



# El Salvador

---

## Country Report

### **Training and Dialogue Program Energy Policy**

**Japan International Cooperation Agency  
National Council of Energy of El Salvador**

**David Eduardo Parada Velásquez**

Tokyo, Japan.  
April 2010

# General Facts



Area  
21042 km<sup>2</sup>

Political division  
14 departments  
262 municipalities

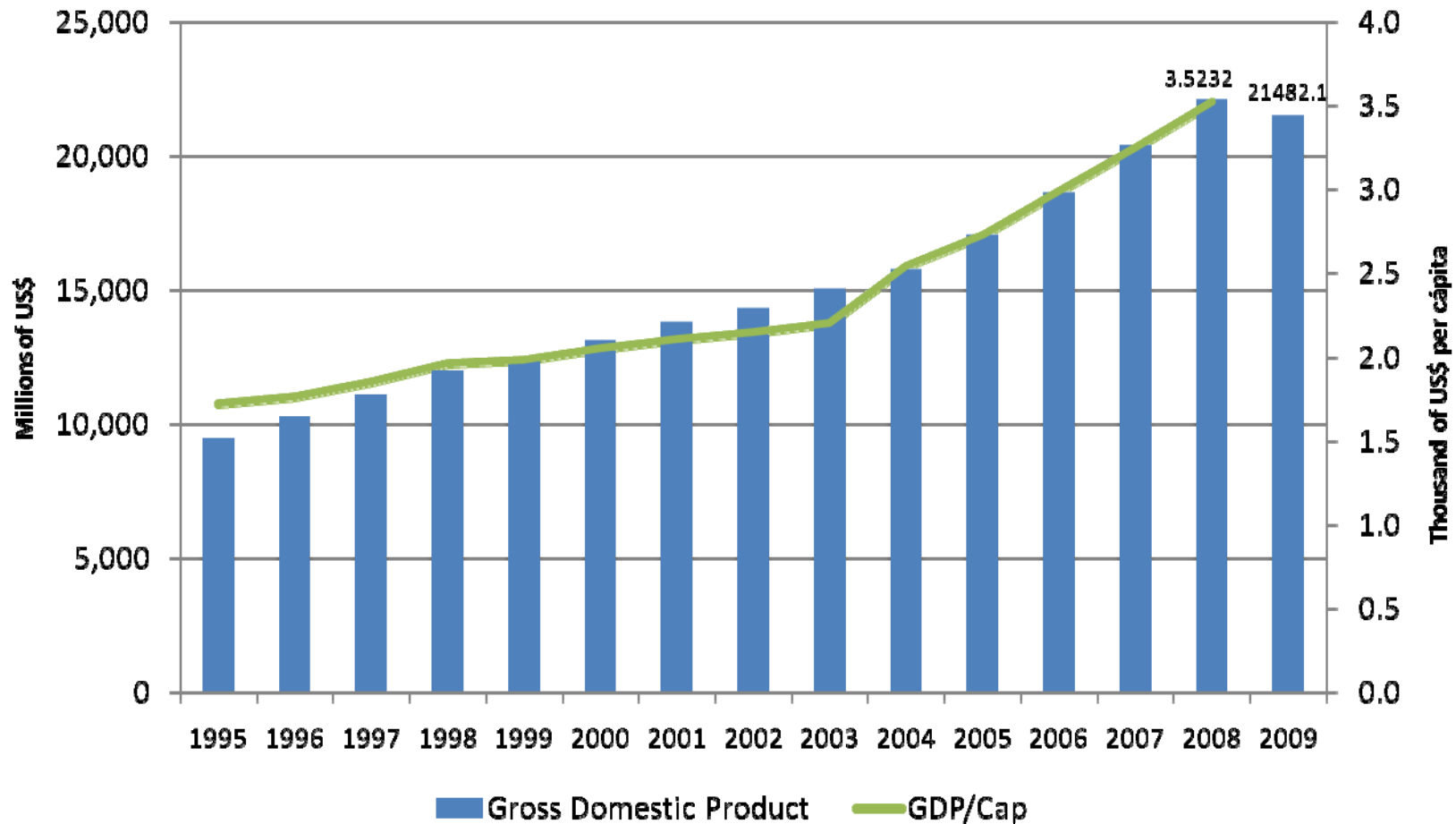
Capital  
San Salvador

Population (census 2007)  
5,744,113 inhabitants

Official language  
Spanish

# General Facts: Economic Statistics

## Gross Domestic Product

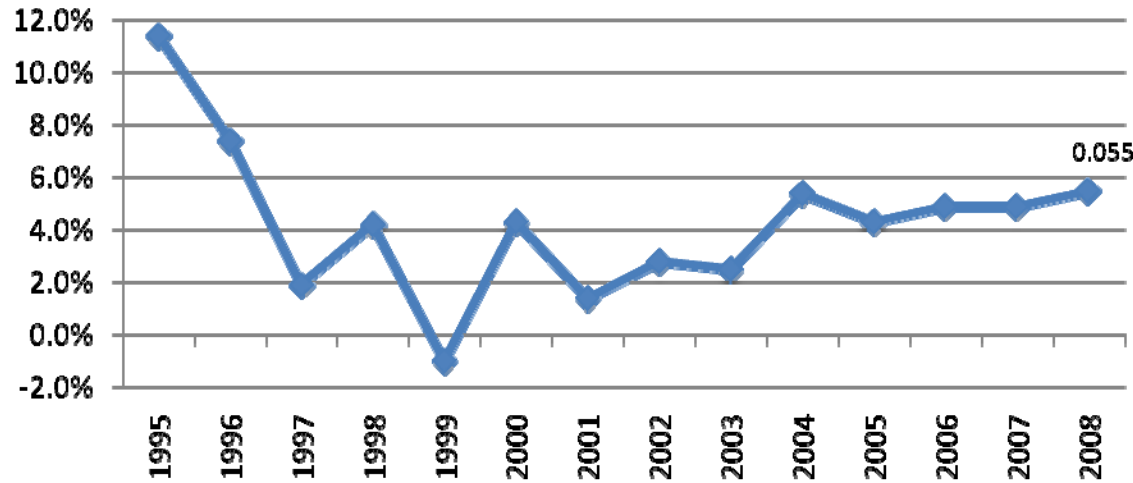




