



U.S. Embassy–Mexico City Electricity Factsheet

Important Facts:

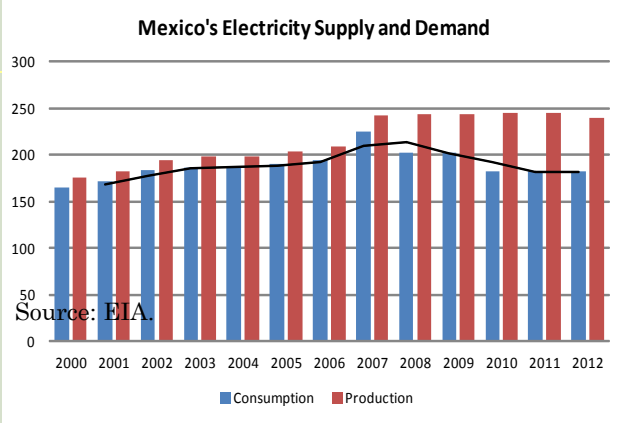
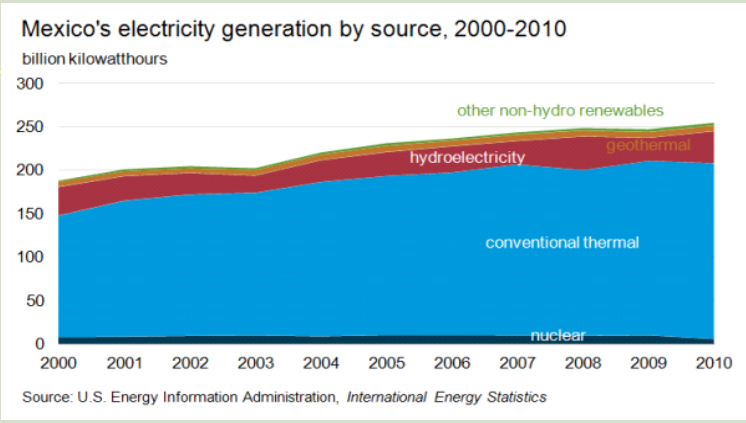
- The state-owned Comisión Federal de Electricidad (CFE) is the dominant player in the generation sector, controlling over three-fourths of installed generating capacity. CFE also holds a monopoly on electricity transmission and distribution.
- The Comisión Reguladora de Energía (CRE) has principal regulatory oversight of the electricity sector.
- Private participation in electricity generation is now permitted in certain categories, including for the purposes of construction and operation of private plants for self-supply, cogeneration, Independent Power Producer (IPP), small production (under 30 MW), and import/export.

Most of Mexico's electricity generation comes from conventional thermal plants, the fuel source for which is increasingly natural gas .

Mexico’s electric industry is dominated by the Federal Commission of Electricity (CFE), which is responsible for the overall planning, development, and operation of the national electricity system in Mexico. Mexico's installed electrical power capacity on the national National Electricity System (SEN) grid increased by 602 megawatts (MW) in 2012 to a total of 52.5 gigawatts (GW) .

Types of Energy	# Plants
Hydroelectric	79
Thermoelectric	28
Geothermal	7
Carboelectric	2
Wind	3
Nuclear	1

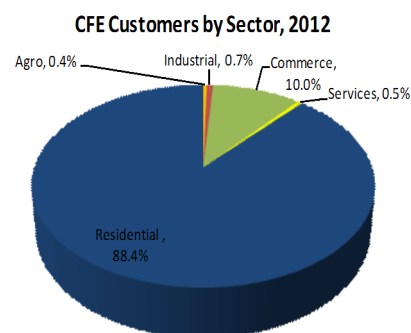
In 2012, the national electricity consumption stood at 229.318 gigawatt-hours (GWh). This represented an increase of 7.2% over the year 2010. Also, the electricity power supply grew 2.9%, to extend coverage to more than 35.3 million users. For the same year, the national installed capacity stood at 61.568 MW. In this capacity, 52.512 MW corresponded to public service, including 11.907 MW of independent power producers (IPPs) and 9.056 MW of other licensees in the sector private. In particular, the installed capacity of the public service core technologies fossil sources participated with 26.4% and plants utilizing fossil fuels contributed 73.6%. In 2009, the installed capacity for power generation in OECD member countries stood at 2.6 Terawatts (TW). America concentrated 47.4% of this capacity. The United States recorded an installed capacity of 1.0 TW, which represented 84.3% of the total in North America and 40% among all OECD countries. For its part, Canada and Mexico participated with 10.8% and 4.9% of the capacity of North America, respectively.



