

# Yucatan



## THE STARTING POSITION

**Population:** 1,955,577  
(2010)

**Capital:** Merida (42.8% total population)

**GDP:** US\$ 11,990,797.4  
(2012)

**GHG emissions:** 10.9 million Mt CO<sub>2</sub>eq  
(2005)

**GHG emissions /capita:** 5.56 Mt CO<sub>2</sub>eq  
(2005)

**GHG emissions intensity:** 1.13 Mt CO<sub>2</sub>eq /  
MXN million  
(2005)

Yucatan State is located in Southeastern Mexico, on the north part of the Yucatán Peninsula, bordered by the states of Campeche and Quintana Roo and the Gulf of Mexico.

The Economy of the State is based on the service sector which represent 71% of State GDP according to the latest data, it is follow by the secondary sector with 24.71% (construction, energy, water) and the primary sector with 4.24% (agriculture, stockbreeding, forestry, fisheries). The contribution of Yucatan, to the National GDP is 1.4%.

Climate change is considered the most important environmental problem of the present century, in this sense; Yucatan has a strong commitment in building a more resilient economy while reducing greenhouse gas emissions. Climate Change has been address in the “Yucatan State Development Plan (2012-2018)” as one of its strategic guidelines. As well the government has promoted the creation of the "Yucatan State Special Program of Climate Change" (2013).

Yucatan has been recognized nationally by its leadership in Climate Change public policies, which are based on a solid legal frame such as the “General Law of Climate Change”, and are, align to the National Program of Development (2013-2018) and Mexico’s National System of Climate Change.

Yucatan’s vision to address climate change has a regional perspective, considering the particular characteristics of the region and its vulnerability to the adverse impacts of climate change. Yucatan has partner with neighboring states leading the “Regional Strategy of Climate Change” in order to achieve three objectives: Develop a Regional Adaptation Strategy, Implementation of the Yucatan Peninsula Regional Program of Reduction of Emissions from Deforestation and forest degradation (REDD+ PY), and the creation of the Yucatan Peninsula Climate Change Action Fund.

## Yucatan's specific actions and commitments

### I. Targets to reduce Greenhouse Gas Emissions

In terms of reduction of GHG emissions, Yucatan State has set two intensity targets convey in the "Yucatan State Special Program of Climate Change".

1. To reduce intensity of region-wide CO<sub>2</sub>e emissions by 20% by 2018 based on 2005 levels
2. To reduce intensity of region-wide CO<sub>2</sub>e emissions by 40% by 2030 based on 2005 levels

### II. Actions to reduce Greenhouse Gas Emissions

The Energy industry has been identified as the principal responsible of GHG emissions. In order to start a transition to cleaner energies the government is currently developing "The Strategic Plan in Sustainable Energy" conduct by The Ministry of Urban Development and Environment. Through this Strategic Plan, the State will evaluate the potential applicability of renewable energies, identify technical and financial barriers, generate the legal framework needed to implement policies in energy efficiency, and estimate the social and regional impacts of renewable energies in economy and environment.

Additionally Yucatan government has implement "The State Program to improve wastewater treatment in pig farms" officially launched on 2012. This program provides medium- and small size farms with biodigesters to improve the management of wastewaters and reduce methane emissions. Pig farming has become one of the most important activities in Yucatan, with 470 pig farms registered and an estimated swine population of 898,729. The program currently attends 44 of the 60 municipalities that develop this activity and has supported 150 medium- and small-sized farms. In 2015 the program seeks to reach a total of 200 pig farms benefit.

### III. State Strategy of Reduction of Emissions from Deforestation and forest degradation (REDD+ Yucatan)

The expected impacts of climate change on ecosystems and human societies, has prompted efforts to estimate with precision emissions of GHGs. According to Yucatan's Greenhouse Gas Inventory Data, Land Use, Land-Use Change and Forestry (LULUCF) contribute with 12.5% (1.3 million Mt CO<sub>2</sub>eq) of GHG emissions.

The land-use, land-use change and forestry (LULUCF) sector is one of the six major sources of GHGs, particularly of carbon dioxide or CO<sub>2</sub>. In order to attend this problematic, Yucatan Government will launch on 2016 "The State Strategy REDD+".

Aiming to reduce degradation of natural resources and deforestation ( net loss of 22,647 ha/yr) “The State Strategy REDD+” will contain the guidelines to promote sustainable rural development with low GHG emissions, as well as the initiatives to incentive the preservation and sustainable use of the tropical forest, such as the use of carbon trading schemes, and other economic instruments that could benefit local communities in achieving a better quality of life while guaranteeing the environmental services of regional tropical forest.

#### IV. Adaptation

According to the "Yucatan State Special Program of Climate Change", projections from Climate regional models (RCMs) revealed that in the consecutive decades, Yucatan State would suffer drastic changes in climate that would affect negatively productive, environmental and social sectors. Among the expected changes are the increment of temperature with averages between 91.4 and 98.6° F; a detriment of average rainfall up to 15% and an increased frequency of extreme weather events.

To this matter, Yucatan government has set two targets convey in the "Yucatan State Special Program of Climate Change", to accomplish the objective to reduce the vulnerability of the productive, social and environmental sectors to the impacts of Climate Change.

1. To reduce 17% of economic losses associated to climate change impacts by 2018.
2. To reduce 30% of economic losses associated to climate change impacts by 2030.

In order to accomplish these targets, a vulnerability assessment has allowed the State to identify and prioritized actions to build up the resilience capacity of most vulnerable sectors such as Water, Health, Human Settlements, among others. In addition in order to evaluate progress in this matter a series of indicators have been established, as shown below.

<b>Strategic area</b>	<b>Indicator</b>	<b>Base line 2005</b>	<b>Target 2018</b>
	<b>PIB % reduction from lo</b>		
Forestry, Agriculture and livestock	Direct damages caused by extreme meteorological events (Hurricanes) sector Agriculture and livestock (million MXN)	193	166
Water	Water consumption per capita m <sup>3</sup> /year	135.48	94
Human settlements	Urban infrastructure reinforcement investment /GDP (%)	0.25	0.36
Biodiversity	Percentage of protected land	17	18
Industry, commerce and tourism	Urban infrastructure reinforcement investment /GDP (%)	0.0	0.2
Health	Infrastructure reinforcement	0.88	1.26
Coastal zone	Quality index for coastal water	1.5-3.5	1.5-3.5