

Energy Sector: Investment, Regulation and Binational Strategy

Dallas Fed, Sept. 26, 2019

INEGI revealed today that the monthly Industrial Activity Indicator (IMAI) of Mexico decreased 0.4% in real terms in July vs June 2019

Mining -2.9%

Construction -1.4%

Utility sector (power, gas & water) -0.7%

Manufacturing sector 0.2%

On YOY, Industrial Production declined
2.8%

- Construction -9.1%

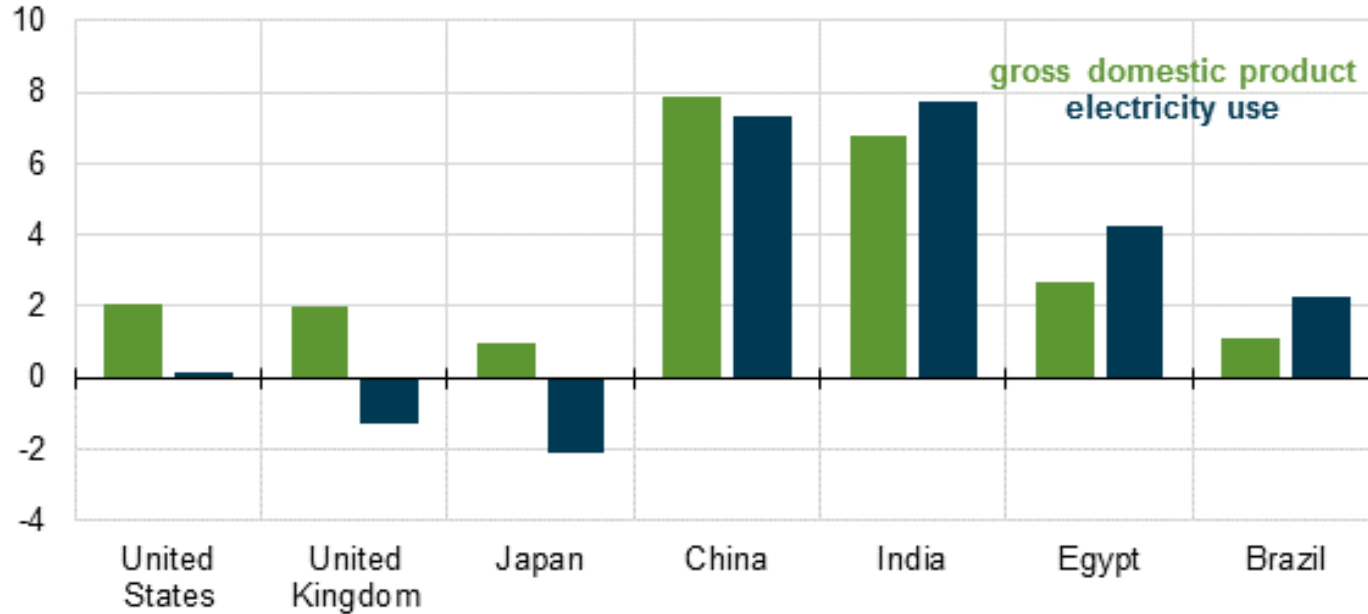
- Mining -7.4%

- Utilities -1.1%

- Manufacturing sector 1.2%

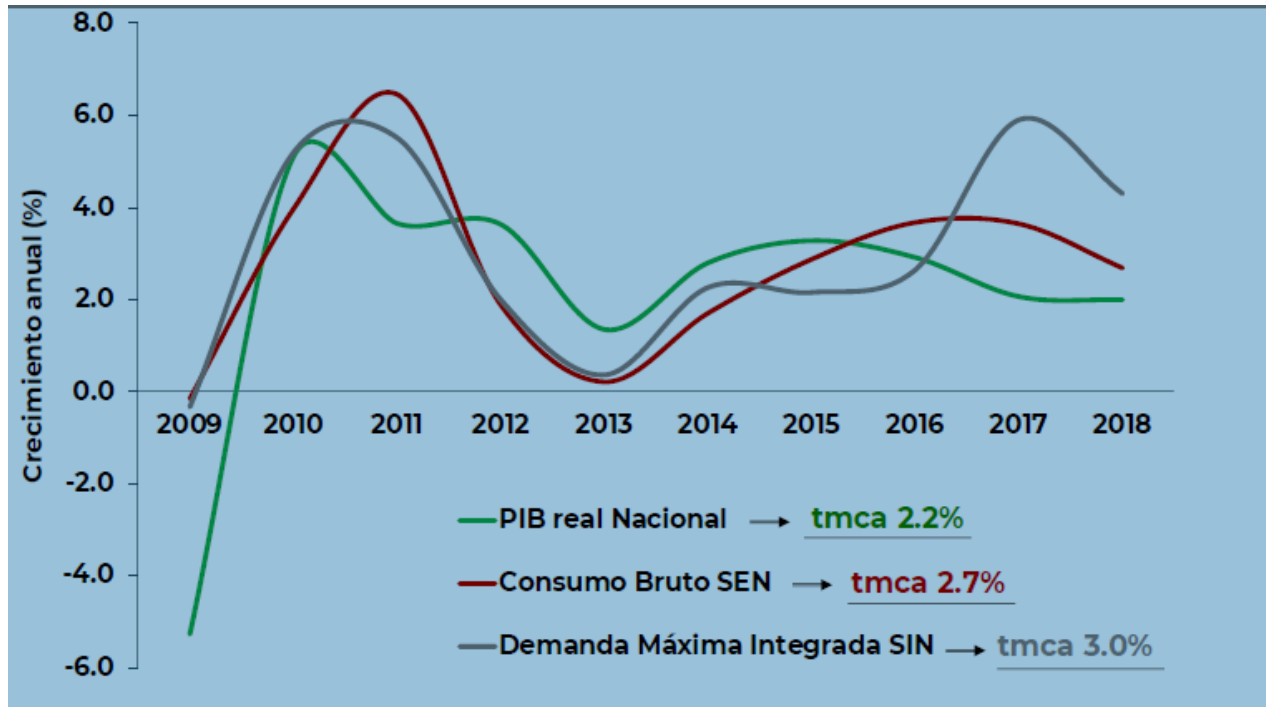
GDP AND THE ELECTRIC INDUSTRY

Gross domestic product and electricity use growth rates (2011-2015)
percent per year (five-year average)



