

PEMPHIS

.47



Environmental Newsletter
Ministry of Environment and Energy



YEAR IN REVIEW

EDITOR'S NOTE

AS WE SUM UP ANOTHER TRIP AROUND THE SUN; IT IS TIME TO REFLECT UPON OUR ACHIEVEMENTS AND WORKS.

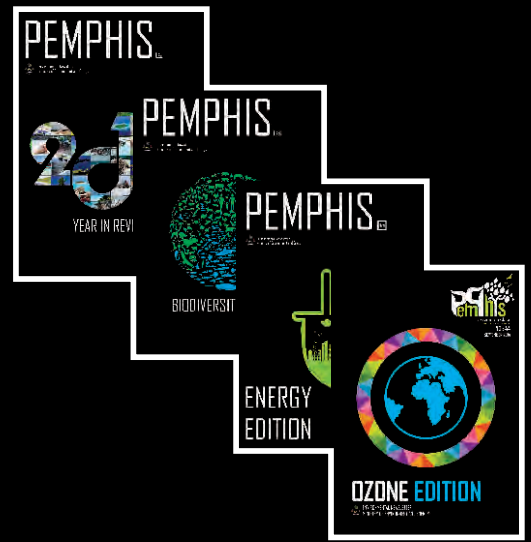
THIS EDITION LOOKS INTO THE YEAR 2014 IN REVIEW.

SINCE WE WILL BE GREETED WITH A NEW WORK PLAN AND NEW TARGETS PEMPHIS WISHES ALL OF ITS READERS ALL THE BEST ON THEIR FUTURE ENDEAVOURS AND OBJECTIVES. MAY THE BLESSINGS OF ALMIGHTY BE WITH US ALL.

AS ALWAYS, YOUR FEEDBACKS AND CRITICISM IS MORE THAN WELCOMED. HOPE YOU WOULD ENJOY THIS EDITION.

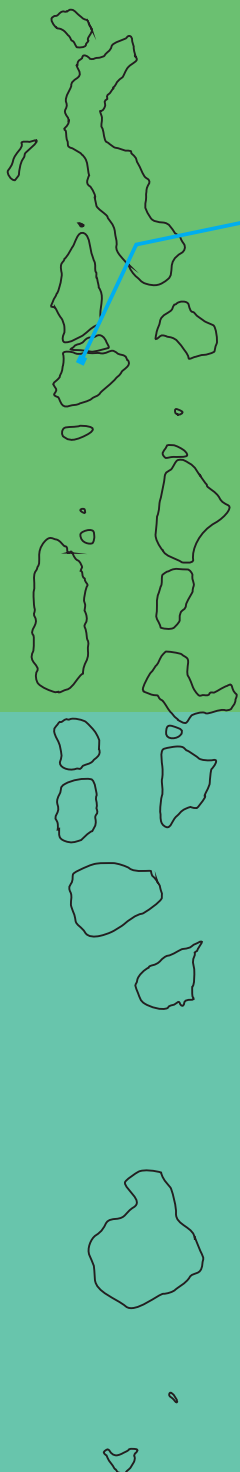
FEEDBACKS, COMMENTS, ARTICLES, PHOTOS, ETC.

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CONSERVING BIODIVERSITY



Works are ongoing to make Maldives a biosphere reserve by 2017 as committed.

Baa Atoll Conservation Fund awarded 7 small scale projects in Baa Atoll under the thematic areas of Education, Awareness and Conservation,

Out of the 9 protected areas in Baa Atoll, management plans are being developed for 2 areas. The Hanifaruu Area is being managed through a management regulation since 2013

The 5th National Report on Biodiversity is being completed

National Biodiversity Strategy and Action Plan is being finalized

National Biosafety Regulation has been drafted

Permit issuance for CITES listed species started

National Coral Reef Monitoring Framework has been established. This framework will be used to continually monitor the health of the coral reefs



“United Nations Decade on Biodiversity” Day
During the 12th conference of the parties to CBD



ENERGY

A total of **975 kW solar panels**, worth **46 million Rufiyaa**, were installed throughout the Maldives.

