

CLIMATE CHANGE LEGISLATION IN
MALDIVES
AN EXCERPT FROM
The 2015 Global Climate Legislation Study
A Review of Climate Change Legislation in 99 Countries



Michal Nachmany, Sam Fankhauser, Jana Davidová, Nick Kingsmill, Tucker Landesman, Hitomi Roppongi, Philip Schleifer, Joana Setzer, Amelia Sharman, C. Stolle Singleton, Jayaraj Sundaresan and Terry Townshend

www.lse.ac.uk/GranthamInstitute/legislation/



**Grantham Research Institute on
Climate Change and
the Environment**



GLOBE
The Global Legislators Organisation



Inter-Parliamentary Union
For democracy. For everyone.

Maldives

Legislative Process

The Republic of Maldives is a presidential representative republic. The executive branch consists of the President, Vice-President and Cabinet. The President and Vice-President are elected on the same ticket by popular vote for a five-year term with a two-term limit. The President serves as head of government and appoints a cabinet, subject to approval by Parliament.

Parliament is unicameral and called the Majlis, with 85 representatives serving five-year terms elected from population-decided constituencies. The government or elected members of the Majlis may present a proposed legislation (called a bill) to the “floor” where it is then delegated to a legislative committee for debate and amendments. Standing committees are permanent and members are assigned for two and a half years. Selected committees are purpose-specific and dissolved after achieving their mandate. Once through the committee process, the bill is sent back to the floor for a vote, where it may pass with a simple majority and be promulgated by the president within 30 days. The president has the authority to send a bill back to the Majlis with observations and objections. These may be considered by representatives who amend the legislation or pass the bill again as is. The most recent election was held in March 2014 with the next one due in 2019.

Approach to Climate Change

The Maldives is the sixth-smallest sovereign state with a total land area of 226km². Of the 1,192 coral islands making up the territory, only 358 are in use for human activity, accounting for 176km².

The Maldives faces perhaps one of the most severe potential effects of climate change: the complete, or near complete, submersion of their national territory. The island country’s average height of is 1.5m and the highest point is a coastal cliff measuring 4m above sea level. Over 80% of inhabited land is less than 1m above sea level. While the territory is protected against most oceanic storms by an expansive coral reef that surrounds the island, rising sea levels may literally wipe out the island’s dry land through regular tidal flooding. In the past six years, more than 90% of the inhabited islands have reported being flooded annually, with 37% of the islands reporting flooding as a recurring event. Furthermore, 97% of the islands also report shoreline erosion, and 64% report erosion as being a severe issue. In addition to this, 45% of the tourist resorts also report severe erosion issues.

The risk assessment presented in the National Adaptation Plan is bleak. Housing, infrastructure, economic sectors and fresh water resources are all at great peril. Fifty percent of housing structures are within 100m of the coastline, and very few are built to withstand tidal flooding. Likewise, nearly all of the national infrastructure, including roadways, airports, schools, hospitals, tourist resorts and energy generators risk submersion if sea levels rise to projected levels.

Under worst-case climate change projected scenarios, the entirety of the Maldives would be submerged by water. This fact led the President in 2009 to go so far as to suggest moving the entire population to a new sovereign territory, paid for by funnelling tourist dollars into a sovereign wealth fund (nature-based tourism accounts for approximately 70% of GDP). A ‘green tax’ on tourists was first raised as a possibility in 2009 (at a rate of USD3 per day) and in 2014 has again been suggested (and was included in the most recent government budget at a rate of USD6 per day per guest).

The main policies addressing climate change are the Strategic National Action Plan for Disaster Risk Reduction and the Climate Change Adaptation 2010-2020. In the country’s 2001 national report to

the UNFCCC, policy recommendations include participating in international advocacy, incorporating climate change concerns into regulatory policies, creating financing mechanisms to implement climate change programmes, building capacity to adapt to climate change, incorporating adaptive measures into national planning and developing strategies to mitigate GHG emissions.

