



Air quality status, policies and programmes of the Maldives



General Overview

- ❖ Significant pollution sources in urban center - capital city.
- ❖ Overall air pollution significantly less in country
 - ❖ Pollution sources; from land and sea vehicles, diesel power generation, open burning of waste and construction.
- ❖ Trans boundary air pollution from Indonesia and India is a seasonal issue.
- ❖ Currently, the air quality monitoring stations established for local air quality monitoring does not function.
- ❖ Hanimaadhoo Climate Observatory located at Northern end monitors Trans boundary air pollution under Atmospheric Brown Cloud Program.

Current policies, regulations and standards

- ❖ National Ambient air quality standards: No
- ❖ National Air Quality Policy: No
- ❖ Air Quality legislation / programmes:
 - Environmental Protection and Preservation Act (1993)
 - National Solid Waste Management Bill
 - Waste Incineration Guideline
 - Concrete Batch Plant Guideline
 - Vehicular Emission Standard
 - Waste Management Regulation

Emission from Industries

Current status

- ❖ Industries that have the potential to impact air quality:
 - Incinerator or closed burner plants
 - Construction
 - Power production facilities
 - Fish processing industry
- ❖ Total GDP of the country: **3 Billion USD**
- ❖ Industries' share of GDP: 17%
- ❖ Electricity sources: Diesel fuel oil

Current/ Planned policies & programmes

- ❖ No emission regulations implemented, but vehicular emission standard is implemented by Transport Authority.
- ❖ Small installation's emissions regulated under Waste Incineration Guideline and Concrete batch plant guidelines by EPA.
- ❖ Renewable energy investments promoted by Energy department and Maldives Energy Authority
 - Import duties waived for solar panels and other renewable energy technologies
 - Feed-in tariff and net-metering regulation in place
 - Waste to energy systems planned for key waste management centers (R.Vandhoo, Addu city and Male' city)
 - Wind projects ongoing for Himmafushi and Naifaru

❖ Energy efficiency incentives:

- Working on developing labeling and standards for selected electrical appliances
- Building energy efficiency measures to be included in building code by 2018

❖ Incentives for clean production and installation of pollution prevention technologies:

- Energy efficient appliances such as LED lights are provided to households

❖ Actions to ensure compliance with regulations:

- Automatic Data Acquisition systems to be implemented in all power houses.
- Power house registration mandatory for operation and licensing for business.
- Increased amount of monitoring of registered powerhouses to be implemented in coming years.

❖ Other actions at national, sub-national and / or local level to reduce industry emissions:

- BML established green fund to finance environmental projects
- Maldives has identified a target of 10-24% target and potential set of action for emission reduction by 2030 in their NDC
- Maldives is a part of Joint Crediting Mechanism

Emission from Transport

Current status

- ❖ Key transport-related air quality challenges:
 - limited public transport
 - challenges in implementing emission standards

Current/ Planned policies & programmes

- ❖ Vehicle emission standard: implemented
- ❖ Fuel Sulfur content (ppm) : 380ppm
- ❖ Restriction on used car importation
 - Cars older than 5 years banned and only brand new motor cycles are allowed to be imported.

❖ Actions to expand, improve and promote public transport and mass transit:

- Bus service in Hulhumale' and Addu City ongoing since 2006
- Government Plans to introduce motor cycle taxi in future

❖ Actions to promote non-motorized transport:

- Second National Environment Plan prioritized strategies that favor public transport, bicycle lanes and footpaths – not yet implemented.

❖ Other transport-related actions:

- No import duty on electric vehicles
- An age limit of the vehicles on the road- taxi cars should not be more than 25 years

Emissions from open burning of Agricultural/ Municipal waste

Current status

❖ Outdoor, open burning:

- Lack solid waste management system – waste frequently burned

Current/ Planned policies & programmes

❖ Legal framework:

- Waste Management Regulation 2013/R-58 facilitates the reduction in open burning
- Government has plans to establish regional waste management facilities throughout the country.
- The Solid waste management bill in process of enactment.

❖ Actions to prevent open burning of municipal waste and / or agricultural waste:

- Plans to establish regional waste management facilities throughout the country
- Waste generated in islands will be transferred to these regional waste management centers
- Waste Management Regulation 2013/R-58 under the Environment Protection and Preservation Act 4/93, limits open burning

Emissions from open burning of Biomass

Current status

- ❖ Fuel is used very rarely for cooking and space heating:
 - Fire wood use is very limited and almost negligible - urban households use LPG.
- ❖ Impact:
 - There has been no research done, correlating the respiratory disorders and emissions, therefore the impact is unknown.

Current/ Planned policies & programmes

- ❖ Promotion of non-grid / grid electrification:
 - Net metering
- ❖ Promotion of cleaner cooking fuels and clean cook stoves:
 - Currently no plans
- ❖ Other actions to reduce indoor biomass burning, or to reduce its emissions:
 - Promotion of LPG for cooking

❖ Challenges:

- Strong policy framework for environmental protection but legal framework needs to be strengthened with respect to air pollution control and lack of monitoring and enforcement.
- do not have the necessary equipment, testing facilities and trained personnel to carryout air quality monitoring.



THANK YOU