A project to install **6.5 MW** of solar PV systems is set to open for bidding process. This will contribute to achieve the target of meeting **30%** of the day-time peak energy demand through renewable means of energy.

Import duty worth **32 Million Rufiyaa** was exempted from renewable energy goods.



270,000 units of LED lights worth **60 Million Rufiyaa** were provided to citizens and government institutions

Campaigns to minimize energy wastage were initiated throughout the Maldives.

A 4 year project with the assistance from of **Global Environment Facility (GEF)** was initiated for the purpose of incorporating best practice means of energy usage and minimization of wastage of energy in construction developments.

Energy audit was conducted in 5 schools to deduce the energy use and ways to minimize the energy wastage. Measures to implement are being prepared based on the insight from the study.

Important works have been done to aware the relevant parties to provide technical details regarding the energy sector of the Maldives.

An energy outlook comprising of all the inhabited islands have been published.

“Energy supply and demand” have been published which provides statistics on the energy sources and utilization with its respective sectors.

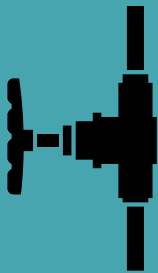
A regulation has been drafted and sent to the Attorney General’s office to license the electricity utility providers, distributors, transmitters and suppliers.





WATER AND SANITATION

Contracts have been signed to establish water supply systems in **10 Islands** worth **463 Million Rufiyaa**



Design phase have been **completed for 2 Islands**
Construction phase is ongoing for **8 Islands**

Funds to establish **pipled water supply in 16 Islands** have been allocated.



Water Shortages in Iruvai Monsoon:

Contract have been awarded for **repairing and maintenance works** for **desalination plants in 10 Islands**



Sanitation:

Contracts have been awarded to establish **sewerage systems** in **26 Islands**:

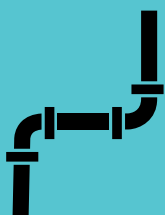
Survey of 11 islands have been finished

Design of the sewerage systems have been completed in **6 islands**

Construction of sewerage systems in **9 islands** are ongoing

Loans have been confirmed for **sewerage systems in 16 Islands**

Upon completion of the stated projects; **proper sanitation** would be newly introduced to **42 Islands**.

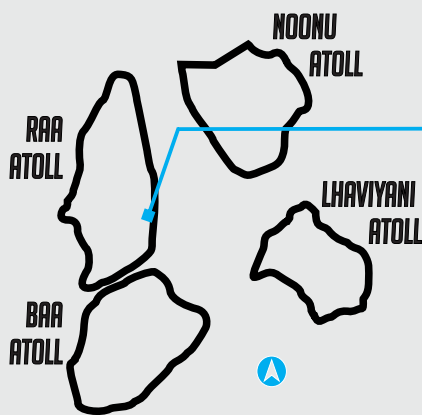




WASTE MANAGEMENT

Through a region wise waste management plan; A trial waste management project for Noon, Raa, Baa and Lhaviyani Atoll comprising **46 inhabited Islands** along with resorts and industrial islands have been commenced with the loan Assistance of World Bank.

This project will supply dustbins, wood chippers, bottle crushers and other waste management equipment to the island communities



A total of **200 Million Rufiyaa** will be spent for the project.

Raa, Vandhoo has been assigned as the regional waste management centre and all the associated major works have been completed. This centre would be provided with necessary equipment and machineries such as loaders, forklifts, etc.. Furthermore, the **biggest incinerator in Maldives**, with a capacity to cater **40 tonnes** of waste per day, would be established in this centre

A tailored vessel is being built for transporting waste to the facility of Raa, Vandhoo



Upon completion of these projects **51 inhabited islands (47,000 citizens)**, industrial islands and resorts will have a waste management system meeting international standards.



The projects cost **220 Million Rufiyaa**.

Through PSIP projects waste collection centres have been established in 2 islands and work is ongoing in 3 islands. Furthermore, bidding process have been completed for 2 islands and is set for contract signing while works for 3 more islands await and is it allocation or approval budget allocation. Another 4 islands is at the bidding stage. Permission for change of scope for 1 island has been submitted. 10 million Rufiyaa have been allocated for the construction of waste collection centres in 15 islands.

