

Companhia Energética do Maranhão

COMPANY BACKGROUND

Companhia Energética do Maranhão, or CEMAR, is the power distribution company servicing Brazil's northeastern state of Maranhão. Maranhão is one of the poorest states in Brazil, whose 6.6 million inhabitants earn a per capita income 25.7% below the national average. With increasing demand for power, and electrification a key element to both improving the quality of people's lives and fueling economic growth, CEMAR is working to bring power to the entire state, with a particular emphasis on rural and low-income segments. Since 2004, the company has participated in a Brazilian government program called Light for All (Programa Luz Para Todos) aiming to bring about universal access to electricity throughout the country. At the end of 2011, CEMAR's geographic coverage spanned 100% of the state, with approximately one million of its residential subscribers classified as low-income.

Country: Brazil

Sector: Utilities

IFC's Investment: \$80 million in long-term debt financing

The company's primary shareholder is Equatorial Energia, a publicly listed holding company with 65.1% ownership, whose investments target power generation, distribution and transmission primarily in Brazil. The public power utility, ELETROBRAS, holds a 33.6% stake and minority shareholders, which include CEMAR's management, hold the remaining 1.3% of the company. CEMAR is a regulated utility company, with tariffs and contracting obligations set by Brazil's National Agency for Electrical Energy (ANEEL).

DRIVERS FOR CEMAR'S INCLUSIVE BUSINESS MODEL

- Maintenance of the Light for All Program
- Maranhão's continuous social and economic growth

The primary driver for CEMAR's inclusive business model was a federal government program, Light for All, that created new market segments for the company to reach. The objective of the program, launched in 2003, was to connect 1.7 million households and 12 million individuals by the end of 2010. Cemar exceeded this target reaching 1.9 million customers by 2012.

The northeast region of Brazil saw the highest need for rural electrification, nearly half of the total, and consequently received nearly 44% of overall federal funding, according to a report from the US Commercial Service. Total project cost was estimated at R\$9.5 billion (\$4.3 billion), with 71% to be funded by the federal government and the rest split among state governments and distribution companies.

Bringing power to over one million individuals under the Light for All Program fueled the state's demand for more power. Brazil's Institute of Geography and Statistics (IBGE) reports that Maranhão's GDP increased an average of 7.8% per year from 2005 to 2011. Strong economic growth, supported by increased electricity access and coupled with low starting levels of consumption, has pushed electricity demand across all customer segments, increasing CEMAR's electricity load by 4.2% between 2007 and 2008, outpacing the national increase of 2.9%. In 2011, the company reached an increase of 5.5% in electricity load, outpacing the national increase of 1.8% and the northeast region's decrease of 1.5%.

CEMAR'S INCLUSIVE BUSINESS MODEL

CEMAR's concession mandates it to continuously invest in its distribution network, but reaching Maranhão's rural and low-income populations presented the company with a number of challenges.

Expanding infrastructure into rural and sparsely populated areas represented significant capital expenditures.

Moreover, the potential customer base was approximately 88% residential – of whom about 70% were low-income – meaning their power needs and tariff categories would be relatively low. Yet the needs for power were clear, and for CEMAR this represented a hugely untapped customer base. The challenge was therefore to develop the rural power market both profitably and inclusively.

In 2004, GP Investimentos, a private equity firm and the former parent company of Equatorial, took control of CEMAR, which was left financially adrift in the wake of Brazil's 2001 energy crisis. Under the direction of GP Investimentos, CEMAR adopted a new strategy, focusing on building a strong, stable platform for future growth and rural electrification. At the same time, the government of Brazil launched the Light for All program providing the needed incentives to stimulate demand and develop these rural markets.