Direct correlation observed more in developing economies than in developed ones

GDP VS ELECTRICITY DEMAND IN MEXICO



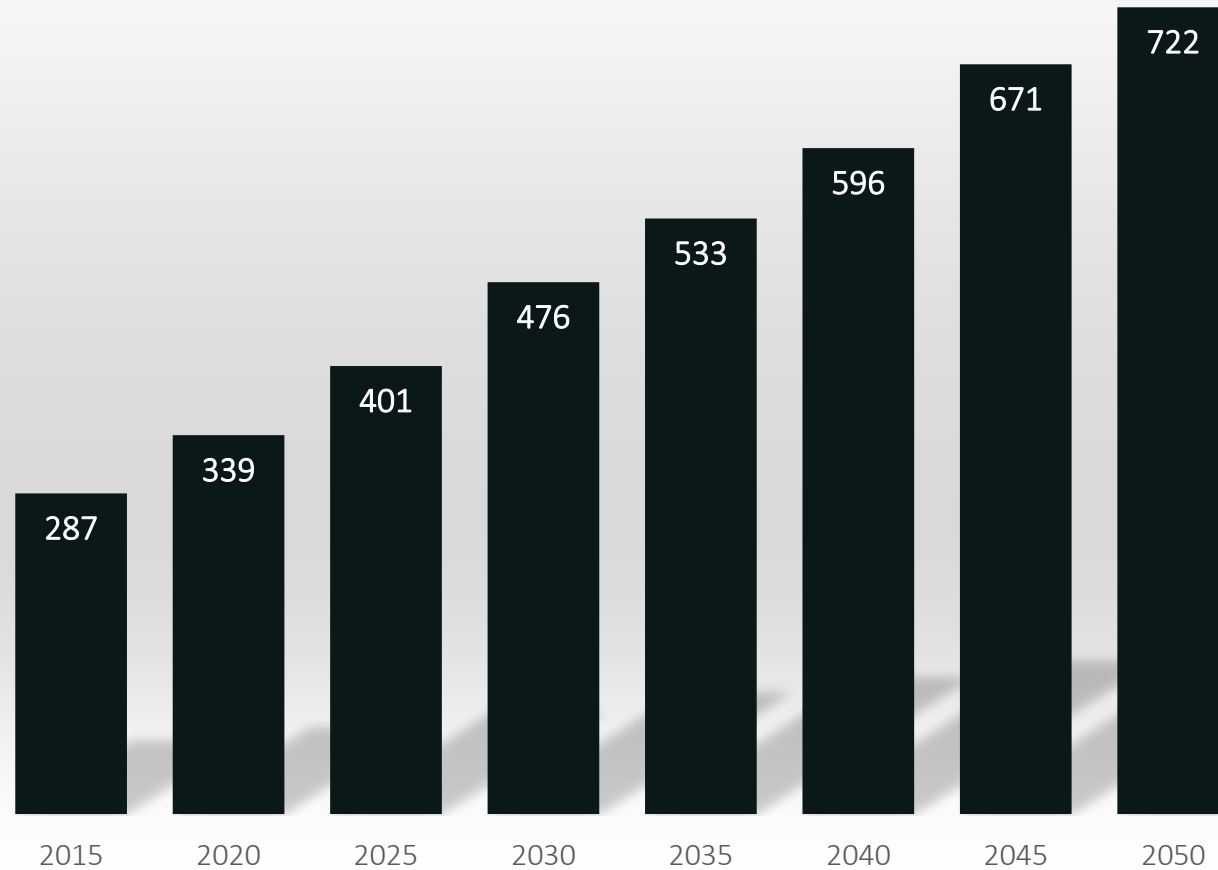
Source: Prodesen 2019-2034

