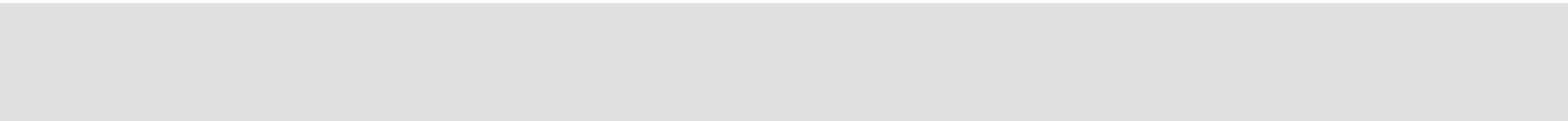


National Energy Strategy

2013-2027

A solid grey horizontal bar at the bottom of the slide.

- Mexico's energy sector challenges
- National Energy Strategy development
- Methodology
- Expected outputs and indicators



ENE 2013-2027

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**



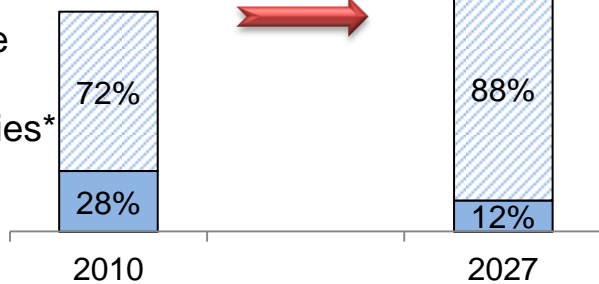
There were **384 cities**

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*



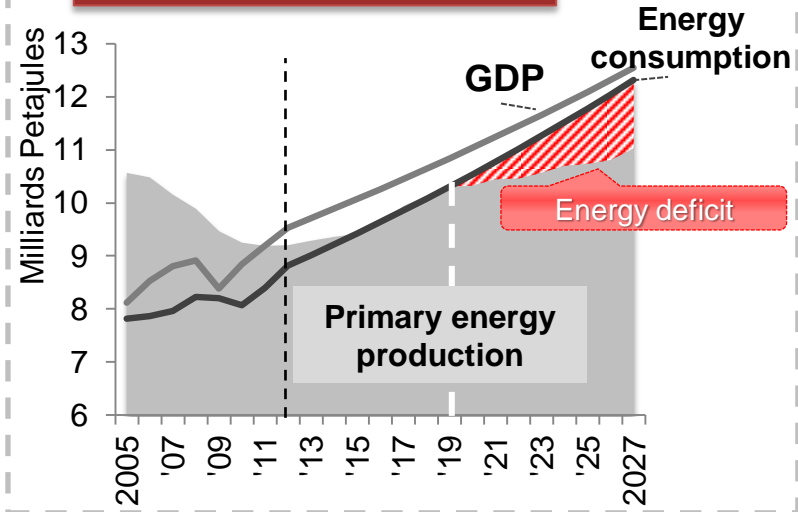
□ Urbanization degree

Urban population will represent **88%** of the total

*15 thousand inhabitants or more

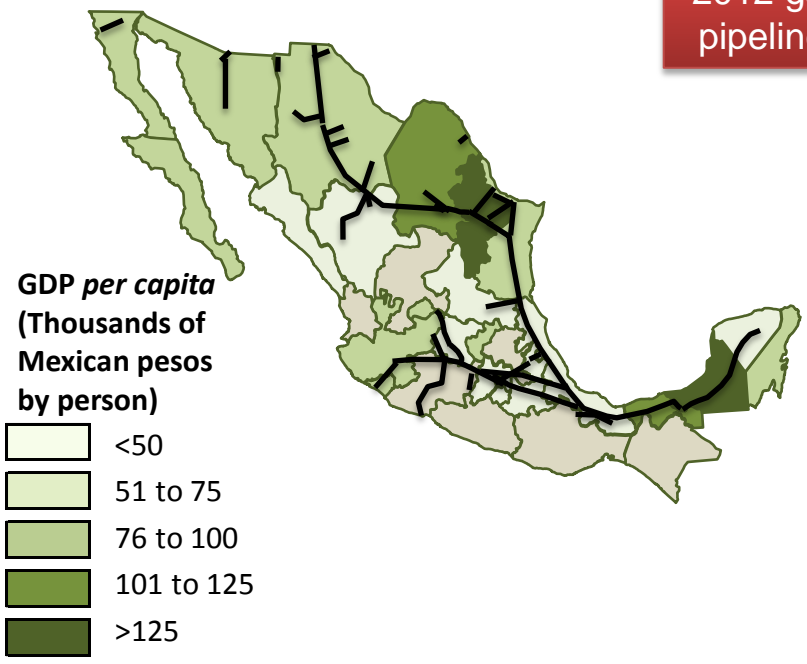
If current trends in energy production and consumption continue without carrying out energy efficiency measures, Mexico could become a net energy importer before 2020.