Loan has been approved for another region wise waste management plan. Feasibility study is planned to start in 2015.



Through grants from European Union and Australian Government, **20 Million Rufiyaa** will be spent on waste management of 5 islands of Alif Atoll.



FLASH BACK ON THE HIGHLIGHTS OF 2014

JAN ▶

- ▲ SANITATION FACILITY AT LAAMU ATOLL GAN ISLAND INAUGURATED
- ▲ ADFD AND IRENA TO FINANCE A WASTE TO ENERGY PROJECT IN MALDIVES
- ▲ CONTRACT SIGNED FOR THE SUPPLY AND INSTALLATION OF 250KWP SOLAR PV GRID CONNECTED SYSTEM AT THINADHOO ISLAND OF GAAFU DHAALU ATOLL
- ▲ 300 KWP SOLAR PV SYSTEM INSTALLED IN THINADHOO OFFICIALLY CONNECTED TO THE GRID
- ▲ LOAN AGREEMENT SIGNED WITH KUWAIT FUND FOR WATER AND SEWERAGE FACILITIES IN FUVAHMULAH ISLAND
- ▲ MALDIVES SIGNED STATEMENT ON GLOBAL RENEWABLE ENERGY ATLAS

- ▲ FOUNDATION STONE LAID FOR SAFE DRINKING WATER PROJECT AT HAA ALIF IHAVANDHOO
- ▲ AGREEMENT SIGNED TO ESTABLISHED INCINERATION PLANT IN RAA ATOLL VANDHOO ISLAND
- ▲ HAA DHAALU ATOLL HANIMAADHOO ISLAND SEWERAGE PROJECT INAUGURATED
- ▲ ALIFU DHAALU ATOLL MAAMIGILI ISLAND WATER SUPPLY FACILITIES INAUGURATED
- ▲ CONTRACTS SIGNED TO ESTABLISH WASTE MANAGEMENT CENTRES IN 3 ISLANDS. LHAVIYANI ATOLL OLUVELIFUSHI ISLAND, RAA ATOLL KINOLHAS ISLAND AND LHAVIYANI ATOLL KURENDHOO ISLAND
- ▲ "SHOP TO SHOP" AWARENESS PROGRAMME ON WASTE MANAGEMENT
- ▲ WORKSHOP: CLIMATE CHANGE POLICY
- ▲ WORKSHOP: WATER RESOURCE MANAGEMENT

◀ FEB

MAR ▶

- ▲ AGREEMENT SIGNED TO ESTABLISH SEWERAGE FACILITIES IN THAA MADIFUSHI AND BURUNI
- ▲ CONTRACTS SIGNED TO ESTABLISH WASTE MANAGEMENT CENTRES IN 3 ISLANDS. RAA ATOLL RASGETHEEMU, RASMAADHOO AND AN'GOLHETHEEMU ISLAND
- ▲ WORKSHOP: TECHNOLOGY ASSESSMENT AND POWER SYSTEM PLANNING HELD
- ▲ CONTRACT AWARDED FOR THE ESTABLISHMENT OF SEWERAGE FACILITIES IN 3 ISLANDS. ALIFU DHAALU ATOLL MAAMIGILI ISLAND, MEEMU MULAH AND MEEMU DHIGGAR
- ▲ WORKSHOP: INTEGRATED WATER RESOURCE MANAGEMENT PROJECT OF ALIFU ALIFU THODDOOU
- ▲ CONTRACT AWARDED FOR THE ESTABLISHMENT OF SEWERAGE FACILITIES IN LAAMU MAAMENDHO
- ▲ CAPACITY BUILDING PROGRAMME ON ECONOMICS OF CLIMATE CHANGE ADAPTATION UNDERTAKEN
- ▲ CONTRACT AWARDED FOR THE ESTABLISHMENT OF SEWERAGE FACILITIES IN DHAALU HULHUDHELI
- ▲ GROUND BREAKING OF MEEMU DHIGGARU ISLAND WATER SUPPLY AND SEWERAGE FACILITIES
- ▲ MEEMU MULAH WATER SUPPLY AND SEWERAGE FACILITIES INAUGURATED
- ▲ MVR 2 MILLION FOR WASTE MANAGEMENT SYSTEMS ESTABLISHED IN GAAFU DHAAL FARESMAATHODAA GRANTED BY JAPAN
- ▲ AGREEMENTS SIGNED TO ESTABLISH 40 KW SOLAR PV SYSTEMS AND 5KW ICE MACHINES IN KAARFU DHIFFUSHI
- ▲ CONTRACTS SIGNED TO ESTABLISH SEWERAGE FACILITIES IN SHAVIYANI MILANDHOO
- ▲ MALDIVES HOSTED INTERNATIONAL RENEWABLE ENERGY INVESTORS CONFERENCE
- ▲ CELEBRATED EARTH HOUR