In the last 10 years the electric demand of electricity in Mexico has grown at an annual rate of 2.7% while GDP has grown at 2.2%.

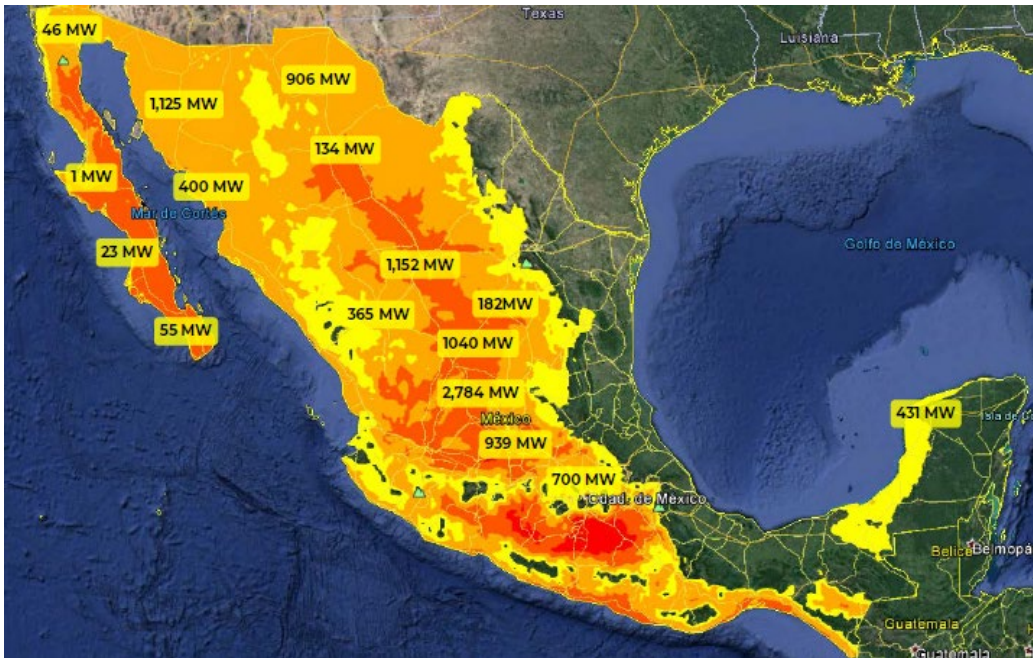
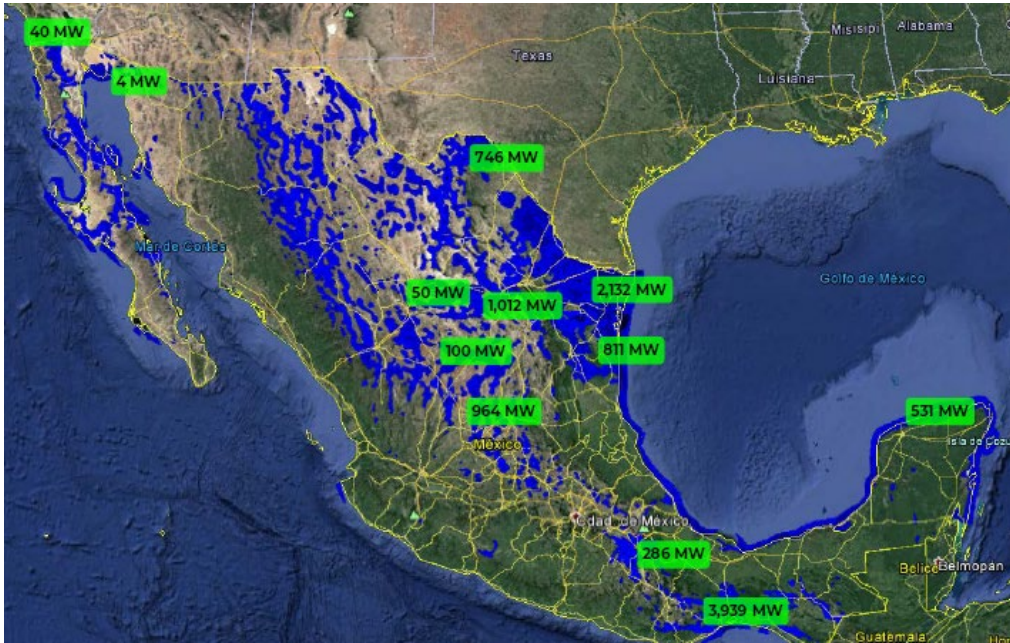
Electricity Demand in Mexico