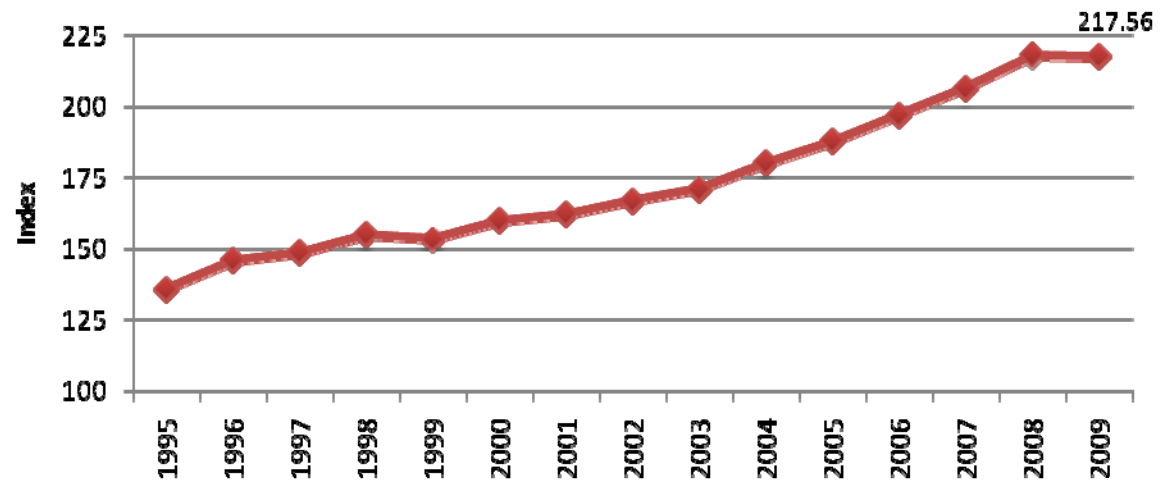
# General Facts: Economic Statistics



## Inflation



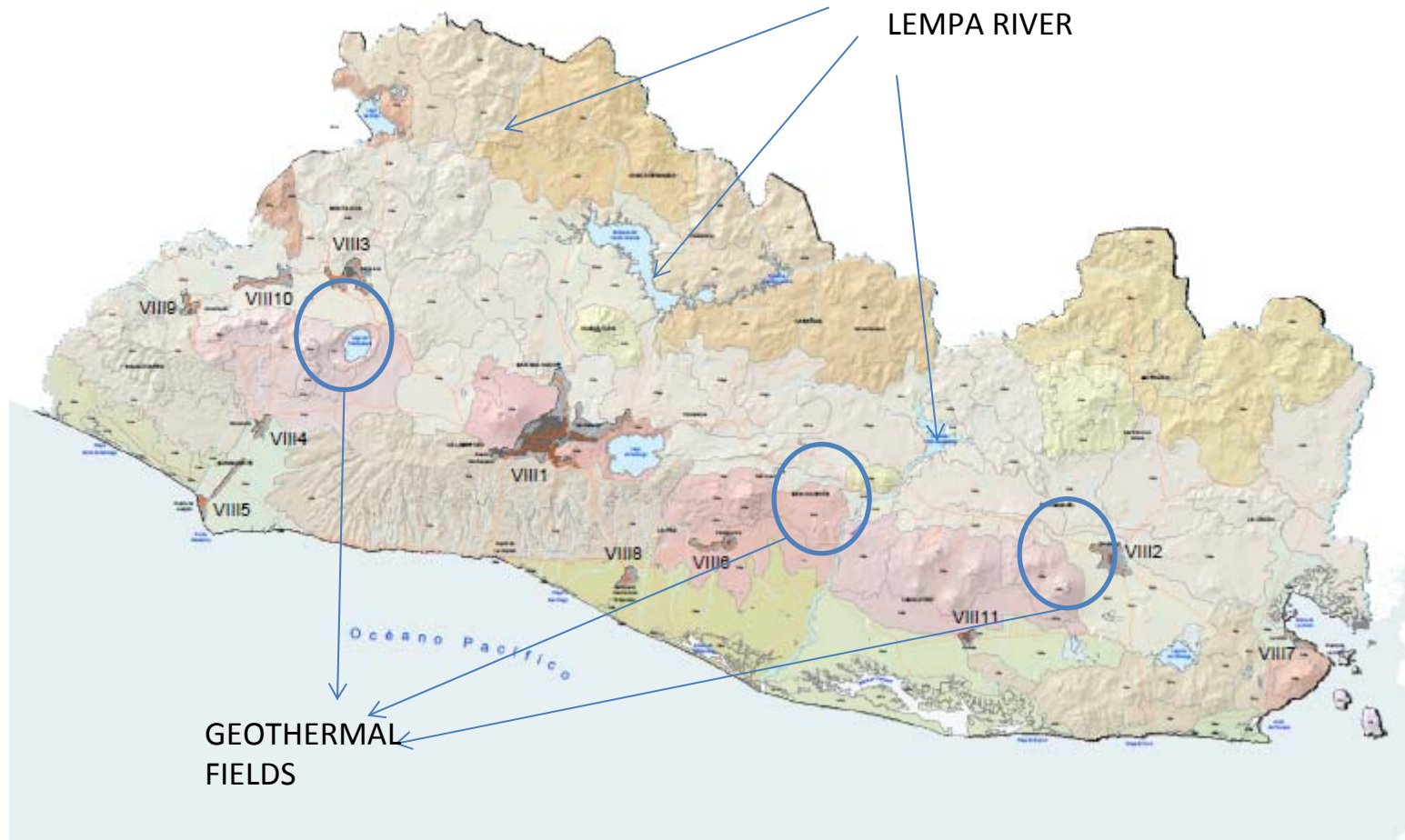
## Consumer Price Index



# General Facts: Demographic Statistics

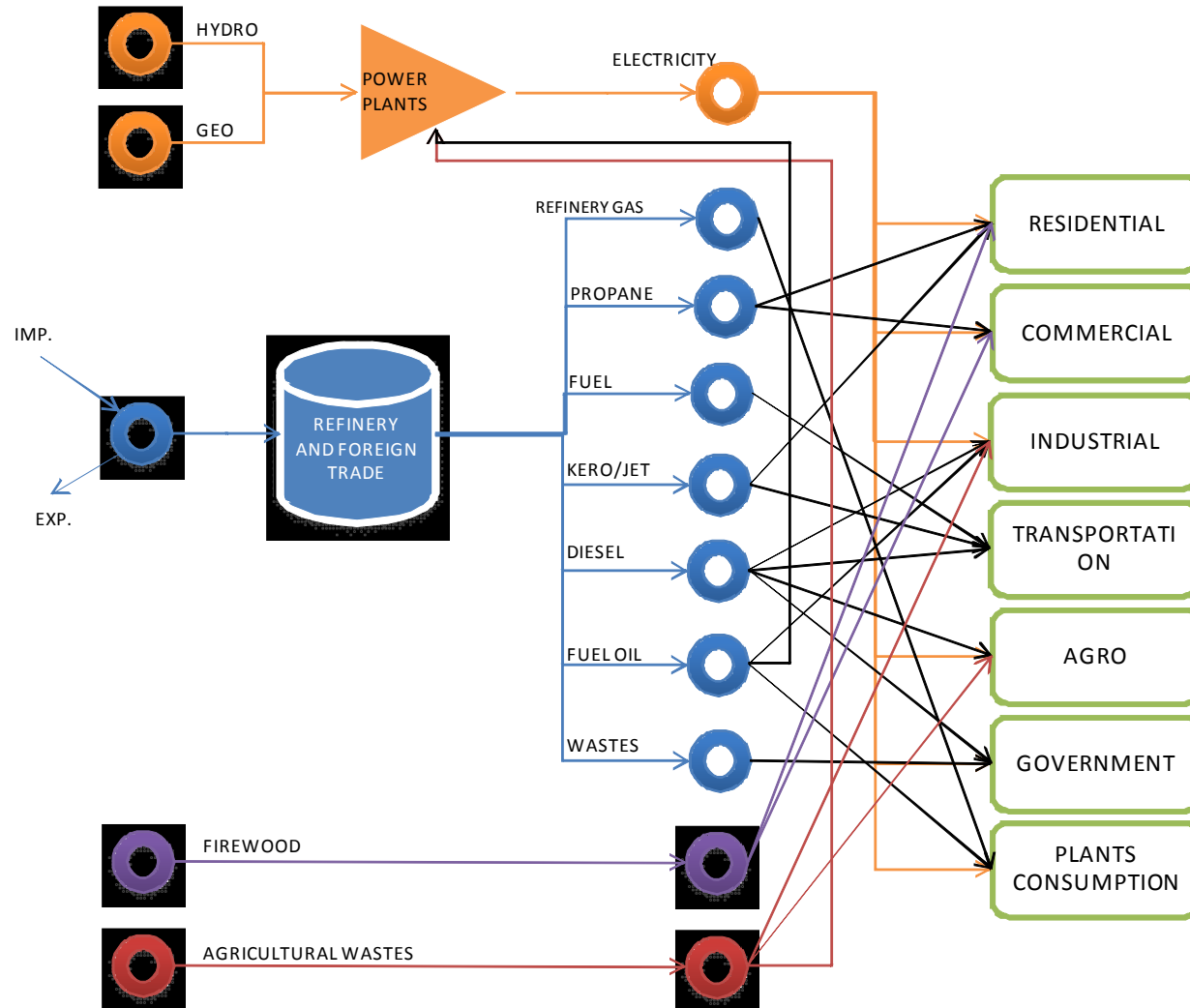
ITEM	Indicator (2008)
Population	6,122,410
Urban	3,969,960
Rural	2,152,450
Access to electricity (estimated)	90%
Access to water (estimated)	73%
Dwellings	1,529,480
Average cap/dwell	4.00
Inhabitants per square km.	291
Population in capacity to work	2,495,900
Population that actually work	2,349,050
Alphabetization rate	85.90%