- ▲ PANEL DISCUSSION ON THE OCCASION OF WORLD WATER DAY HELD
- ▲ CONTRACTS SIGNED TO ESTABLISH WASTE MANAGEMENT CENTRES IN ALIF DHAAL DHIGURAH
- ▲ IMPLEMENTATION OF JOINT CREDIT MECHANISM WITH JAPAN COMMENCED IN MALDIVES
- ▲ WORKSHOP: CLIMATE CHANGE POLICY

◀ APR

MAY ▶

- ▲ WORKSHOP: LOW CARBON DEVELOPMENT STRATEGY
- ▲ AGREEMENT SIGNED ON IMPLEMENTING THE HCFC PHASE-OUT IN FISHERIES SECTOR
- ▲ "PROJECT FOR CLEAN ENERGY PROMOTION IN MALE" HANDED OVER BY JAPAN

- ▲ EVENTS HELD TO CELEBRATE WORLD ENVIRONMENT DAY
- ▲ CONTRACT SIGNED FOR THE PROVISION OF SEWERAGE FACILITIES IN ADDU CITY, HITHADHOO

◀ JUN

JUL ▶

- ▲ INSTALLATION OF SOLAR PV SYSTEMS IN RAA UNGOOFARU COMMENCED
- ▲ CONTRACT SIGNED FOR THE CONSTRUCTION OF WETLANDS CONSERVATION AND ECO-TOURISM DEVELOPMENTS WORKS IN THE PROTECTED EYDHIGALI KILHI OF ADDU CITY HITHADHOO
- ▲ CONTRACT SIGNED FOR THE CONSTRUCTION OF COASTAL PROTECTION WORKS IN GAAFU DHAARU THINADHOO
- ▲ CONTRACT AWARDED FOR THE OPERATION AND MAINTENANCE OF SEWERAGE SYSTEMS IN LAAMU GAN

- ▲ RAINWATER HARVESTING COMPONENT OF THE WATER SUPPLY FACILITY IN RAA DHUVAAFARU INAUGURATED
- ▲ COASTAL PROTECTION WORKS OF RAA MADUVVARI INAUGURATED
- ▲ AWARENESS WORKSHOP: RENEWABLE ENERGY AND ENERGY EFFICIENCY HELD IN ALIF DHAARU MAHIBADHOO
- ▲ AWARENESS WORKSHOP: ENERGY EFFICIENCY AND ENERGY CONSERVATION IN GDH. THINADHOO
- ▲ WASTE MANAGEMENT EQUIPMENT HANDED OVER TO 25% INHABITED ISLANDS OF MALDIVES

◀ AUG

SEP ▶

- ▲ EVENTS HELD TO MARK WORLD OZONE DAY
- ▲ CONTRACT SIGNED TO DESIGN AND BUILD COASTAL PROTECTION STRUCTURE IN KAAFU MAAFUSHI
- ▲ CONTRACTS SIGNED FOR THE PROCUREMENT OF MATERIALS FOR THE PILOTING OF DRAINAGE SYSTEM IN HAA DHAARU KULHUDHUFFUSHI

