

## NORTH AMERICA



# Mexico

GDP: **\$1,283bn**

Five-year economic growth rate: **4.1%**

Population: **123.8m**

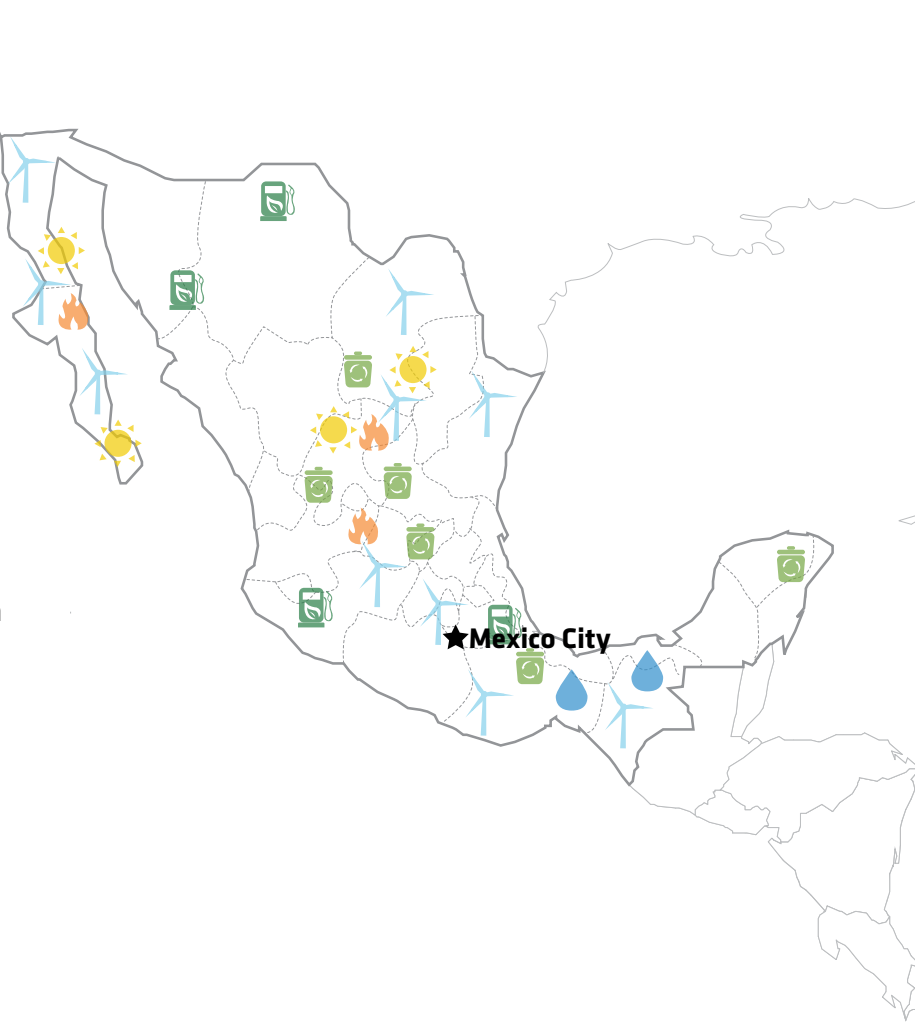
Total clean energy investments, 2009-2014: **\$11.7bn**

Installed power capacity: **64GW**

Renewable share: **5.8%**

Total clean energy generation: **15.9TWh**

Top energy authority: **National Energy Council**



### OVERALL RANKING

2014

2015

8

7

### OVERALL SCORE

2015

1.72

PARAMETER	RANKING	SCORE
I. Enabling Framework	32	1.10
II. Clean Energy Investment & Climate Financing	12	0.85
III. Low-Carbon Business & Clean Energy Value Chains	07	3.84
IV. Greenhouse Gas Management Activities	04	3.01

### SCORE SUMMARY

Mexico in 2015 moved up one position to seventh in its overall *Climatescope* ranking and achieved a 1.72 score. In 2014, Mexico recorded an overall score of 1.57.