GDP growth

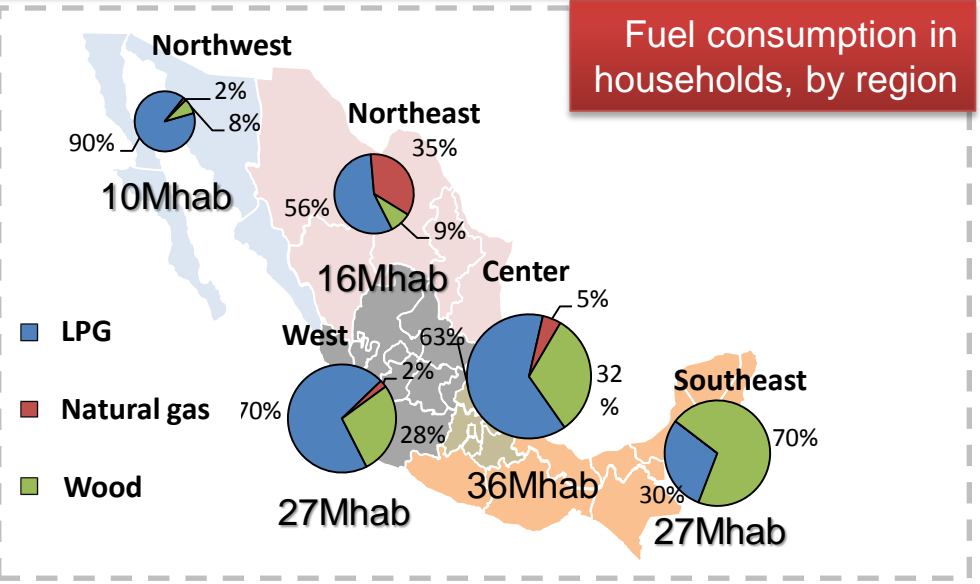


Access to energy must be expanded

2012 gas pipelines

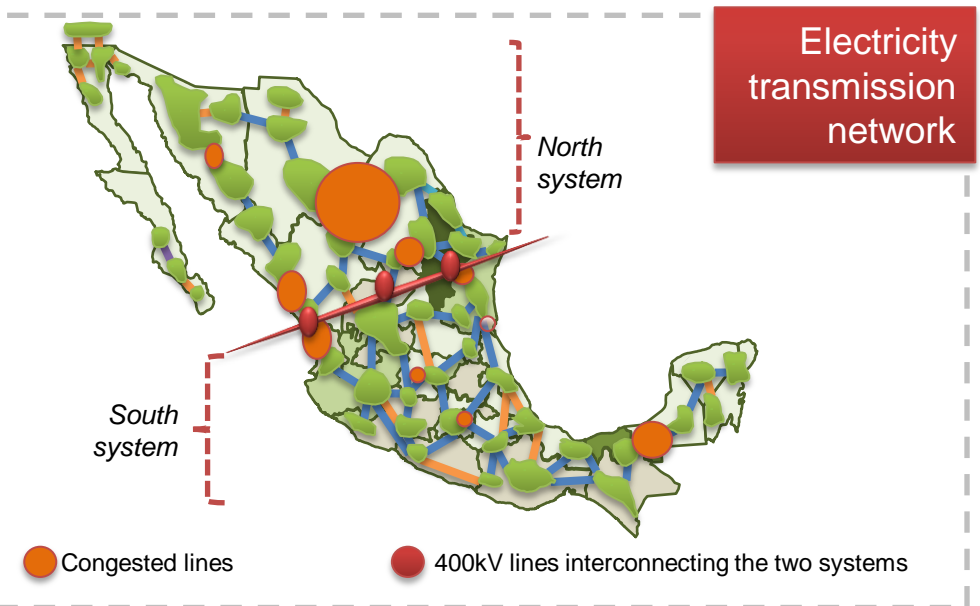


Fuel consumption in households, by region



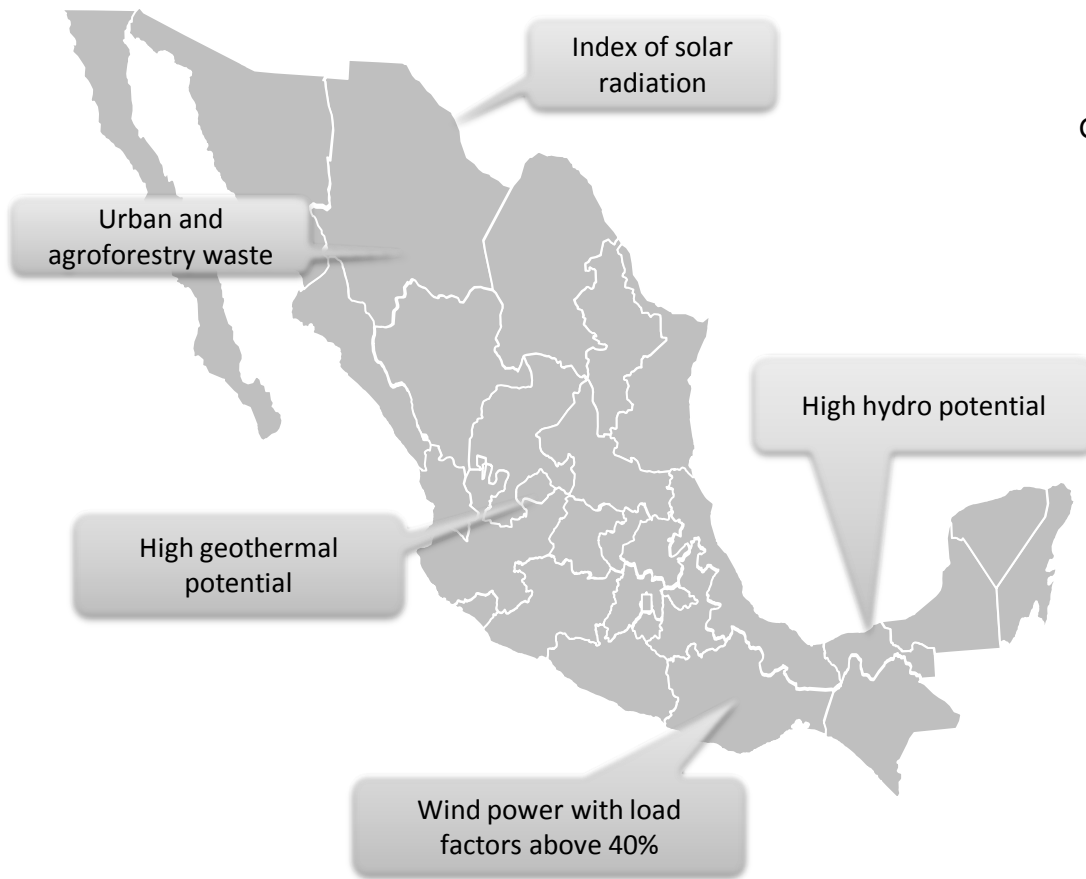
- Access to energy services in the country is regionally fragmented.