- ▲ CONTRACT AWARDED: BUILDING COASTAL PROTECTION STRUCTURES AT KAAFU VILLINGILI
- ▲ WORKSHOP: LOW CARBON STRATEGY FOR TRANSPORT SECTOR
- ▲ EVENTS HELD TO MARK THE INTERNATIONAL DAY FOR THE PRESERVATION OF THE OZONE LAYER
- ▲ CONTRACT SIGNED FOR BUILDING COASTAL PROTECTION STRUCTURES AT GAAFU DHAARU FARESMATHODAA

◀ OCT

NOV ▶

- ▲ CONSTRUCTION OF COASTAL PROTECTION IN GAAFU DHAARU THINADHOO INAUGURATED
- ▲ GROUND BREAKING CEREMONY OF SEWERAGE FACILITY IN HAA ALIFU HOARAFUSHI HELD
- ▲ WASTE BINS DONATED BY CHINESE GOVERNMENT
- ▲ WORKSHOP: CUSTOMS OFFICERS ON HCFC PHASE-OUT
- ▲ MALDIVES ELECTED AS THE NEXT CHAIR OF THE ALLIANCE OF SMALL ISLAND STATES
- ▲ WORKSHOP: NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAS) PREPARATION BEGIN
- ▲ MOU SIGNED WITH REPUBLIC OF CHINA FOR THE PROVISION OF LED LIGHTS TO MALDIVES
- ▲ MINISTRY SIGNS AN AGREEMENT WITH MWSC SIGNED TO PROVIDE WATER SUPPLY NETWORK IN ALIFU ALIFU THODDOO

- ▲ GROUND BREAKING OF THE SANITATION FACILITY AT NOONU HOLHUDHOO HELD
- ▲ GRANT AGREEMENT SIGNED BETWEEN THE GOVERNMENT OF MALDIVES AND NETHERLANDS FOR THE COASTAL PROTECTION PROJECT AT GN.FUVAHMULAH, S.MARADHOO, MARADHOO-FEYDHOO AND S.FEYDHOO

◀ DEC



COASTAL PROTECTION

PSIP Projects: 10 Islands

Work Commenced:

Noon. Holhudhoo
Meemu. Naalaafushi
Raa. Maduvvaree

Contract awarded:

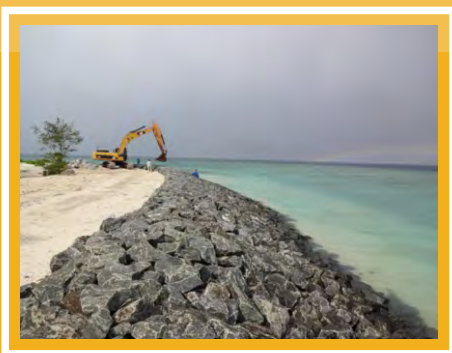
Kaafu. Maafushi
Kaafu. Villingili
Gaaf Dhaalu Faresmaathodaa

Bidding process finished:

Thaa. Kandoodhoo
Thaa. Veymandoo
Thaa. Vandhoo

Coastal surveying have been conducted in 12 sites.

- V. Keyodhoo: Coastal erosion survey
- N. Fushivelaavaru: Coastal survey
- K.Thulusdhoo: Coastal erosion survey
- Reef Near K. Ziyaaraifushi: Reef survey of the wreck site of Vietnamese freighter Viet Long
- Sh. Farukolhu: Survey of the proposed airport development island
- Sh. Komandoo: Reef survey
- Dh. Meedhoo: Land reclamation survey
- B. Eydhafushi: Land reclamation survey



Grant Aid from Global Environment Fund (GEF):

950m revetment strip is set to be established in G.DH Thinadhoo, worth **34.5 million Rufiyaa**. Contract has been awarded and construction is ongoing for this project.

