



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

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# 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.<br><br>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 !

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