(TWh)

Source: Sener



Electricity demand in Mexico is projected to grow at a projected annual rate of 2.7% for the next 3 decades



Renewable potential of Mexico

(source Prodesen 2019)

- Mexico has a vast and yet untapped renewable potential
- Industry estimates show that the impact to GDP could be \$30bn and create 200 thousand new jobs in 15 years¹
- Investments could trigger economic development in remote areas

¹ “Estudio de Energías Limpias en México 2018-2032” Sept. 2018 CESPEDS

COUNTRY	2019 RANK	2018 RANK
China (Mainland)	1	1
US	2	2
France	3	5
India	4	3
Australia	5	6
Germany	6	4
Japan	7	7
UK	8	8
Argentina	9	10
Netherlands	10	9
Mexico	19	13

RENEWABLE ENERGY COUNTRY ATTRACTIVENESS INDEX

Some factors affecting Mexico's ranking:

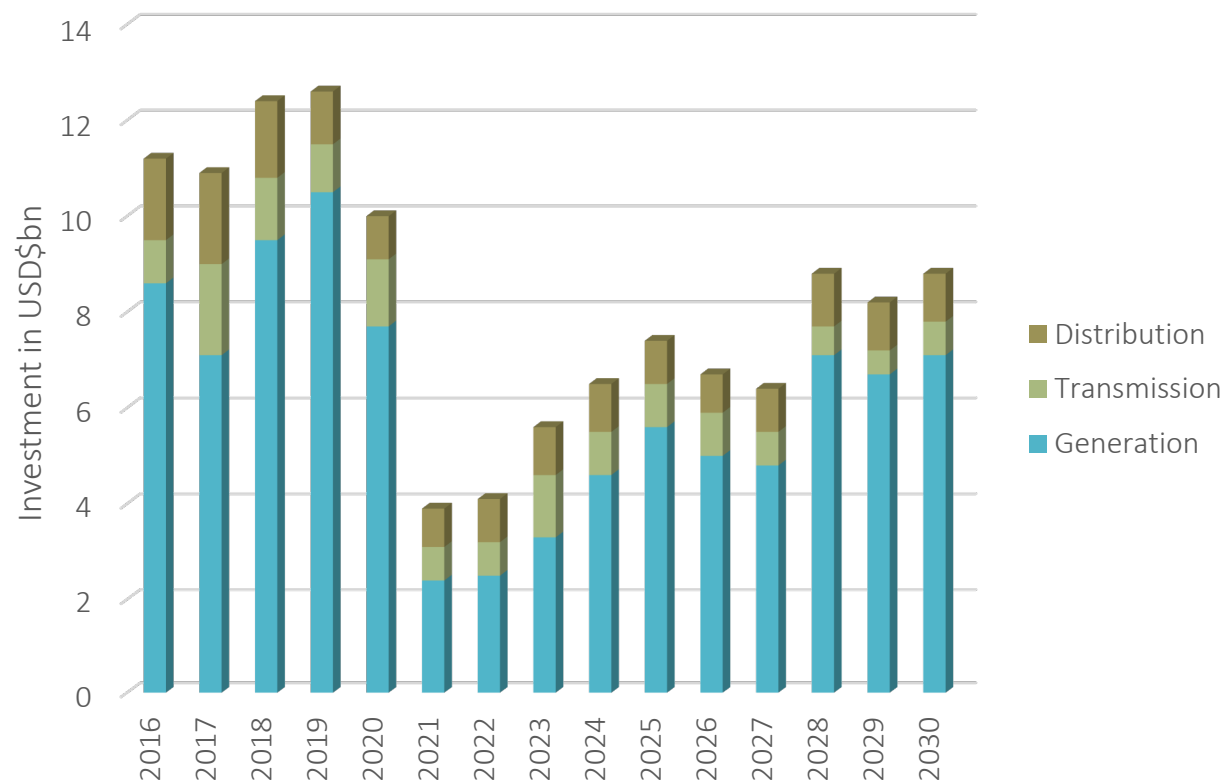
- Change in government policy towards SOE

- Cancellation of electricity auctions

- Threats to modify existing contracts

15 yr Investment Plan in Mexico Electric Sector

Source: Prodesen



A sector that is ravenous for capital should attract investments from all parts of the world

- Mexico projected in 2016 that around \$125 bn USD would be needed to keep up with the demand growth

Chapter 8.1:
sovereignty of
ownership of
hydrocarbons

Chapter 14: investor
protection standards

ISDS protections
under USMCA limit
vis-à-vis NAFTA what
investors could bring
to the tribunals