The modernization also led to significant reductions in the frequency and duration of service disruptions and boosted service quality and customer satisfaction

The company underwent major organizational and operational restructuring, which focused on efficiency improvements in three main areas. First, CEMAR invested heavily in modernizing and expanding its distribution network, including replacing obsolete equipment, installing new distribution lines and sub-stations and voltage regulating equipment. The modernization mitigated technical power losses, a particular concern given that Maranhão lacks any generation capacity and reaching rural areas requires transmission lines to traverse greater distances. Reducing commercial losses was another key component, addressed by many operational improvements to the network, such as upgrading information systems, enabling precise GPS-based location for distribution poles and automating network operations. This enabled CEMAR to improve collection rates and combat electricity theft. The modernization also led to significant reductions in the frequency and duration of service disruptions and boosted service quality and customer satisfaction.



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Finally, the management structure was dramatically overhauled, focusing on reducing costs and increasing productivity. Regional departments were eliminated, and the management structure was reduced from seven layers to three. Many operational aspects were outsourced, such as billing, customer service, and network maintenance. CEMAR focused on providing stronger incentives, including performance-based bonuses for all its employees and stock options for management.

The Light for All program was designed to reduce capital costs, as low-income and rural customers would have been unable to bear the initial connection costs

CEMAR's enrollment as an implementing agency in the government's Light for All program obliged the company to electrify the entire state of Maranhão and to contribute 15% of the costs while government grants and subsidized loans comprised the rest. This was designed to reduce capital costs, as low-income and rural customers would have been unable to bear the initial connection costs. The government also provided incentives to promote demand in rural markets through a low-income consumer subsidy. This program allowed residential customers classified as low-income to receive a reduction of up to 65% off their energy bills, with the reduction depending on the amount of power consumed, such that the lowest users paid the lowest rates. In July 2012, 48.3% of CEMAR's customers were eligible for the low-income rebate due to new regulation procedure established by ANEEL.

RESULTS OF CEMAR'S INCLUSIVE BUSINESS MODEL

- 1.9 million customers reached by the second quarter of 2012
- 311,757 new power connections under the Light for All program (approximately 11% of Brazil's total program) by the second quarter of 2012

CEMAR's emphasis on efficiency gains proved a winning strategy: since 2004, the company has seen consistent growth that's climbed into the double-digit levels. Net operating revenues and EBITDA have respectively climbed from R\$526.1 million and R\$85.4 million in 2004 to R\$1,912.1 million and R\$482.2 million in 2011, an average revenue growth rate close to 35% per year. Moreover, the reorganization quickly led to a drop in costs relative to revenues, stimulating a sharp improvement in EBITDA margins, which climbed from 16.2% in 2004 to 40.2% in 2006, remaining around 25% through 2012.

Strong increases in demand fueled this growth, with CEMAR seeing an average annual increase in total residential power consumption between 2009 and 2011 of 11.7%. Moreover, as demand rose, customers posted high repayment rates of 93.4%, suggesting that both policies to stimulate economic growth and power demand among low-income consumers were sustainable. At the same time, CEMAR achieved

significant gains in the quality and reliability of service, with measures of the length and frequency of interruptions dropping by 1.3% and 17.5% between 2010 and 2011.

Expanding distribution through the Light for All program has had great development impacts: CEMAR has reached to date over 300,988 new customers in rural Maranhão. The Company's reach increased from a total of 1.2 million in 2004 to approximately 1.9 million customers in 2012 under the program and through expansions carried out by CEMAR on its own account. Over this time, nearly 50% of this increase targeted un-electrified rural and low-income segments. In 2012, CEMAR expects to reach a total of 2 million customers. Access to electricity is a fundamental element to improve the quality of people's lives and stimulate economic growth, enabling both domestic and commercial refrigeration, use of appliances, machinery and artificial lighting.

IFC'S ROLE AND VALUE-ADD

IFC's Investment: \$80 million in long-term debt financing

Investment Year: 2008

- Helped restore investor confidence following the energy crisis in Brazil in 2001 during which hydroelectric generation plummeted due to low rainfalls, putting distribution companies under severe financial pressure.
- Addressed concerns about foreign exchange risk after the crisis by providing local currency financing at a longer maturity compared to the market.
- Applied IFC's environmental and social performance standards as CEMAR expanded its distribution network.

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