widely used for refrigeration and air-conditioning -- not only damage the ozone layer, but also warm the planet. The level of climate benefits that can be achieved depends on what chemicals and technologies replace HCFCs. Their phase out thus offers a unique opportunity to acquire cutting-edge technologies that not only eliminate ozone depleting chemicals, but also saves energy and maximizes climate benefits.

Looking back on the accomplishments made so far under this treaty, I hope that the Montreal Protocol community can use the same energy, ingenuity and sense of urgent optimism to help the world solve its environmental challenges.



Reference: OASI 2012

THE MONTREAL PROTOCOL: THE VIEW FROM 25 YEARS

Nearly 50 years ago, men walked on the Moon and returned alive, having seen the Earth rise above the lunar horizon. The last 50 years also saw the rise of a great environmental peril: destruction of Earth’s ozone layer. This peril was – and continues to be – addressed with focused intensity by people from every nation through their collective commitment to the future of life on our planet.

The lens that focuses this collective commitment is the Montreal Protocol, the international treaty to protect the ozone layer, and this September 16 marks its 25th anniversary. From this vantage point, we have a wider view of the Treaty’s value.

In the relationship between science and policy, in advancements in key technologies, in ongoing national implementation of chemical controls, and in the framework that engages many players to actively balance rigorous measurement with selective flexibility, we see that the Montreal Protocol allows a uniquely powerful vision for collaborative effort.

When the Montreal Protocol was agreed in 1987, initial goals for reduction of ozone depleting substances (ODS) were modest. But from the start, the Treaty presumed that goals should be informed over time by scientists asking: what is necessary to solve the environmental problem?

As scientific understanding of ozone destruction became more precise, Parties responded by strengthening the Treaty. From an initial 50% cut in a subset of ODS, to fuller elaborations through amendments agreed in London (1990), Copenhagen (1992) and Beijing (1999), the treaty has sharpened its focus from a measure fit only to slow ozone layer destruction to one capable of assuring its restoration.

In hindsight, we can appreciate that the Montreal Protocol’s successive ODS production phase-outs drove a process larger than merely changing chemicals used in equipment. Progress in energy efficiency, leak prevention and pollution reduction have translated Treaty-driven technology change into wholesale market transformation, allowing global companies to leverage the opportunities created by the Protocol’s goals to innovate and improve.

For example, when the Montreal Protocol was signed, U.S. residential air conditioning performed with an

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average Seasonal Energy Efficiency Ratio (SEER) under 9 -- lower if installed or operated improperly. Repair or ultimate disposal of equipment commenced with venting refrigerant to the atmosphere. The best U.S. equipment now exceeds SEER 24, and refrigerant is routinely recovered for reuse. New low-GWP options are beginning to be used that promise even better results.

Thus, the Montreal Protocol's ODS reductions have catalyzed leadership companies and innovators worldwide to help protect ozone – and to see in this effort a key market advantage. Their drive and creativity to improve technologies and products is strengthened by Treaty schedules, which provide certainty to encourage investment. Innovators continue to stretch the limits of the best that is technically achievable in myriad industrial and consumer contexts. Taken together, their efforts have quietly - and with minimal disruption to consumers or markets - revolutionized industrial sectors.

The role of governments, negotiators, regulators and implementers who set the Treaty's course is also central to the Montreal Protocol's success. Ever-stronger Treaty goals have been hammered out in respectful and frank international exchanges, then translated into meaningful national limits. Thanks to the efforts of implementers from all sides, from the Ozone Secretariat to individual national ozone units -- fidelity to treaty goals and its necessary antecedent, careful measurement of controlled ODS --underpins all aspects of the Treaty's operations.

True to its pragmatic history, the Montreal Protocol balances this rigor by welcoming even limited improvement as a starting point. In the near term, the treaty allows flexibility to recognize differing national circumstances and uses of high social value. Exemptions that make sense are explicitly accommodated – but also carefully reviewed. This, too, ultimately strengthens the Treaty's credibility.

Environmental non-governmental organizations (NGOs) have played a vital role in shaping flexibility in specific instances, and more broadly in the Montreal Protocol's vision of its future. They keep aspirations high, and ensure that our focus remains on how best to use the Montreal Protocol's visionary framework to maximize future environmental benefits.

A vital learning from the past 25 years, then, is that global environmental problems are best solved together, with key roles for all nations and all sectors of civil society.

Reference: OASI 2012

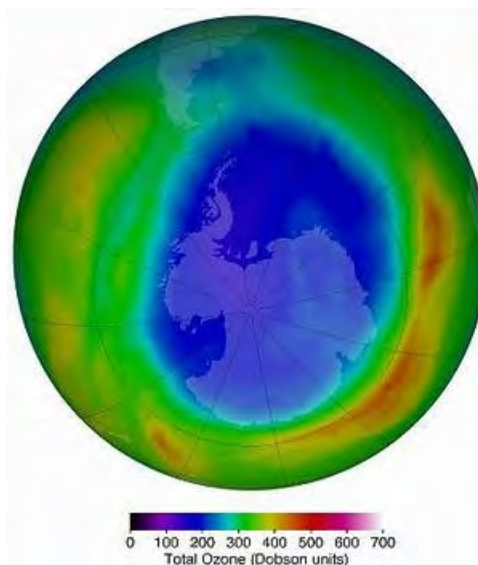
The Treaty's vision is broad; it is not a narrow view in which governments alone are held to have sole capacity to clearly see the path forward. The vision of scientists, regulators, diplomats, industry and sector experts, environmental NGOs and others has created an accord that, above all, is hopeful. The Treaty's starting points were modest, but its goals remain bold. This, too, is key to its success: an environmental vision of the future must be hopeful if it is to motivate and inspire.

The Treaty was most recently strengthened in 2007 in Montreal, when Parties agreed to tighten controls on hydrochlorofluorocarbons. A stirring moment of negotiations came when the gavel banged down late in the evening of the last day, to seal the Parties' agreement.

But the context for this historic accord was set in the opening of that 20th anniversary meeting. Over massive video screens, astronauts from the International Space Station orbiting Earth saluted delegates, shared their hopes for our success, and also their unique view from far above the Earth's stratosphere.

The Montreal Protocol itself offers us a unique view of the Earth. It is a lens through which Parties share a vision of environmental improvement. In this treaty, we see ourselves as fellow riders on a shared planet, as collaborators in the demanding work of innovating a sustainable future, and as filial children who have inherited, and aspire to pass on unstained, this beautiful Earth.

Arctic Ozone hole as of September 13, 2012



Layout & Design by: Mohamed Aflah

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Environment Department,
Ministry of Housing and Environment,
1st Floor, Tinu Building, Ameene Magu,
Male', Republic of Maldives.
Email: ahmed.hassaan@mhe.gov.mv
Web: <http://pemphis.wordpress.com>
<http://www.mhe.gov.mv>