In 2015, Mexico improved on the Clean Energy Policies Indicator of Enabling Framework Parameter I. However, that development was partially offset by softness on the Asset Finance Investment Indicator of Clean Energy Investment and Climate Financing Parameter II.

On Enabling Framework Parameter I, Mexico ranked 32<sup>nd</sup> in 2015, an eight-level improvement on 2014. Its Parameter I scores were 1.10 and 0.90 in 2015 and 2014, respectively.

Mexico in 2015 lost ground on Clean Energy Investment and Climate Financing Parameter II, sinking to 12<sup>th</sup> from sixth. Its 2015 Parameter II score was 0.85 versus 1.12 in 2014.

On Low-Carbon Business & Clean Energy Value Chains Parameter III, Mexico joined the top 10 group of countries with a move into seventh place, with a score of 3.84. Its 2014 Parameter III metrics were 15<sup>th</sup> and a score of 2.82.

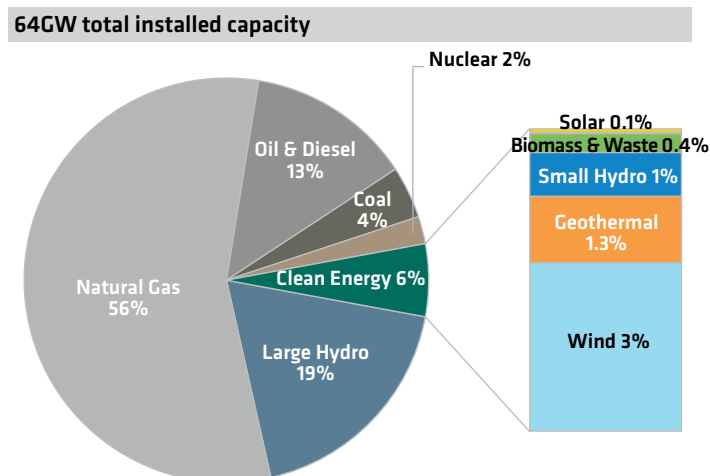
On Greenhouse Gas Management Activities Parameter IV, Mexico matched its fourth-place rating from the prior year. Its parameter scores were materially unchanged: 3.01 in 2015 and 3.02 in 2014.

For further information, access [www.global-climatescope.org/en/country/mexico](http://www.global-climatescope.org/en/country/mexico)

## OVERVIEW

Mexico's energy sector is at a historical turning point. At the end of 2013, Congress passed sweeping reforms of Mexico's intended to lead to the liberalization of the power generation sector historically controlled by state-owned Federal Electricity Commission (Comisión Federal de Electricidad, or CFE). Regulation has since been rolled out, and the first new market mechanisms will start operation in 2016. By 2018, Mexico's generation market will operate under new rules.

### INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)



Source: Bloomberg New Energy Finance, Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaría de Energía

In 2014, Mexico generated 6% of its electricity from renewables, including biomass and waste, geothermal, small hydro, wind and solar plants. As Latin America's largest natural gas producer, the country relies primarily on gas-fueled generation, which produced around 60% of the estimated 285TWh generated in 2014.