Grant Aid from Government of Netherlands and Loan assistance from Kuwait Fund

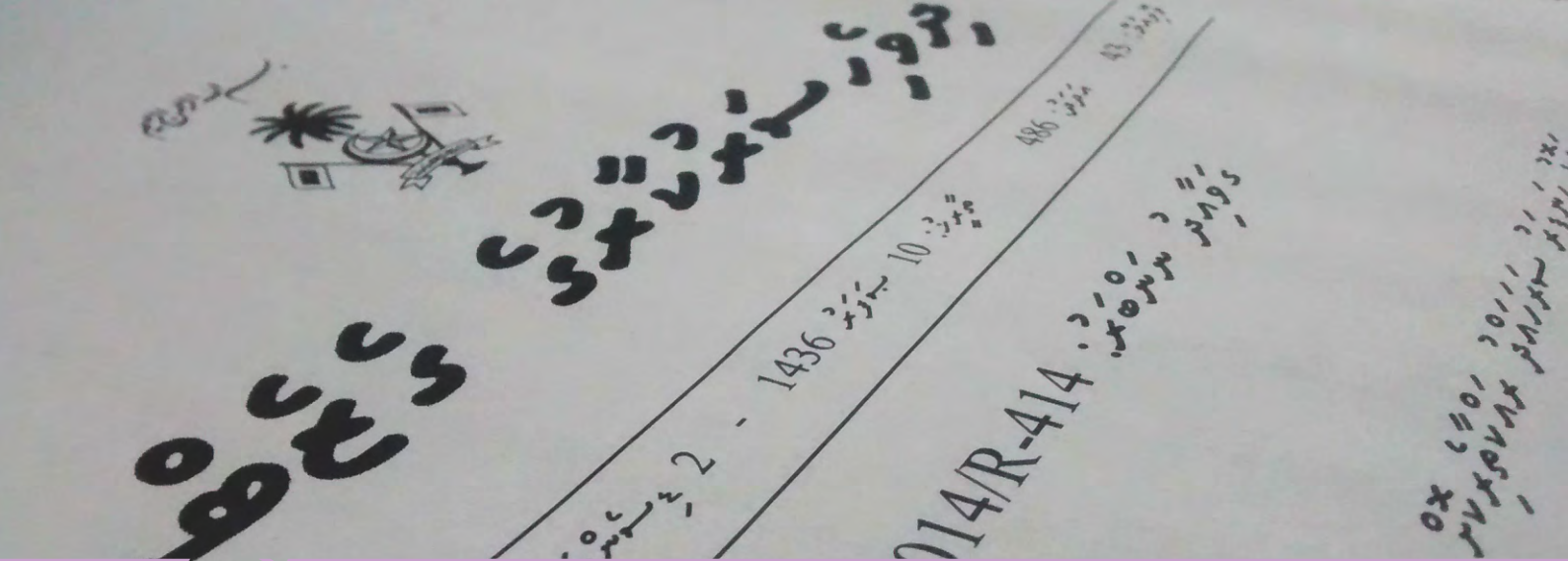
Contract awarded to conduct required technical studies for the protection of coastal areas for the islands of:

- S. Feydhoo
- S. Maradhoo - Feydhoo
- S. Maradhoo
- Fuvahmulah



Upon completion of the ongoing contracts:

16.8 million Rufiyaa would be spent on **7 islands** for **4.4 km** of coastal protection



COMPLIANCE AND ENFORCEMENT

A total of 134 EIAs have been reviewed and approved this year; which includes projects such of dredging, land reclamation, sewerage and sanitation, water, beach replenishment, resort construction, etc.

Enforcement of Waste Management regulation and dewatering regulation have been put in to action this year.

76 permits have been issued for dredging and reclamation projects.

Permits have been issued for water networking projects in 5 islands. These islands include Alifu Alifu Ukulhas, Alifu Dhaal Maamigili, Meemu Dhiggaru, Meemu Muli, and Faafu Magoodhoo.

Permits have been issued for sanitation projects in 11 islands; which are Raa Meedhoo, Raa Maduvvari, Haa Alifu Thuraakunu, Haa Alifu Dhidhdhoo, Haa Alifu Hanimaadhoo, Shaviyani Kanditheemu, Noonu Holhudhoo, Raa Kinolhas, Kaafu Gaafaru, Alif Dhaal Omadhoo, Faafu Magoodhoo and Gaafu Dhaalu Thinadhoo.

Through the dewatering regulation, 42 permits have been issued for construction projects. Ongoing works for 5 parties was halted and penalized for failing to compliance the regulation.

Confiscated Slow Loris finds new home.

