

CLIMATE CHANGE LEGISLATION IN

LIBYA

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A Review of Climate Change Legislation in 99 Countries



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Libya

Legislative Process

Libya achieved independence from UN trusteeship in 1951. Libya is currently rebuilding from a violent civil war ignited in 2011. From September 2011, Libya operated under a transitional government following from the fall of Colonel Qaddafi's regime and the United Nations' recognition of the National Transitional Council as the legal representative of Libya. The legal system is similarly in a period of dynamic transition and is influenced by both state and non-state entities.

In 2011, the National Transitional Council adopted an interim Constitutional Declaration and, in 2013, elections were held for a 60-member Constitutional Assembly to draft a new constitution. Excessive violence resulted in only 47 members being elected to the body. Although the body was given 120 days to draft a new constitution from their first meeting, in April 2014, in light of continued unrest, it is anticipated that the process will take months.

Since July 2012, Libya has had an interim parliament, the General National Congress, composed of 200 members, which replaced the National Transitional Council in August 2012 as the representative of the Libyan people. Following popular elections in June 2014, a new 200-member parliament, the House of Representatives, was elected. The terms and future election dates are as yet undecided.

Approach to Climate Change

Libya is an expansive North African country, with a total area of about 1.76 km²; however, 90% of the country is hyper-arid desert and less than 1% of Libya's land is arable, making it one of the driest countries in the world, with an average annual precipitation of between 300-400mm. This lack of arable land, coupled with poor soil quality, severely limits Libya's capacity to produce food; as a result, the country imports about 80% of its food and the majority of its 6.2 million inhabitants live along the thin stretch of fertile Mediterranean coastline.

The country is divided into three distinct climate regions that largely coincide with physiographic differences: (1) the Coastal Plains, (2) the Northern Mountains and associated highlands and plateaus, and (3) the expansive Sahara Desert that extends from the Gulf of Sidra, which divides the fertile Coastal Plains, to the Internal Depressions in the centre of the country and the Southern and Western Mountains.

The Coastal Plains, the northern coastline along the Mediterranean, is the most temperate and fertile of the climate zones, experiencing dry summers and mild wet winters. Inland from the Mediterranean, Libya's climate varies considerably. The Northern Mountains experience higher rainfall and colder winters, while the dominant Sahara desert zone, is barren, hyper-arid, and typically receives less than 50mm of precipitation per year.

According to the 2014 UNDP Human Development Report, Libya is one of the most highly developed countries in Africa, with an index of 0.784 and a comparative HDI ranking of 55 of 187 countries and territories worldwide. Nevertheless, Libya has undertaken very little in terms of climate change

adaptation and mitigation efforts compared with other North African countries and the scope of Libya's climate change policies is largely limited to participation in regional and global initiatives. Libya is a member of the League of Arab States and the Arab Maghreb Union (AMU), which have both integrated climate change mitigation and adaptation activities into their regional agendas; however, none of the regional agreements are binding for Libya.

Although Libya signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1999, it has yet to submit a national communication to the UNFCCC assessing the nation's vulnerability to climate impacts and proposing a prospective policy framework. The country has not prepared any National Adaptation Programmes of Action. Although Libya received funding from the Global Environment Facility (GEF), in 2002, to assist in the development of the scientific and technical capacity needed to produce an initial national communication to the UNFCCC, the project was terminated in 2005. A 2013 report from GEF indicates that between July 2010 and June 2014, Libya received an additional \$4.5 million from GEF for biodiversity (\$1.5m), climate change (\$2.1m), and land degradation (\$0.9m) projects; however, Libya spent all of funds on the land degradation project. The GEF climate change projects were under the oversight authority of Libya's National Committee for Climate Change, headed by the Energy Secretary of the Ministry of Electricity and Renewable Energy.

As well as the National Committee for Climate Change, climate change related issues fall under the authority of following government organisations: the General Environment Authority, the Ministry of Agriculture, Animal, and Marine Wealth, the General Water Authority, and the Ministry of Electricity and Renewable Energy.