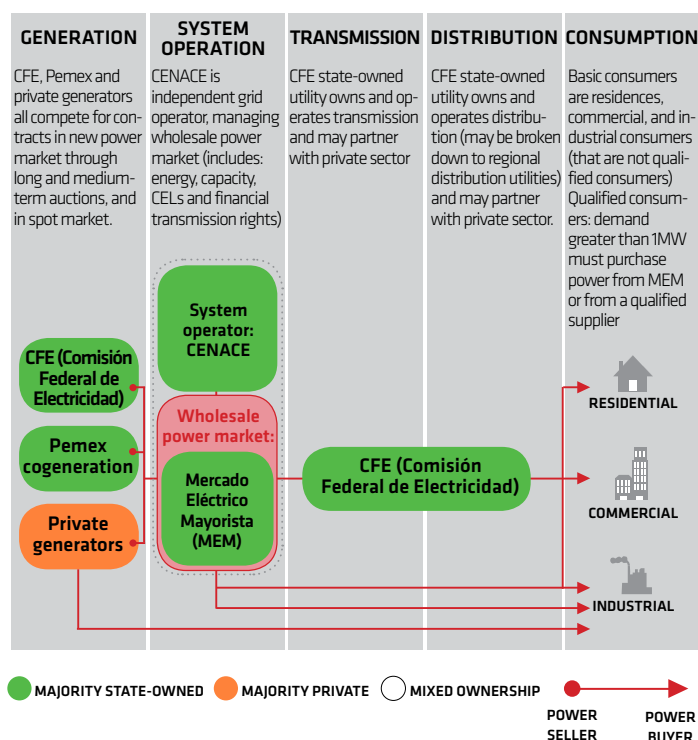
## KEY POLICIES

<b>Energy Target</b>	35% of electricity generation coming from renewable sources (including large hydro and nuclear) by 2024.
<b>Debt/Equity Incentive</b>	Funds support clean energy grants for Mexican research institutes and renewable energy electrification programs.
<b>Tax Incentives</b>	Accelerated depreciation for renewable energy projects and machinery.
<b>Net Metering</b>	Retail electricity consumers may connect their renewable facilities to the national grid, delivering surplus generation and obtaining billing credit for excess electricity provided.

Source: Bloomberg New Energy Finance Policy Library

## POWER SECTOR STRUCTURE

**Regulator: CRE (Comisión Reguladora de Electricidad)**



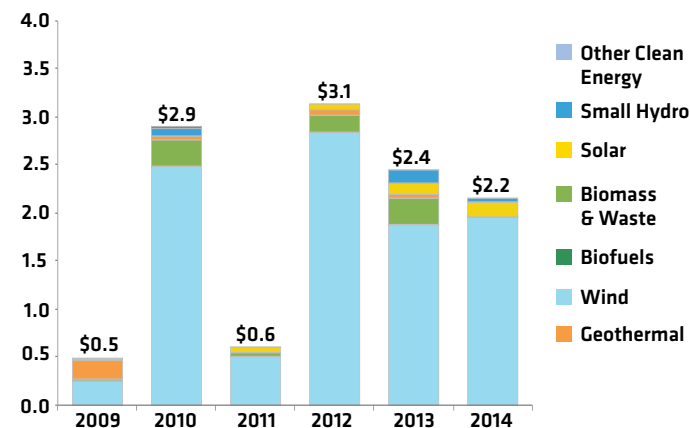
Source: Bloomberg New Energy Finance

Note: this diagram reflects Mexico power market structure after full implementation of power market reforms, which is expected to be rolled out through to the beginning of 2018.

Mexico's electricity market has been tightly regulated – although this is about to change thanks to the reforms. CFE controlled all on-grid power supplies and determined which projects were to be developed by independent power producers. These projects could sell electricity to CFE, which awarded power contracts through tenders. The only other options for private generators were to sell electricity directly to large consumers via bilateral agreements or to qualify for a permit as a small power producer.

### ANNUAL INVESTMENT IN CLEAN ENERGY, 2009-2014 (\$bn)

**\$11.7bn total cumulative investment**



Source: Bloomberg New Energy Finance

Notes: Total investment includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

Mexico's energy reforms amended the constitution and opened generation to private developers, while transmission and distribution will remain under CFE, with some role for private investment. In addition, the reforms create a wholesale power market, operated by a new independent system operator, the Energy Control National Center (Centro Nacional de Control de Energía, or CENACE). The reforms bring auctions to supply power to the system and pave the way for clean energy certificates (certificados de energías limpias or CELs), which will be required to demonstrate compliance with a yearly clean energy obligation.