The electricity sector in Mexico relies heavily on thermal sources (75% of total installed capacity), followed by hydropower generation (19%). Although exploitation of solar, wind, and biomass resources has a large potential, geothermal energy is the only renewable source (excluding hydropower) with a significant contribution to the energy mix (2% of total generation capacity).

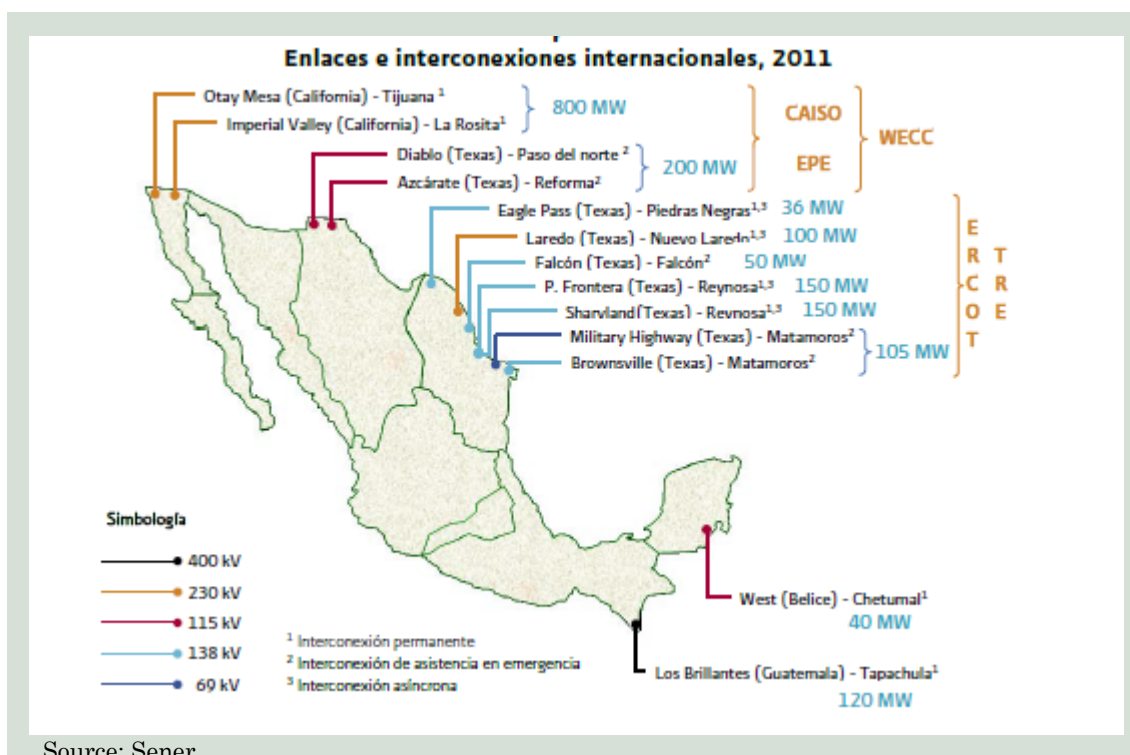
Industry vs Residential.

Mexico's national transmission grid, which is operated by CFE, includes over 31,000 miles of mostly high and medium voltage lines. According to statistics from CFE, over 98% of Mexico's population has access to electricity. The 99.5% of the electricity generated by the CFE is for domestic consumption, but still, the CFE exports the remaining 0.5%. In Brazil, Russia and India, the industry claimed between 47% and 50% of total electricity in 2011, in South Africa such participation amounted to 59% and to 67% in China, for the case of Mexico, 88.4% is for residential use (2012). Meanwhile, the average consumption of the industrial sector in OECD countries was around 33%.



International Interconnections.

Electricity trade between the United States and Mexico has existed since 1905, when privately owned utilities located in remote towns on both sides of the border helped meet one another's electricity demand with a few cross-border low voltage lines. Over the years, both countries developed highly regulated and structured electricity sectors and a number of major and minor cross-border transmission lines were constructed. However, for a variety of technical and market reasons, U.S.-Mexico electricity trade has remained small. Existing electrical interconnections between Mexico and the United States are relatively limited in capacity and operationally constrained by non-synchronous cross-border ties, except in the Southern California-Baja California region.



The SEN is interconnected at different levels of tension with the United States, Belize and Guatemala. For this there are two types of interfaces: the ones that operate in a permanent basis and those for emergency situations. In the case of Guatemala, the infrastructure consists of a transmission line of 27 km in the Mexican side. In the Northern region Mexico has eleven interconnections in the border (see map above). The electricity trade in the Northern border is made by the SEN and two regional councils in the United States, the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Corporation (NERC). The SEN also has interconnections the Electric Reliability Council of Texas (ERCOT).