The slow loris is set to start a new life at the Ape Rescue Centre in England after spending 8 months in Dhoonidhoo. The animal was illegally trafficked into the country, and confiscated by police during a drug raid in Male' earlier January this year. The animal is expected to start a new life at the Shaldon Wildlife Trust in Devon after spending another month in quarantine at Monkey World. The slow loris is to be paired with another slow loris named Doris in the UK.

The slow loris is an Appendix I listed species of CITES, which require the highest level of protection in international trade.





OZONE & CHEMICALS

Chemical profile of the Maldives has been completed

In co-operation with relevant authorities, a policy for the management of chemicals imported to the Maldives has been formulated to manage the chemicals imported to the Maldives among relevant authorities

An agreement have been signed to develop a chemical database in Maldives



Minister Thoriq Ibrahim calls upon Parties to take proactive action to ensure SIDS specific challenges and needs are taken into account.

At the High-Level Segment of the Joint Meeting of the 10th Conference of the Parties to the Vienna Convention and the 26th Meeting of the Parties to the Montreal Protocol, Minister of Environment and Energy Mr Thoriq Ibrahim called upon the Convention and the Protocol to give due consideration to the specific needs and challenges of small island developing states in phasing out hydrochlorofluorocarbons (HCFCs). In this regard the Maldives concern that current alternatives to HCFC such as hydrofluorocarbons (HFCs) have a high global warming potential, thereby causing a tension with the national policies towards low emissions development and climate change concerns.

Increase of HFCs have largely been a result of phasing out HCFC under the Protocol as countries switch out of HCFCs.

Fourth Session of the Assembly 18th & 19th January 2014, Abu Dhabi



INTERNATIONAL RELATIONS

Ministry of Environment and Energy have represented Maldives in International Meetings and advocated for the preservation and sustainability of the environment.

- 1st, **United Nations Environmental Assembly**, Kenya, Nairobi
- 3rd, **International Conference on Small Island Developing states**, Apia, Samoa
- 18th, **Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)** of the Convention on Biological Diversity (CBD), Montreal, Canada
- 2nd, **Intergovernmental Platform on Biodiversity & Ecosystem Services (IPBES-2)**, Antalya, Turkey
- 20th, Conference of the Parties of **United Nations Climate Change Conference (UNFCCC)**, Lima, Peru
- 40th, **Intergovernmental Panel on Climate Change (IPCC)**, Copenhagen, Denmark
- 12th meeting of the **Conference of the Parties to the Convention on Biological Diversity (CBD)**, Pyeongchang, Korea.
- Joint 10th Conference of the **Parties to the Vienna Convention for the protection of the Ozone Layer** and the 26th Meeting of the Parties of the **Montreal Protocol on substances that Deplete the Ozone layer**, Paris, France
- 4th, **International Renewable Energy Agency assembly (IRENA)**, Abu Dhabi, UAE.
- 5th, **Global Environmental Fund (GEF) Assembly** and Associated Meetings, Cancun, Mexico.
- 1st, **World Health Organization (WHO) Conference on Health and Climate Change**, Geneva, Switzerland
- 40th session of the **Subsidiary Body for Scientific and Technological Advice (SBSTA)**, Bonn, Germany





CLIMATE CHANGE

Continuous measures are being carried out at all stages and levels as the nation is placed at the forefronts of the effects of climate change threatening the sustainability and development of the nation. Through the efforts taken on this regard, Maldives have been elected as the Chair of the Alliance of Small Island Developing States (AOSIS).

If the global mean temperature rises by 2 degree Celsius, there could be devastating effects on Maldives. Hence, highest priority is given by Maldives to assure that financial assistance for adaptive measures are included in the Global Climate Agreement that is to be adopted in 2015 at Paris (COP 21)

Low Carbon Strategy for Transport Sector has been formulated which identifies potential mitigation opportunities within the transport sector of Maldives. These strategies include adaptation measures and mitigation strategies which would enable transport sector to endure in a changing climate.




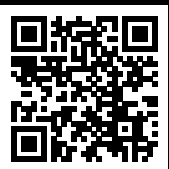
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