# General Facts: Natural Resources

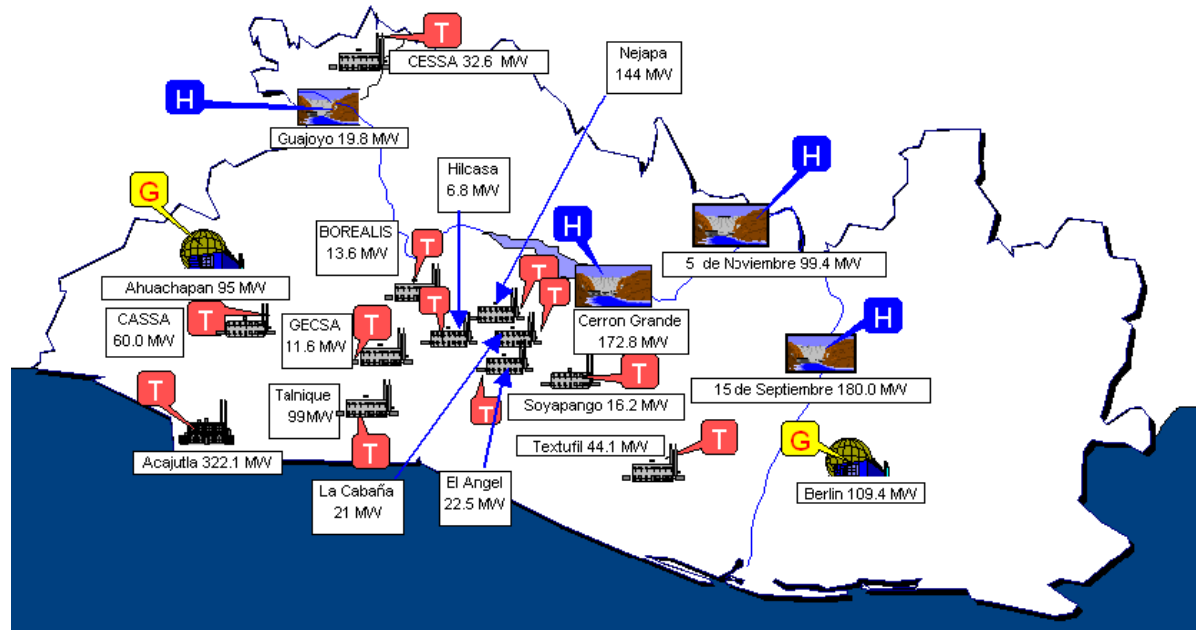




# General Facts: Energy Supply Chain



# General Facts: Installed capacity for electricity generation



Resource	Installed capacity (MW)	Participation
Hydro	472	32 %
Geothermal	204	14 %
Bagasse	68	5 %
Thermal oil based	727	49 %
	<b>1472</b>	<b>100 %</b>





# Energy Sector: Background



- El Salvador reformed the electricity sector in 1996 looking for a competitive market, attract the private investment and improve the sector.
- By then, the Executive Commission of the Lempa River known as CEL was in charge of transmission and distribution system, operation of hydro and geo power plants, investments, exploration for new resources, research energy statistics among others.
- Since El Salvador has no fossil resources, the operation of the fuel sector was in charge of the Acajutla Refinery (by then property of the government) and the regulation of the fuel sector was managed by the Ministry of Economy.
- After the reform to the General Electricity Law, CEL was dismembered, and most of it's activities were distributed to different entities, and other were left apart.



# Energy Sector: Background



Before 1996

CEL

Hydro, geo and oil power plants operation	Transmission system
Research and exploration	Planning
National energy balance	Administrator

After 1996

CEL

ETESAL

Trasactions Unit

?????

Hydro and geo power plants operation

Transmission system

Administrator

Planning

Research and exploration

National energy balance



# The Energy Policy 2010 - 2024



The development of the energy system in El Salvador tend towards a diversification of supply, minimizing costs, considering the rational and efficient use of energy, improving the coverage of the basic requirements of the population in a way that contributes economic growth, social equity, and the reduction of environmental impacts.

The strategic guidelines of the energy policy are the cornerstones of the same and emerge from the analysis of external factors, national conditions, the future supply needs and the interrelationship between economy, environment, people and politics. The consideration of these four aspects are the base for an energy policy focused on sustainable development.