The Ministry of Environment and Energy is the main government body responsible for climate change in the Maldives, with climate change featuring prominently in the ministry's mandate. The National Adaptation Plan, published by the then-Ministry of Environment, Energy and Water, is a significant and comprehensive planning document; but there remains a lack of detail about how to finance the 12 climate change programmes detailed. The Environmental Protection Agency was established under the 1993 Environmental Protection and Preservation Act as an operational agency of the Ministry of Environment and Energy.

In 2009, the Maldives Climate Change Trust Fund (CCTF) was established to support a climate resilient economy and society, focusing on low carbon development as well as mitigation and adaptation. The first phase of the CCTF (USD 10.3m) was funded by the European Union and Australia and has supported the implementation of three projects to date: the Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change project (supporting community-based wetland management, rainwater harvesting, coral reef monitoring and local government capacity building); the Clean Energy for Climate Mitigation project (solar energy, energy conservation and technical assistance); and the Ari Atoll Solid Waste Management pilot project (supporting the development of an island-level integrated solid waste management system and a residual waste transfer system for off-island disposal).

These projects were purposefully multi-purpose and geographically dispersed to benefit communities in various islands and pilot a large number of different activities. Project implementation to date has shown that a geographically more concentrated approach would likely enhance the effectiveness of interventions and generate more benefits for local communities with a greater chance of long-term sustainability. A 'model climate resilient atoll approach' that could demonstrate water resource and wetland initiatives, coral reef monitoring, and solid waste management in few selected locations has therefore been recommended for the proposed Climate Change Adaptation Project (CCAP), the second phase of the CCTF. The Government has identified the Addu and Ganviyani atolls as implementation locations for the CCAP, and the EU and Australia have expressed their intention to support the proposed CCAP with total funding of USD4.4m, commencing in 2015.

Energy supply

Imported petroleum fuels (predominantly diesel fuel oil) supply the vast majority of energy (about 80% of all imported fuel). Diesel is mainly used for power generation and transportation, both by the state power utility and private generators in the outer islands. In 2012 the total installed power generation capacity was approximately 245MW with power generation for Malé, the capital of the Maldives, accounting for approximately 72% of all generated power for inhabited islands. Power demand in Malé is predicted to grow at over 11% per annum and for the Maldives as a whole at 21%. Of the total generation capacity, 105MW is installed in the tourist resorts, while 120MW is installed in the inhabited islands of the atolls. 20MW is installed in industrial islands.

In 2009, then-President Mohamed Nasheed announced the government's intention to make the Maldives the world's first carbon neutral country (excluding aviation) by 2020. This target involves a series of measures, the most significant of which is a shift from fossil fuel to renewable energy production. This policy is also intended to enhance energy security and reduce reliance on imported oil for energy, as well as provide an exemplar for other countries to follow. The estimated total cost for decarbonisation is estimated to be USD2bn to USD3bn by 2020. A more formal version of this pledge is contained within the 2009 National Strategy for Sustainable Development which specifies that the country aims to become carbon neutral in the energy sector by 2020.

In 2011, the Cabinet announced the establishment of a Renewable Energy Investment Office under the Ministry of Economic Development to co-ordinate the overall policy framework for renewable energy. The government plans to install renewable energy sufficient to provide up to 30% of the daytime peak demand in all inhabited islands within the next five years. To achieve this target, about 5MW is planned to be installed annually as part of the Scaling Up Renewable Energy Program in Low Income Countries (SREP) investment plan. Two large projects are occurring under the SREP plan: Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) and Preparing Outer Islands in Sustainable Energy Development (POISED). ASPIRE includes installation of 20MW of solar PV systems in the greater Malé region supported by private investment. POISED is targeted to install approximately 20MW worth of renewable energy systems in outer islands. It is anticipated that about 40MW of installed capacity from renewable energy sources will be achieved, equating to a reduction in GHG emissions by approximately 56,000 tCO₂/year, and the avoidance of approximately 22m litres of diesel use per year (although actual achievement of these figures is likely to be hampered by land availability, costs and grid integration constraints).