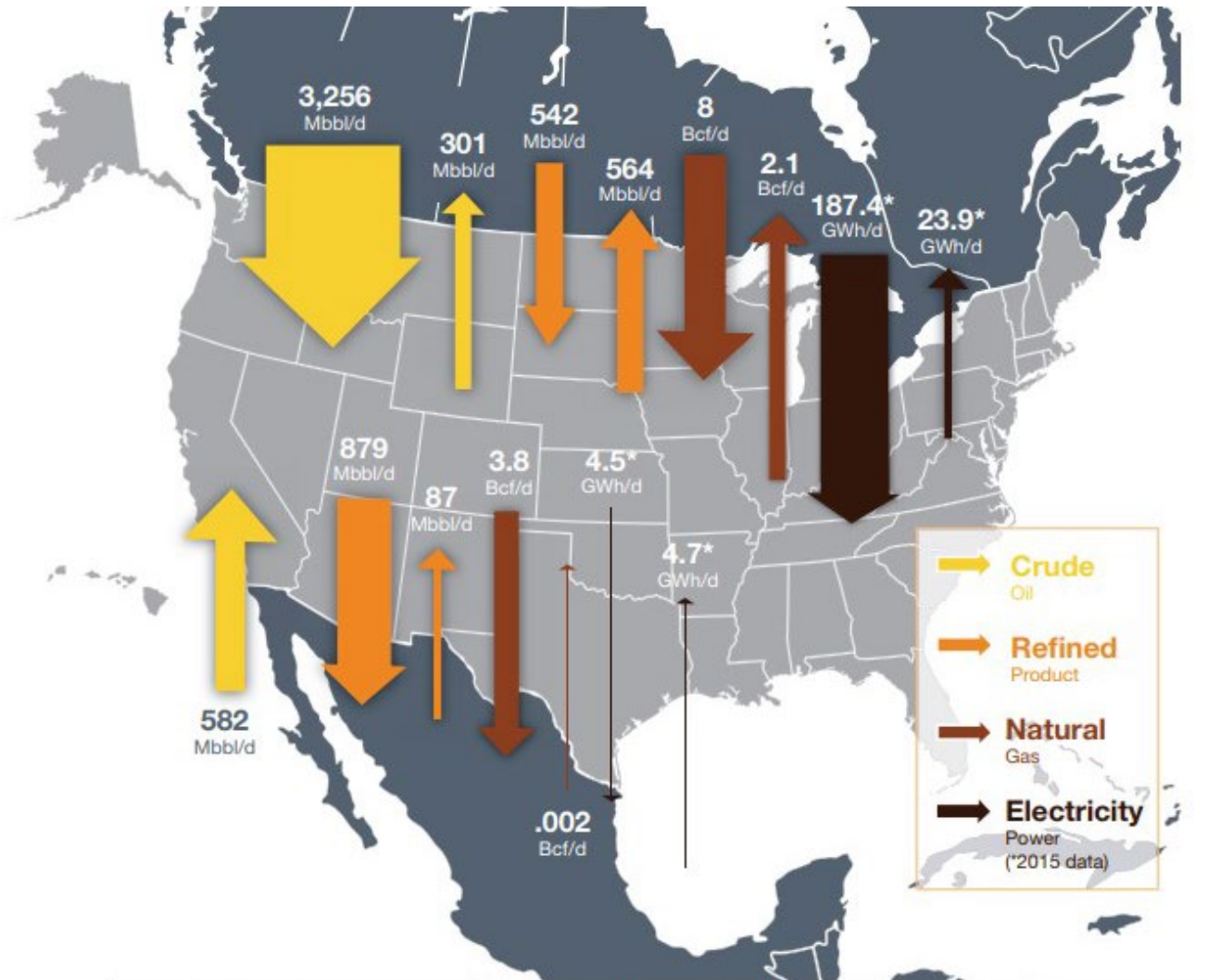
The new USMCA
ISDS limitations do
not apply to energy
investments covered
by government
contracts

What does USMCA say about energy trade?

Energy Flows in North America

Energy trade between Mexico and the U.S. accounts for \$48.5 billion annually, accounting for 12% of the value for all U.S. exports to Mexico and 5% of all U.S. imports from Mexico in 2018.

As of April 2019, Mexico exports to the U.S. over 680,000 barrels per day (96% crude oil), while the U.S. has exported to Mexico over 1.23 million barrels per day (over 509 kbd of gasoline, 130 kbd of natural gas liquids, 130 of LPG, 358 kbd of fuel oil, 60 kbd of jet fuel, among others), as well as 4.3 billion cubic feet (bcf) per day of natural gas.



(Mis) alignment
between public policy
and investment
objectives

(In) efficient
regulatory frameworks

(Semi) transparent
tariff setting
mechanisms

(Quasi) open and
functional market
mechanisms

(Un) predictable
government
institutions

What's going on with the Energy Sector then?

Government priorities in the energy sector

- Strengthen Pemex and CFE
- Reduce energy imports
- Reduce fuel theft
- Build Dos Bocas refinery

Some of the more relevant changes in the AMLO administration have impacted the stability of staff at key government agencies



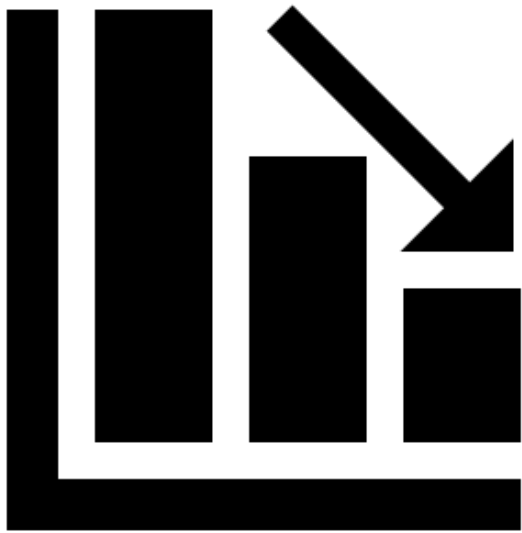
During the first year of the AMLO administration the energy regulators (National Hydrocarbons Commission and Energy Regulatory Commission) suffered a budget cut of 30% as he considered them too bureaucratic.