# The Energy Policy 2010 – 2024

## Some identified aspects to consider



### Politic

- Wide range of actuation
- Balance of the political and economical powers (state and private)

### Economic

- Energy Security
- Continuity of importations and exportations
- Continuity of supply
- Diversified supply services

### People

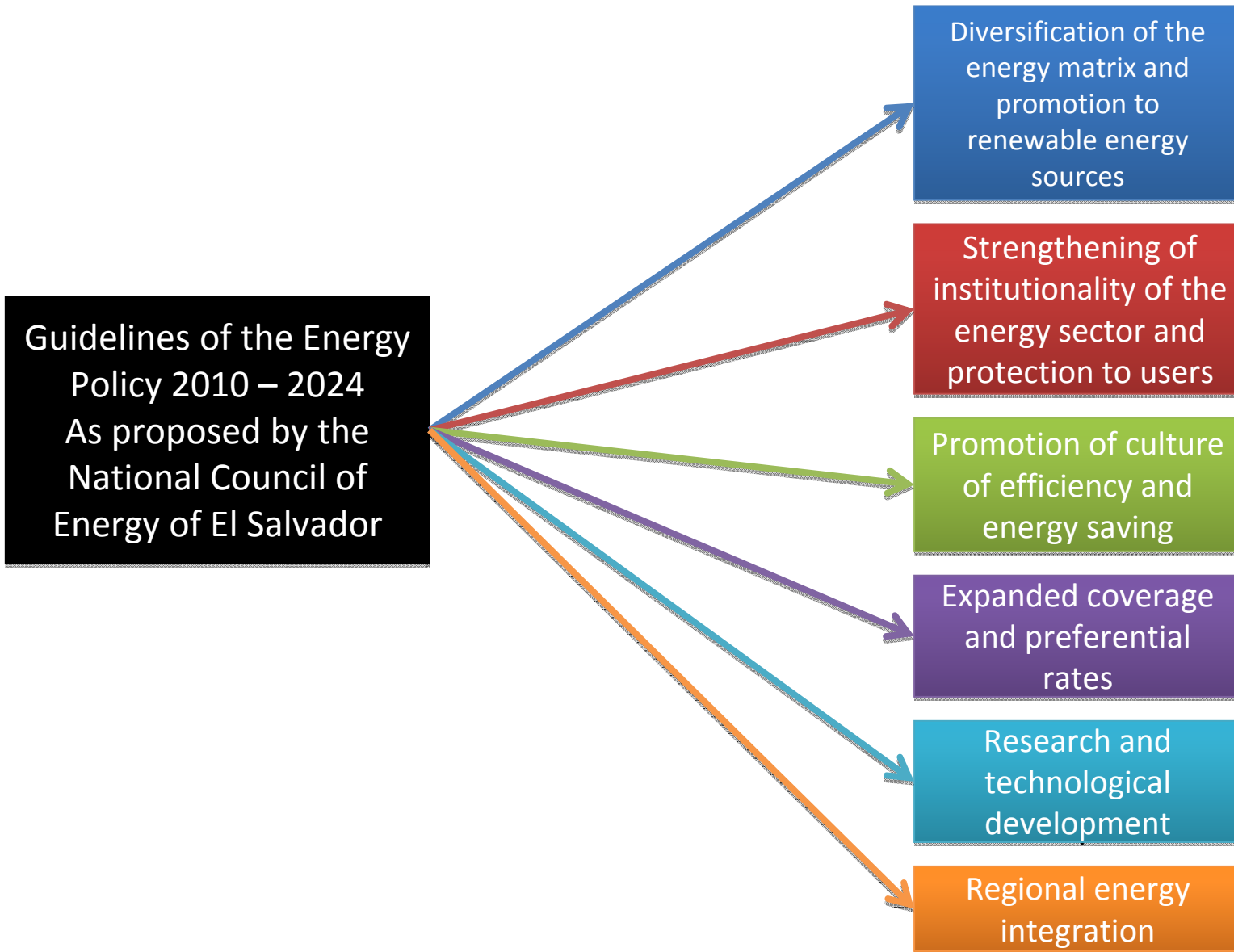
- Full coverage of the basic requirements of the population
- Minimum cost of energy for households
- Diversified energy supply
- Continuity of supply
- Access to quality energy sources
- Financing for technology improvement

### Environment

- Air, water and soil pollution free
- Biodiversity out of danger
- Slightly disturbed ecosystems
- Sustainable use of wood



# Guidelines of the Energy Policy 2010 - 2024



# Major Difficulties of the Energy Policy

The difficulties of implementing a new energy policy in El Salvador are most in an economical, social and environmental level; since the proposed guidelines of the policy are looking for the diversification of the energy matrix, which means introduction of new sources of energy and its related technologies for exploitation.

	Economy	Social	Environment
New hydro		X	X
Coal and Natural Gas		X	X
Biofuels	X	X	X
Energy efficiency	X	X	