A USD200m, 75MW wind farm was announced in 2009 but did not progress beyond the signing of a memorandum of understanding between the government and the private company involved. More recently, a fuel reduction system based on integrating solar PV into existing or new diesel power plants in conjunction with the World Bank and Germany-based DHYBRID has been announced. The system is intended to have a total capacity of 4.1 megawatt amperes installed on five different islands throughout the country.

A feed-in tariff was announced in 2011 whereby regional utility companies would purchase electricity produced by renewable energy companies to the grid at the rate MVR3.50 (USD0.23) per unit of electricity, accompanied by a government subsidy of MVR0.5 (USD0.03) per unit of electricity. Final details of this tariff are still being confirmed.

Energy demand

Energy intensity is high, particularly on resort islands for activities such as air-conditioning. The tourism sector alone accounts for one third of the country's total energy consumption. In 2012, average electricity consumption in the greater Malé region was 2,730 kWh per capita, and for other atolls it was 1,060 kWh per capita. New building regulations particularly related to tourism have been identified as important by the government, along with energy efficiency standards for refrigeration and air-conditioning units. Energy efficiency is the joint responsibility of the Ministry of Environment and Energy, Ministry of Housing and Infrastructure, and the Energy Authority. No overall energy efficiency policies or mandates exist at present.

In 2011, the government eliminated import duty on electric cars and motorcycles, while retaining a 200% tariff on petrol and diesel-powered vehicles. The number of vehicle licences in Malé has been drastically reduced, with electric vehicles highly favoured as part of the country's points-based licensing system. As part of the same decision in 2011, the government also reduced the import duty from 25% to nil on solar and wind-powered ships and equipment, including sails.

REDD+ and LULUCF

Approximately 3%, or 1,000 ha of the Maldives is forested. There is increasing demand on land in the Maldives mainly for agricultural expansion, industrial growth and housing, as well as for timber for use in resort construction. Many islands are used exclusively for single purposes, such as agriculture or tourist resorts, with 35 additional islands set aside for tourism development in recent years. Other land-use concerns include the degradation of the surrounding coral reefs, resulting in government bans on the collection of coral and use of anchors, and the installation of artificial concrete breakwaters at a cost of USD10m per kilometre.

Transportation

In October 2014 a draft Low Carbon Strategy for the Transport Sector was released for public consultation. Transport accounts for estimated 25% of the Maldives GHG emissions and is increasing rapidly with, for example, a 295% increase from 2007 to 2014 in vehicle registrations. The strategy suggests numerous short to long term strategies to mitigate GHG emissions from transport, such as promoting eco-driving behaviour, low carbon technology for aircraft and other vessels, and the establishment of energy efficient infrastructure and re-engineered roads for low carbon transport. The strategy encourages the formulation of laws and regulations to regulate low carbon transport in the short term, and the establishment of a sustainable financing mechanism in conjunction with subsidies or other fiscal mechanisms is recommended in the long term.

Adaptation

The National Adaptation Programme of Action was prepared by the Integrated Climate Change Strategy (ICCS) and published by the Ministry of Environment, Energy and Water. The report states that the drafting included input from a wide array of experts and civil society groups as well as community stakeholders. In the foreword, the President states that the Kyoto Protocol falls far short of reversing climate change, and that adaptation to climate change is the most pressing priority for countries such as the Maldives.

The stated goal of the Adaptation Plan is to present a coherent framework to climate change adaptation that enhances the resilience of natural, human, and social systems and ensures their sustainability in the face of predicted climate hazards. The plan admits its imperfections, given the complexity of the problem and incomplete scientific knowledge; but it stresses a plurality of values to construct a framework that brings climate change into the national agenda while allowing for flexibility in implementation.