Energy supply

Libya's economy and government is dependent on the hydrocarbon industry. As a member of the Organisation of Petroleum Exporting Countries (OPEC), Libya holds the largest proven crude oil reserves in Africa, and is among the top 10 holders of proven crude oil reserves worldwide. It also has the fourth-largest proven natural gas reserves in Africa.

Fossil fuels account for nearly 99% of the total energy mix – EIA estimates from 2010 indicate 70% of energy consumption was from oil, 29% from natural gas, and 1% from renewable generation. IMF figures show that, in 2012, oil and natural gas provided the government with about 96% of its total revenue and made up 98% of total exports. During the civil war, the hydrocarbon sector experienced significant disruptions and production levels are still comparatively lower than before the conflict.

Within the Ministry of Electricity and Renewable Energy, Libya has a Renewable Energy Authority (REAoL), founded in 2007, responsible for: mapping the renewable energy potential of Libya, in particular wind and solar capacity; developing and implementing plans for both energy efficiency and renewable energy development; incentivising private industry to invest in renewable energy technologies; and proposing legislation to support renewable energy development. REAoL estimates that Libya has one of the highest solar radiation potentials in the world, with an average solar radiation of 2470kWh/m²/day, and ranks 5th among Middle East North Africa (MENA) countries for wind power potential.

In 2012, REAoL identified a number of barriers to Libya's pursuit of renewable energy, notably the need for increased capacity building, a stable finance mechanism and the establishment of a supportive policy and legal framework. REAoL has outlined detailed short- and long-term plans, beginning in 2013, to develop Libya's renewable energy capacity with a goal of achieving 10% renewable supply, of 2,650MW of installed capacity, by 2020. This target date was recently changed to 2030. Although REAoL aimed to have a policy and legal framework codified by 2014, this goal has yet to come to fruition and there is currently no legislation governing the renewable energy sector. Furthermore, Libya does not have an energy regulatory agency and the Energy Council is responsible for the operation and management of the energy sector.

Energy Demand

According to the EIA, energy generation more than doubled between 2000 and 2010; however, Libya's installed electricity generation capacity has not increased enough to meet the growing demand for power. Efforts to increase electricity generation and diversify the fuel mix have been further hampered by a lack of private investment, compounded by the country's continued unrest in the wake of the 2011 civil war.

Transportation

Since 1965, when Libya's existing railway lines were all closed, Libya has not had public transportation, apart from buses and taxis. The Libyan government began developing plans, in 1998, for a national railway network along the coastline between the Tunisian border, in the West, and the Egyptian border, in the East. In 2003, a Libyan Railroads Execution and Management Board (LREMB) was created and in 2006, additional plans for a metro system in Tripoli were outlined.

By 2008, an agreement was reached between Libya and the Russian Railways (RZD), as well as the Chinese Railway Construction Corporation (CRCC) to begin construction on Libya's plans for a national railway. Although both companies had begun construction prior to the 2011 civil war, neither company has recommenced construction since the war.

Adaptation

The Saharan climate and low-levels of precipitation across Libya result in significant stress to the country's very limited freshwater resources and make Libya highly vulnerable to climate change impacts. Libya's annual freshwater consumption is generally greater than the volume of renewable water resources. In 1983, in response to significant freshwater shortages and the inadequacy of desalination in addressing such shortages, the government launched the Great Man-made River Project (GMR) to extract fossilised water from the Nubian Sandstone Aquifer System (NSAS) under the Sahara desert and transport it to the cities along the Coastal Plains. Thus far, the government has spent over USD20 billion to construct a complex network of 4,000km of pipelines to draw freshwater from the world's largest known fossil aquifer system, contributing over 1.6m cubic metres per day to the water supply. In 2009, the GMR accounted for 61% of Libya's total water supply, while 11% came from desalination and the remaining 28% from renewable groundwater sources. Before the civil war, the GMR was in the final and fourth phase and the goal was to supply around 6 million m³ of freshwater to the Coast by 2030.

Libya: Legislative Portfolio

Libya currently has no climate change legislation.

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