Both regulators lost their leadership and all commissioners were changed. Today CRE has 2 vacancies and CNH 3 including the president of the Commission.



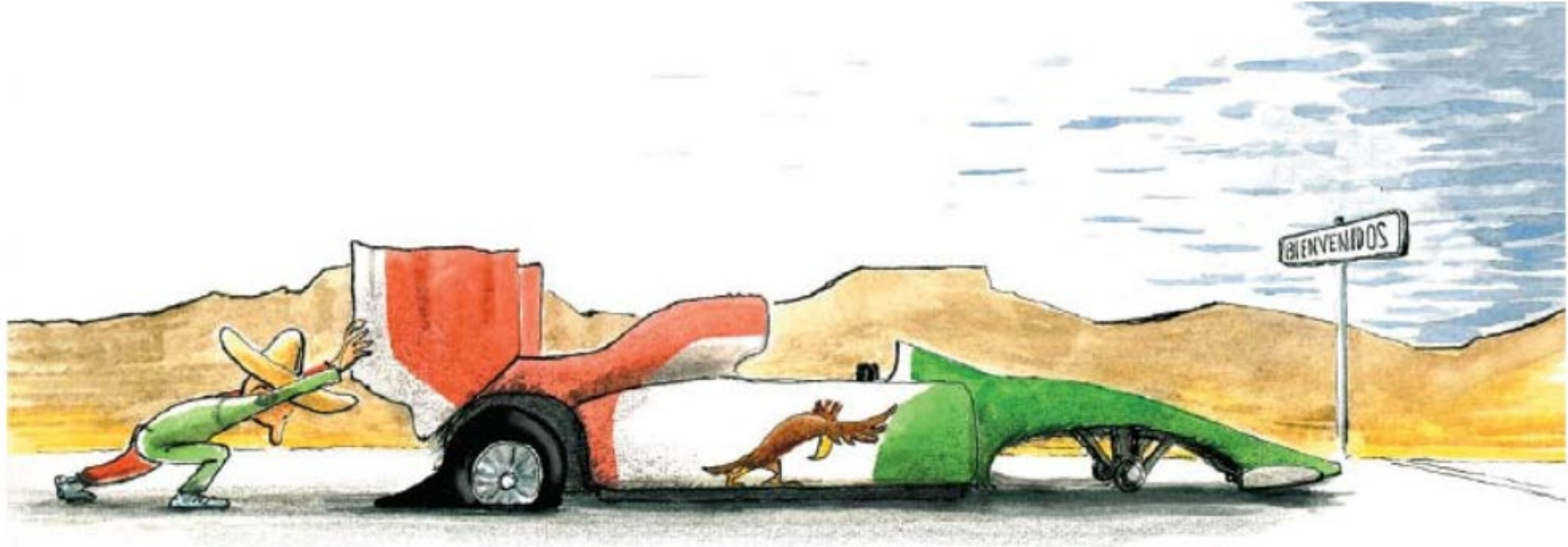
The last one to leave the post was ASEA director who left a couple of weeks ago due disagreement with the government regarding the lack of environmental impact studies for the Dos Bocas Refinery project.



Economy is not looking strong either

- The Mexican economy contracted 0.3 percent in the first quarter of 2019 compared to the fourth quarter of 2018.
- The economy's growth stagnated at 0 % in the second quarter of 2019. To avoid recession the Central Bank cut interest rates in August for the first time in five years.
- The Central Bank's forecasts 2019 GDP growth to hit between 0.2 and 0.7%

“¡Andale, pushale compadre que ahí la llevamos!”



Víctor Solís



Mexico has great investment potential in infrastructure. It has vast untapped renewable and hydrocarbon reserves that are unrivaled in other parts of the world



Considering the lack of growth in the economy and the projected future needs for energy the (relatively) new government of Mexico will have to be more creative in finding ways to balance politics with reality.



The USMCA should provide the necessary frameworks for maintaining and increasing the energy trade across the border and investments should result in economic development and increased GDP growth

Conclusion

Flow of capital, like
electricity, will always
follow the path of least
resistance...

Thank you very much!