



Energy Sectoral Program up to 2012

SENER

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II.-Objective and sector indicators

Program objectives

Objective 1. Guarantee the country's energy security on hydrocarbons.

Objective 2. Encourage the operation of the hydrocarbons sector in line with international standards of efficiency, transparency and accountability.

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Objective 3. Increase exploration, production and transformation of hydrocarbons in a sustainable manner.

Objective 4. Encourage tariff levels correspondent with the costs of an efficient operation of the public entities of the electric sector.

Objective 5. Balance the portfolio of primary sources of energy.

Objective 6. Strengthen the public entities of the electric sector in operations and standards of quality and reliability in service delivery.

Objective 7. Promote an efficient use and production of energy.

Objective 8. Encourage the use of renewable sources of energy and biofuels that is technical, economical, environmental and socially viable.

Objective 9. Mitigate the increase of Green House Gas emissions.

Program objectives

Objective 1

I. Hydrocarbons

Guarantee the country's energy security on hydrocarbons.



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	Indicator	Measurement unit	Current scenario	Goal 2012* Base	Goal 2012 Outstanding
	Proven reserves restitution rate (1P)	Percentage	41	51	100
	Natural gas utilization	Natural gas extraction percentage	95	97	98
	Gasoline imports	Imports as percentage of total demand	38	40	40
	Autonomy days in Critical storage facilities: a) Gasolines b) Diesel	Sufficiency days	a) 2.1 b) 2.8	a) 4.0 b) 4.0	a) 4.0 b) 4.0

* The goals are in line with the baseline scenario of the Infrastructure National Program 2007-2012, assuming the fiscal reform.

Program objectives

Objective 2

I. Hydrocarbons

Encourage the operation of the hydrocarbons sector in line with international standards of efficiency, transparency and accountability.

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	Indicator	Measurement unit	Current scenario	Goal 2012* Base	Goal 2012 Outstanding
	Recovery ratio of Hydrocarbons production(Reserves 1P).	Percentage	33	34.5	35
	Refinery units utilization ratio	Percentage	83	87	87
	Index of accidents in the oil sector**	Accidents per million of working hours under risk exposition	0.7	0	0

**Regarding safety, Pemex goal is zero accidents. This goal does not reflect the statistical trend of the indexes.

Objective 3

I. Hydrocarbons

Increase exploration, production and transformation of hydrocarbons in a sustainable manner.

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	Indicator	Measurement unit	Current scenario	Goal 2012* Base	Goal 2012 Outstanding
	Oil Production	Million barrels per day	3.3	Greater than 2.5	3.2
	Natural Gas production	Billion cubic feet per day	5.4	5	7

* The goals are in line with the baseline escenario of the National Infrastructure Program 2007-2012, assuming the fiscal reform.

Objective 4

II. Electricity

Encourage tariff levels correspondent with the costs of an efficient operation of the public entities of the electric sector.

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	Indicator	Measurement unit	Current scenario	Goal 2012
	1) CFE: Sales per operative worker		1) CFE: 2.3	1) CFE: 2.6
	2) CFE: Sales per worker on dispatching*	Gigawatts-hour / Worker (GWh/Worker)	2) CFE: 3.7	2) CFE: 4
	3) LFC: Sales per worker on dispatching+sales		2) LFC: 2.6	2) LFC: 2.9

•Data about CFE workers on dispatching accounts for the sales force, thus, this data is comparable to that of LFC.

Objective 5

II. Electricity

Balance the portfolio of primary sources of energy.



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Indicator	Measurement unit	Current scenario	Goal 2012		
Electricity generation by Primary sources	Percentage	Fuel oil	28.9	Fuel oil	20.1
		Natural Gas	36.1	Natural Gas	41.4
		Coal	9.3	Coal	9.6
		Large-scale hydro plants*	16.9	Large-scale hydro plants	16.8
		Small-scale hydro plants	4.1	Small-scale hydro plants	3.5
		Other renewables	1.9	Other renewables	5.9
		Nuclear	2.7	Nuclear	2.7

* The generation capacity of a Large-scale hydro plant is equal or greater than 70 Megawatts (MW)

Objective 6

II. Electricity

Strengthen the public entities of the electric sector in operations and standards of quality and reliability in service delivery.

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	Indicator	Measurement unit	Current scenario	Goal 2012
	Interruption time by consumer (without considering the events beyond the firms control)* 1) CFE 2) LFC	Minutes per year	1) CFE: 79 2) LFC: 112	1) CFE: 78 2) LFC: 106
	Total losses of energy 1) CFE 2) LFC	Percentage	1) CFE: 10.9 2) LFC: 32.5	1) CFE: 10.5 2) LFC: 28 **

* CFE measures the interruptions starting from 1 minute and LFC starting from 5 minutes. SENER is carrying out activities in order to align the methodologies. Currently, LFC has not the tools to measure from 1 minute onwards.

** This goal depends upon the success of LFC Program for Non-Technical Losses Reduction which is currently under revision. If this program is not executed, LFC estimates an increase of 41.8% by 2012 in total losses.

III. Energy Efficiency, Renewables and biofuels

Objective 7

Promote an efficient use and production of energy.

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	Indicator	Measurement unit	Current scenario	Goal 2012
	Electricity consumption savings *	Gigawatts-hour (GWh)	21,685	43,416

* Assuming the replacement of 160,000 refrigerators and 43,000 air conditioners announced by President Calderón on October 11 2007, Villahermosa, Tabasco.

III. Energy Efficiency, Renewables and biofuels



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Objective 8

Encourage the use of renewable sources of energy and biofuels that is technical, economical, environmental and socially viable.

	Indicator	Measurement unit	Current scenario	Goal 2012
	Renewables in the electricity generation capacity	Percentage	23	26

IV. Environment and climate change

Objective 9

Mitigate the increase of Green House Gas emissions.

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	Indicator	Measurement unit	Current scenario	Goal 2012
	Prevention of Carbon Dioxide emissions from Electricity generation	Million tones of Carbon dioxide (Mt CO ₂)	14	28
	Sulfur content of: 1) Magna Gasoline 2) Premium Gasoline 3) Diesel	parts per million (ppm)	1) 500 maximum in metropolitan areas, 1000 maximum in the rest of the country 2) 300 maximum 3) 500 maximum	1) Average 30, 80 maximum 2) Average 30, 80 maximum 3) 500 maximum**

**In the border area the product commercialized is 15 maximum



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