Maldives: Legislative portfolio

Name of law	Environmental Protection and Preservation Act of the Maldives
Date	19 April 1993
Summary	This short Act provides the basis for the powers of the Ministry of Planning, Human Resources and Environment to enact any regulations necessary for environmental protection. While the Act does not specify climate change it does provide the government with the ability to terminate any projects that are deemed to have an undesirable impact on the environment.

Maldives: Executive portfolio

Name of Policy	Maldives National Energy Policy & Strategy
Date	27 September 2010
Summary	<p>Published by the Ministry of Housing and Environment, the National Energy Policy & Strategy provides a framework for energy policy. It specifies that the lead agency for the energy sector is the Climate Change and Energy Department within the Ministry of Housing and Environment and has one of its key policies that the country will achieve carbon neutrality in the energy sector by 2020. Strategies to achieve this goal are:</p> <ul style="list-style-type: none"> • Develop and implement plans to include forecasts of energy usage by different sources, GHG emissions and status of carbon neutrality • Establish and monitor energy targets to achieve carbon neutrality • Promote carbon capture and storage through R&D • Ensure energy sector compliance with safety and environmental standards • Establish an environmental division in every energy sector utility to ensure compliance with regulations made under 1993 Environmental Protection and Preservation Act <p>Other policies include promoting energy conservation and energy efficiency, increase national energy security (through, for example, promoting indigenous renewable energy to reduce reliance on imported fossil fuels), promoting renewable energy technologies, and strengthening the institutional and legal framework of the energy sector.</p>

Name of Policy	The Republic of the Maldives Strategic National Action Plan for Disaster Risk Reduction and Climate Change Adaptation 2010-2020
Date	2010
Summary	<p>The Strategic National Action Plan (SNAP) outlines the likely impacts from climate change (including further tsunamis, sea-level rise, coastal erosion, and reduction in food and water availability). It identifies four strategic areas of action to minimise risk from disasters and to help the Maldives adapt to climate change:</p> <ul style="list-style-type: none"> • Enabling environment towards good governance • Empowered and capable communities • Resilient communities with access to technology, knowledge and other resources • Risk-sensitive regional and local development <p>Under each action area are numerous activities, such as to incorporate disaster risk reduction and climate change adaptation topics into the school curricula and to develop story books on the same topics for children.</p>

Name of Policy	Maldives National Strategy for Sustainable Development
Date	April 2009
Summary	<p>Published by the Maldives government in conjunction with UNEP, the National Strategy for Sustainable Development identifies several goals relating to climate change. These are (with relevant targets listed below):</p> <ul style="list-style-type: none"> • Adapt to climate change (goal 1) <ul style="list-style-type: none"> ○ Build coastal defences for Malé International Airport and Gan International Airport ○ Develop coastal defences around 10 selected islands ○ Train 40 coastal engineers • Achieve carbon neutrality in energy (goal 3) <ul style="list-style-type: none"> ○ Become carbon neutral in the energy sector by 2020 ○ Ensure 50% of the electricity is from renewable sources by 2015 ○ Achieve a 50% reduction by 2015 in energy sector GHG emissions compared to 2000 levels ○ Reach a saving of 7.5% of final energy consumption over 10 years until 2020 through efficiency • Establish a carbon neutral transport system (goal 5) <ul style="list-style-type: none"> ○ Reduce CO₂ emissions from light vehicles – the average car fleet should achieve CO₂ emissions of 140g/km by 2015 ○ By 2015 not less than 10% of transport fuel should consist of biofuels, as an indicative target, considering raising their proportion to 20% by 2020

