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Supplying the energy demand growth that allows for economic development

Population

In 2010 population was close to 114 million

0.9% a.a.

It is estimated that in 2027 population will grow up to 130 million

1.1% a.a.

Considering the growth rate shown in the last 10 years, in 2027 there will be 489 cities

72% of the population lived in cities*

2010

28%

2027

88%

Urbanization degree

There were 384 cities

Urban population will represent 88% of the total

0.9% a.a.

12%

72%

*15 thousand inhabitants or more

a.a. - annual average

If current trends in energy production and consumption continue without carrying out energy efficiency measures, Mexico could become a net energy importer before 2020.

GDP growth

GDP consumption

Energy deficit

Primary energy production

Milliards Petajules

2005

07

09

Energy consumption

2011

13

15

17

19

21

23

25

2027
Access to energy must be expanded

- Access to energy services in the country is regionally fragmented.
- Providing high quality and timely energy will increase the population’s quality of life.

Fuel consumption in households, by region:

- Northeast: 35% LPG, 9% Natural gas, 56% Wood
- Southeast: 70% LPG, 28% Natural gas, 32% Wood
- Center: 5% LPG, 9% Natural gas, 90% Wood
- West: 63% LPG, 2% Natural gas, 32% Wood
- Northwest: 2% LPG, 8% Natural gas, 90% Wood

Electricity transmission network:

- Congested lines
- 400kV lines interconnecting the two systems

GDP per capita (Thousands of Mexican pesos by person):

- <50
- 51 to 75
- 76 to 100
- 101 to 125
- >125

2012 gas pipelines
Mexico has a great potential in energy resources...

Nevertheless, we have not taken full advantage of this.
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National Energy Strategy (NES)

What is the NES?

- It is an integral planning document that organizes and aligns the actions of the different actors involved in the sector in the same long-term vision.

- It was originated from the 2008 Energy Reform and must be updated on an annual basis.

- The document focuses on long-term strategic issues, i.e. the long term actions and projects that need to be undertaken to improve the overall conditions of the energy sector.

- The development of the strategy and its implementation will be the result of a consensual approach involving an active participation of the country’s legislative bodies, as well as scientific, academic and business representatives.
National Energy Strategy 2013-2027

- Establishes a vision to renew the energy sector, which has been lagging behind expectations and building bottle necks.

- Provides certainty to actors in the energy sector for the medium and long term.

- Strengthens the GDP and through economic development, it improves the living conditions of the population, particularly those with lowest resources.

- Incorporates the consensus about the inefficiencies that for years have been considered must be corrected.

- Succinctly exposes the strategic problems from which it establishes specific lines of action required to achieve changes.

- From its methodology, it is possible to monitor its implementation through infrastructure and social inclusion indicators.

Through its strategic objectives the NES defines its essential purpose:

.. that the energy sector will serve as a lever for development of the country and, at the same time, incorporate all Mexicans to the benefits derived from access and consumption of energy.
Participants

Composed of:
- Federal and State Legislatures representatives
- Local authorities
- Public Institutions of Higher Education and Scientific Research
- Representatives of the social and private sectors
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Methodology

For the development of the NES 2013-2027, the following elements were identified: two strategic objectives, three integration elements and four policy measures. From their analysis, lines of action and strategic indicators were defined, always in close adherence to the current legal framework.
Objective 1. GDP growth
Objective 2. Social inclusion

Integration elements

Objectives

Policy

1. Transport, storage and distribution
2. Refining, processing and generation
3. Oil production
4. Energy transition

1. Efficiency
2. Safety
3. Sustainability
Even when the actors are free, are necessary the following premises:

**Hydrocarbons**

1. **Hydrocarbon production** cannot be less than the previous year.
2. Having **1P reserves of at least 10 years** (assuming 100% replacement of annual production);
3. Hydrocarbon production should be **sufficient** to cover the aggregate demand trend of oil products and natural gas for three years after the base year.
4. Natural gas should have the **necessary import infrastructure** to meet the domestic demand.
5. **Fuel supply** to regions that do not have access.

**Electricity**

1. **Expansion of the power sector** through projects that achieve the target set in the LAERFTE and increase system security.
2. Incorporate a methodology that recognizes **energy security risks** associated with high fuel dependence.
3. **Electricity coverage** must keep pace with population growth.
4. Transmission lines should accommodate **interregional electricity trade**.
5. **Localized energy sources** should be integrated. (Distributed Generation)
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Expected outputs

Energy for economic growth

- Energy for economic growth
- Moving towards an energy transition
- Maintaining an energy surplus

Energy for all

Safety

- Reduce energy intensity
- Unify and strengthen energy infrastructure
- Ensuring integrity and efficiency in facilities

Efficiency

Sustainability

- Inclusive development
- Supporting underprivileged populations
- Reduce the ecological footprint

Efficiency

Sustainability

- Inclusive development
- Supporting underprivileged populations
- Reduce the ecological footprint
## Indicators panel

### Integration elements

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The Strategy includes **26 indicators** to follow up the outputs and correct deviations.

Each indicator is representative of the sector and interacts with other components within the strategy.