- Providing high quality and timely energy will increase the population's quality of life.

Electricity transmission network

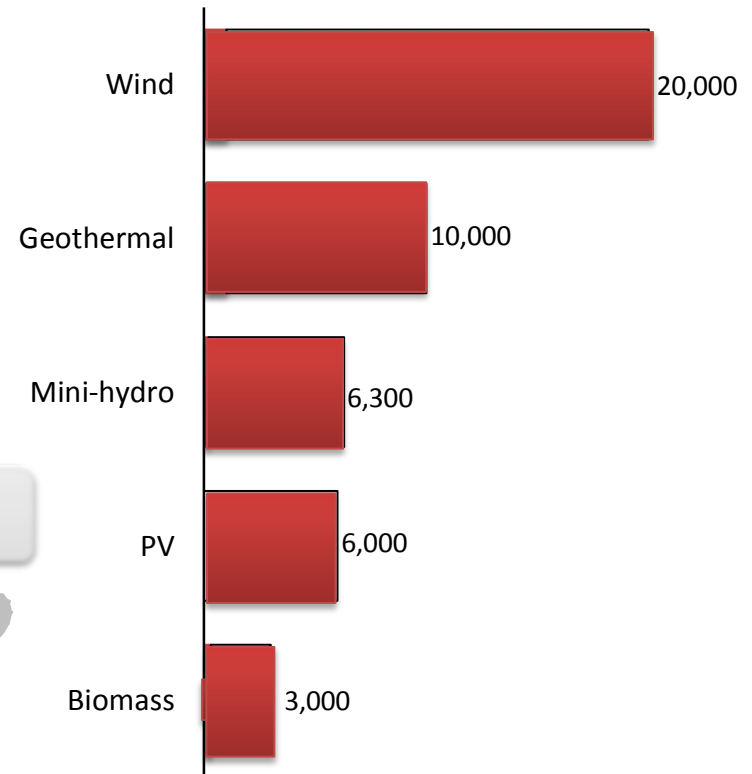


Energy potential

Mexico has a great potential in energy resources...