Sources

- Department of Climate Change and Energy, 2010. *National Assessment Report 2010*, Small Island Developing States report, Ministry of Housing, Transport and Environment [URL: http://www.sidsnet.org/msi_5/docs/nars/AIMS/Maldives-MSI-NAR2010.pdf]. Accessed 26 January 2015.
- First National Communication of Maldives to the UNFCCC. 2001. Ministry of Home Affairs, Housing and Environment.
- Government of the Maldives. 1993. *Environmental Protection and Preservation Act of the Maldives, Law No. 4/93* [URL: <http://epa.gov.mv/images/stories/laws%20and%20Regulations/Environment%20Protection%20and%20Preservation%20Act%2028Law%20No.%204-93%29/English.pdf>]. Accessed 19 November 2014.
- Government of the Maldives. 2009. *Maldives National Strategy for Sustainable Development* [URL: <http://www.environment.gov.mv/v1/download/9>]. Accessed 19 November 2014.
- Government of the Maldives. 2010. *The Republic of the Maldives Strategic National Adaptation Plan for Disaster Risk Reduction and Climate Change Adaptation 2010-2020* [URL: <http://unisdr-apps.net/confluence/download/attachments/9110285/snap-Maldives.pdf>]. Accessed 19 November 2014.
- Human rights council resolution 7/23 “Human Rights and Climate Change.” 25 September 2008. Maldives country submission to the Office of the High Commissioner for Human Rights.
- Ministry of Environment and Energy. 2013. *Maldives SREP Investment Plan 2013-2017* [URL: <http://www.environment.gov.mv/v1/download/624>]. Accessed 03 November 2014.
- Ministry of Environment and Energy. 2014. *Low Carbon Strategy for the Transport Sector (draft)* [URL: <http://www.environment.gov.mv/v1/download/770>]. Accessed 10 November 2014.
- Ministry of Housing and Environment. 2010. *Maldives National Energy Policy & Strategy* [URL: <http://www.environment.gov.mv/v1/download/623>]. Accessed 19 November 2014.
- Naseer, A. n.d. *Pre-and post-tsunami coastal planning and land-use policies and issues in the Maldives* [URL: <http://www.fao.org/forestry/13142-0fe9fec9a5e02098b4147417167c6da3.pdf>]. Accessed 10 November 2014.
- National Adaptation Program of Action. 2007. Ministry of Environment, Energy and Water.
- O’Hehir, Andres. “The Maldives’ ousted president on climate change and tyranny”. Salon.com. 30 March 2012.
- President of the Republic of the Maldives. 2009. President announces the government’s intention to make the Maldives world’s first carbon neutral country, Press Release 15 March 2009, Ref 200-224 [URL: <http://www.presidencymaldives.gov.mv/Index.aspx?lid=11&dcid=180>]. Accessed 03 November 2014.
- Renewable Energy and Energy Efficiency Partnership. 2014. *Maldives (2012)* (web page) [URL: <http://www.reegle.info/policy-and-regulatory-overviews/MV>]. Accessed 03 November 2014.
- Samath, Feizal. “Climate Change: Maldives inches closer to HCFC phase-out”. Inter Press Service News Agency. 14 June 2010.
- South Asia Regional Initiative for Energy Integration. 2014. *Maldives* (web page) [URL: http://www.sari-energy.org/pagefiles/countries/maldives_energy_detail.asp]. Accessed 03 November 2014.
- SREP. 2012. *SREP Investment Plan, Republic of the Maldives* [URL: <http://co2.org/wp-content/uploads/2012/12/Maldives-SREP-last-version-from-MM.pdf>]. Accessed 03 November 2014.
- The World Bank. 2014. *Readiness for investment in sustainable energy: Maldives* (web page) [URL: <http://rise.worldbank.org/data/exploreconomies/maldives/2014?topic=energy-efficiency>]. Accessed 10 November 2014.
- Thupalli, R. 2009. *Maldives Forestry Outlook Study*, Asia-Pacific Forestry Sector Outlook Study II Working Paper Series, Working Paper No. APFSOS II/WP/2009/03, Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, Bangkok [URL: <http://www.fao.org/docrep/014/am248e/am248e00.pdf>]. Accessed 10 November 2014.