A mandate requires that in 2018, 5% of the country's power consumption comes from clean sources (which include renewables, large hydro, nuclear and efficient cogeneration). In 2014, around 21% of the country's generation was from non-fossil sources (applicable to the country's renewable energy target, which includes nuclear and large hydro).

### LEAGUE TABLE

**2014 Total Investments** **\$2,157m**

#### Top Lead Debt Arrangers 2014 (\$m)

Banco Santander	\$220m
BMizuho Financial Group Inc	\$54m
Sumitomo Mitsui Financial Group	\$54m

#### Top Equity Sponsors 2014 (\$m)

Fisterra Energy	\$453m
Enel SpA	\$300m
InterGen NV	\$159m

#### Top Three Asset Finance Deals, 2014 (\$m)

Rank	Sector	Project	Developer	Value
1st	Wind	Cemex Ventika Wind Portfolio	Cemex and Fisterra Energy	\$699m
2nd	Wind	Sierra Juarez Wind Farm	Ienova and InterGen	\$344m
3rd	Wind	Enel Dominica II Charcas Wind Farm	Enel	\$212m

Source: Bloomberg New Energy Finance

Notes: Figures refer to disclosed asset finance investments committed in 2014 and include balance sheet commitments

Mexico also has greenhouse gas reduction targets: a 30% reduction in greenhouse gas emissions by 2020 and 50% by 2050, with emission levels of 2000 set as the baseline.

Renewable energy developers may benefit from accelerated depreciation on the value of their investment in equipment. Goods used for pollution control and research and development purposes are also exempt from import and export taxes. Mexico has two state-run renewable energy funds: one supports energy efficiency and rural electrification initiatives, while the other offers grants to renewable energy and energy efficiency projects developed by Mexican research and academic institutions.

### FINANCIAL INSTITUTIONS IN CLEAN ENERGY

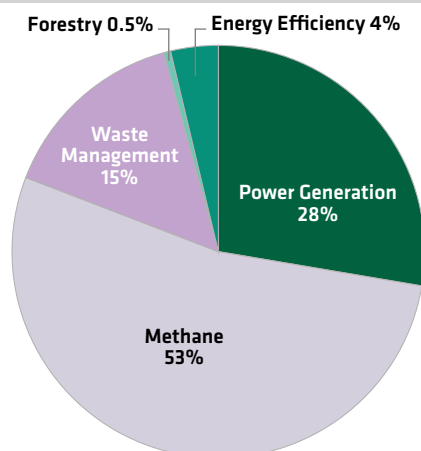
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<input type="checkbox"/>	<b>Funds</b>	<input checked="" type="checkbox"/>	<b>Impact Funds</b>
<input type="checkbox"/>	<b>Private Equity/Venture Capital</b>		

Source: Bloomberg New Energy Finance

Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

### CARBON OFFSET PROJECTS BY SECTOR

188 CDM and voluntary carbon offset projects



Source: UNEP Risoe, Bloomberg New Energy Finance

### CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
<b>Biofuels</b> 	<b>Producers ; Engineering ; O&amp;M ; Equipment Manufacturing ; Distribution and Blending</b>
<b>Biomass &amp; Waste</b> 	<b>Project Development ; Engineering ; O&amp;M ; Equipment Manufacturing ; Feedstock Supply</b>
<b>Geothermal</b> 	<b>Project Development ; Engineering ; O&amp;M ; Resource Development ; Turbines ; Balance of Plant</b>
<b>Small Hydro</b> 	<b>Project Development ; Engineering ; O&amp;M ; Turbines ; Balance of Plant</b>
<b>Solar</b> 	<b>Project Development ; Engineering ; O&amp;M ; Polysilicon/ingots ; Wafers ; Cells ; Modules ; Inverters ; Balance of Plant</b>
<b>Wind</b> 	<b>Project Development ; Engineering ; O&amp;M ; Turbines ; Blades ; Gearboxes ; Towers ; Balance of Plant</b>

Source: Bloomberg New Energy Finance

Note: Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available subsectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.