



**Brazilian Electric Power
Sector:
Changes in Regulatory
Framework**

**Sylvia Larrea
Lead Energy Specialist**

The electricity sector in Brazil

- Brazil has the largest electricity market in South America, with a power consumption that is more than double the combined consumption of Argentina, Bolivia, Chile and Uruguay.
- Installed capacity of 103,000 MW is comparable to that of Italy and the United Kingdom (with a much larger transmission network).
- 72% of its installed capacity are hydroelectric power plants.
- Estimated annual demand growth for electric energy is 5%.
- Large annual investments needed to meet increase in demand.

The early 1990s: State-owned model

- In the 1970s, the sector had a remarkable development.
- However, by the late 1980s, the state-owned model was on the verge of collapse as a result of heavily subsidized tariffs.
- Until the early 1990s, the power sector in Brazil was essentially in government's hands.
- In the early 1990s, the Brazilian electric sector was characterized by: (i) centralization of operation and planning; and (ii) vertically integration of transmission, distribution and generation of the sector.

The 1990s reforms: Towards a competitive sector

- In 1993, the reform of the Brazilian electric sector began with:
 - (i) the extinction of the equalization of the tariffs; and (ii) the creation of supply contracts between generators and distributors.
- In 1995, a major transformation of the existing regulatory framework entered into effect to foster competition:
 - Private participation in the electricity sector
 - Creation of a new market model in generation and commercialization. The figure of Independent Power Producer and the concept of Free Consumer, was created.

The 1990s reforms: Towards a competitive sector (continues...)

- From 1996 - 1998, a project to restructure the sector defined the new conceptual and institutional framework to be implemented for the Brazilian Electric Sector:
 - Desverticalization of the electric power companies.
 - Competition in the segments of generation and commercialization.
 - The State will keep under control distribution and transmission of electric power, considered to be natural monopolies.
 - Creation of a regulating agency, ANEEL (1996).
 - Creation of an operator for the national electric system, ONS (1998).
 - Creation of an operator for the commercial market, MAE (1998).



The 2001-2002: Electric system supply crisis

- In 2001, the electric system underwent a serious supply crisis, which culminated in an electric power rationing plan.
- This event generated questions about the course the electric sector was taking.
- In 2002, the Committee for the Revitalization of the Electric Sector Model was formed. The work resulted in a series of change proposals for the Brazilian electric sector.

The 2002 - 2004: Reforms to correct former model

- The existing institutions were preserved and in some cases strengthened. The new model defined the creation of:
 - The Energy Research Company (EPE), long term planning of the sector.
 - The Committee for the Monitoring of the Electric Sector (CMSE), security of the supply of electric power.
 - The Chamber for the Commercialization of Electric Power (CCEE) to replace MAE's activities, commercialization of electric power.
- Establishment of energy auctions for distribution companies to acquire electricity to serve their captive customers:
 - Regulated market, energy is purchased by distributors for supplying on to captive consumers
 - Free market, independent power producers and large industrial consumers freely negotiate to acquire electricity directly from generation companies.
- All changes until 2004 constitute the current framework for the electricity sector.



Summary of the major changes

Former Model (until 1995)	Free Market Model (1995 to 2003)	New Model (2004)
Financing using public funds	Financing using public and private funds	Financing using private and public funds
Verticalized Companies	Companies classified by activity: generation, transmission, distribution and commercialization	Companies classified by activity: generation, transmission, distribution, commercialization, imports and exports.
Predominantly State-controlled companies	Opening up of the market and emphasis on the privatization of the Companies.	Coexistence between State-controlled and Private Companies.
Monopolies – No competition	Competition in generation and commercialization.	Competition in generation and commercialization.
Captive Consumers	Both Free and Captive Consumers	Both Free and Captive Consumers
Tariffs regulated throughout all sectors	Prices are freely negotiated for the generation and commercialization.	Free environment: Prices are freely negotiated for the generation and commercialization. Regulated environment: auctions and bids for the least tariffs.
Regulated Market	Free Market	Coexistence between Free and Regulated Markets.

Conclusions

- Brazil has made remarkable progress since the first reforms passed.
- The new model attempts to rely on long-term private investment and competition as a key driver of sector growth.
- The new model it was not a reversal of the previous one, but rather it attempted to correct some of the imperfections observed in the latter.
- The Brazilian regulatory framework promotes investments.



Thanks !

Inter-American Development Bank / www.iadb.org