Potential resources (MW)



...nevertheless, we have not taken full advantage of this.

Contents

- Mexican energy sector challenges
- **National Energy Strategy development**
- Methodology
- Expected outputs and indicators

A decorative graphic at the bottom of the slide consisting of a series of overlapping, 3D-style rectangular blocks in shades of grey, red, and green, creating a zig-zag pattern.

ENE 2013-2027

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**.

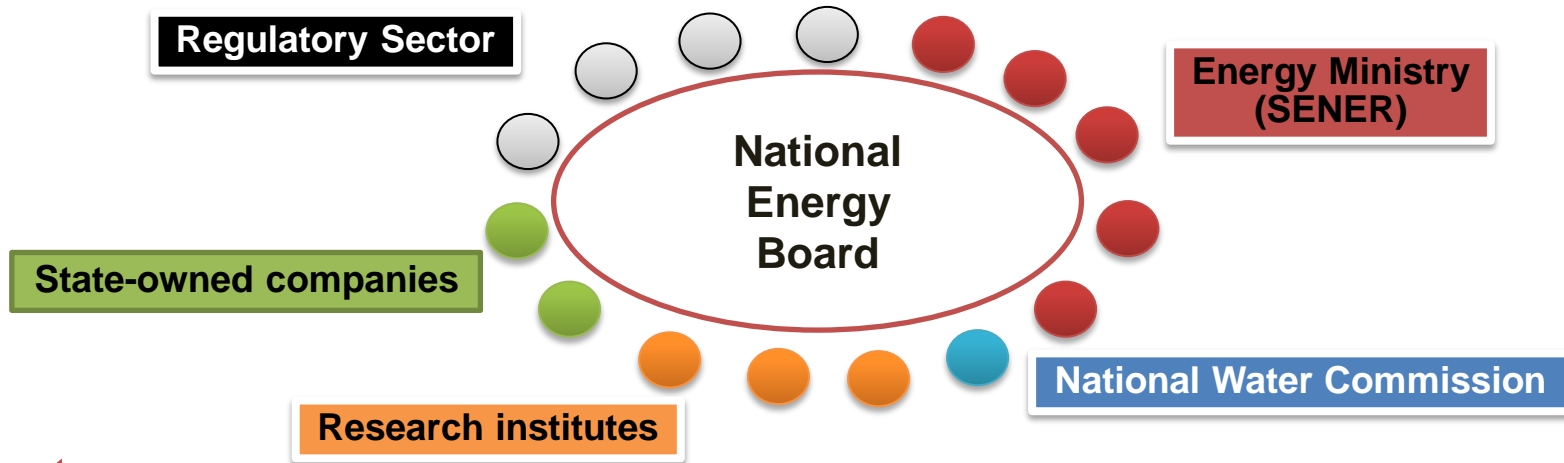


Through its strategic objectives the NES defines its essential purpose:

.. 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

National Energy Board



Consultative Forum

Composed of:

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

Contents

- Mexican energy sector challenges
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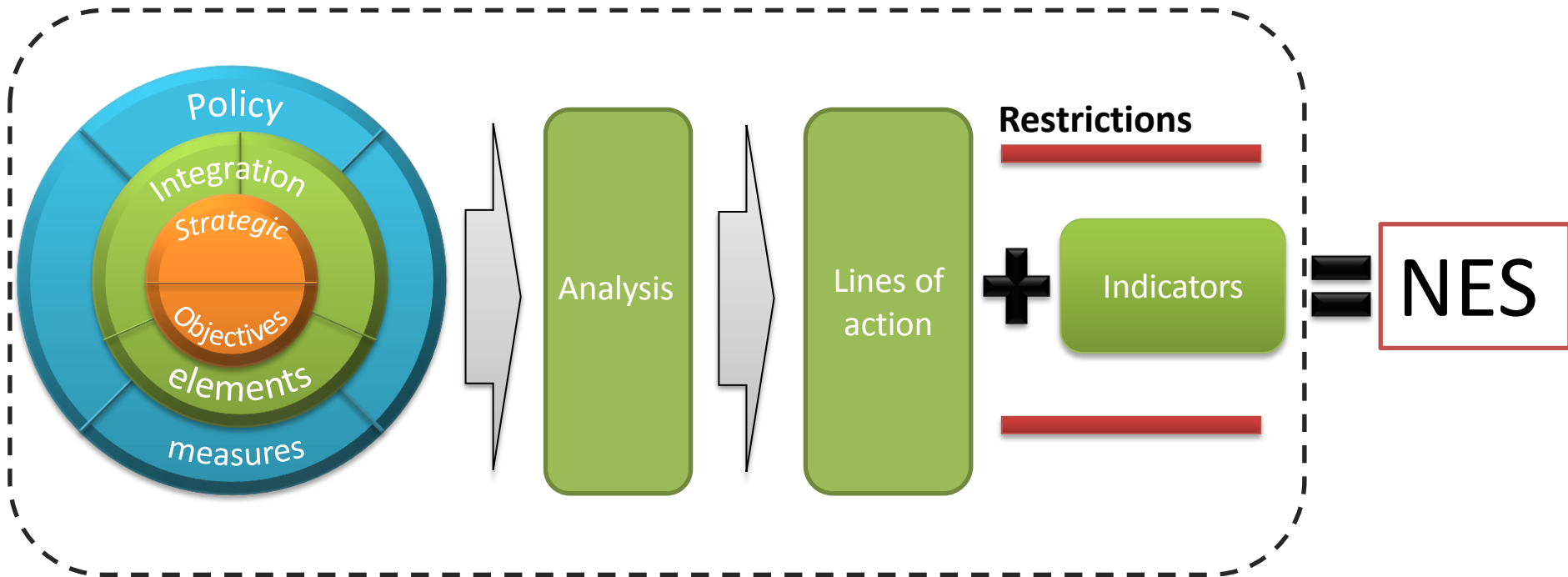


ENE 2013-2027

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

Current legal framework



Structure

• Objective 1.- GDP growth

• Objective 2.- Social inclusion

Objectives

1. Transport, storage and distribution

2. Refining, processing and generation

3. Oil production

4. Energy transition

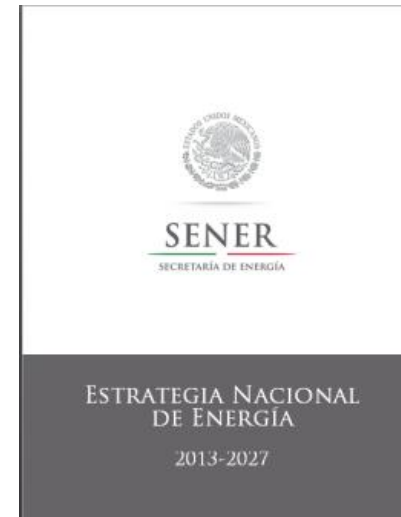
Policy

1. Efficiency

2. Safety

3. Sustainability

Integration
elements



Basic premises

Even when the actors are free, are necessary the following premises:

Hydrocarbons

1. **Hydrocarbon production** can not 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)

Contents

- Mexican energy sector challenges
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ENE 2013-2027

Expected outputs

Energy for economic growth

Energy for all

Safety

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

Efficiency

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

Sustainability

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

Indicators panel

Integration elements

Sustainability	Efficiency	Safety
Indicator	Indicator	Indicator
Energy sector GHG emissions	Energy intensity	Energy independence index

Strategic objective

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

<i>GDP growth</i>	Energy participation in GDP	Non-fossil sources participation in electricity generation	Proportion of oil products transported by wheels	Energy sources diversity
		CO ² Emissions	Gasoline and middle distillates output	Days of autonomy in critical storage terminals: gasoline
		Growth in proven hydrocarbon reserves / GDP growth	Rate of return of 1P reserves	Saturated transmission lines
		Proved Reserves / Production	Natural gas flaring	Carrying capacity of natural gas
<i>Social inclusion</i>	Consumption per Capita	Per-capita fuels consumption gap between regions in the residential sector	Electricity price-cost	Growth in energy supply by distributed generation
		Proportion of households without access to electricity	Household energy equipment	Actions with communities to facilitate the development of power lines and pipelines
		Electrical service coverage	Electricity price to the consumer	Social sector participation in energy projects

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