



# Retail Energy Sales

## The Imminent Disruption in the Brazilian Market

Article

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## Executive Summary

The electric power sector in Brazil is undergoing a substantial transformation, promising significant changes in the coming years. The gradual liberalization of this market has enabled an increasing number of consumers to transition from captive supply, linked to the local distributor, to the free market, where they contract directly with energy retailers. This dynamic fosters the entry of new players and stimulates competitiveness in the sector.

The evolution in regulation in recent years has led to a consistent growth in the number of consumers in the free market. Between 2013 and 2022, the number of free consumers surged from 3.6 thousand to over 31 thousand. Currently, it is estimated that around 90 thousand customers are eligible to immediately join the free energy market. By 2024, with the entry into force of a new regulatory framework, an additional potential of 100 thousand new customers is expected. Therefore, within 12 months, regulatory developments should allow another 190 thousand new customers to integrate into the market.

However, the most significant transformation in the sector may occur with the approval of Bill 414/21, currently under deliberation in Congress. If approved, the bill will allow low-voltage consumers with demand below 500 kW to enter the free market, encompassing more than 89 million consumer units, mostly residential. This change has the potential to revolutionize the electricity sector, but it also brings significant challenges, especially on the supply side. The market change will require a business model quite distinct from what retailers are accustomed to, including:

- Serving customers with different profiles and sizes, demanding a variety of new products and services;
- Providing an exceptional customer experience;
- Developing or acquiring competencies in commercial, financial, digital, among other areas;
- Preparing for increasing competition from new entrants from various sectors, such as finance, retail, technology, and telecommunications.

The challenges will be numerous, but the potential for transformation is extraordinary.

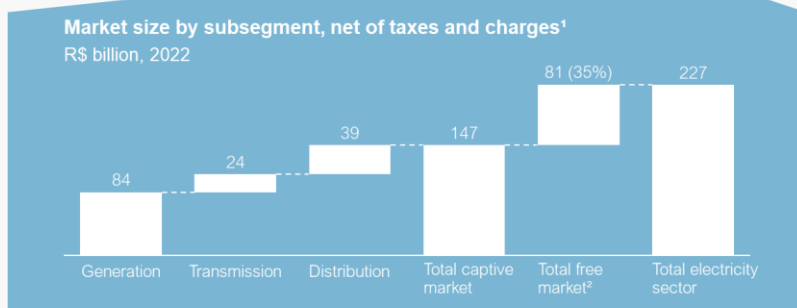
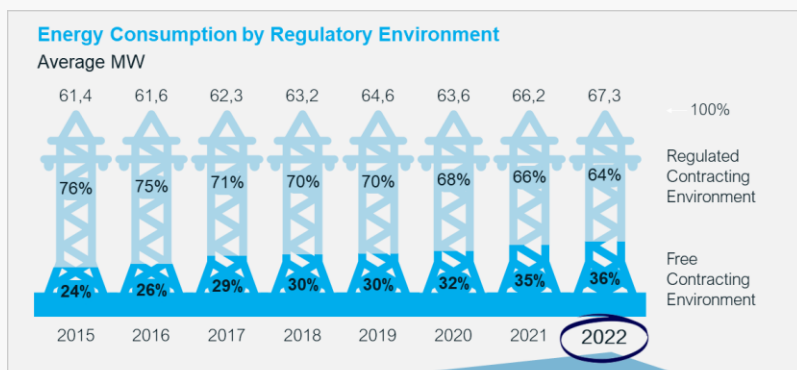
## Transition in the Energy Retail Market

The Brazilian electricity market is undergoing significant transformation, which is expected to result in considerable changes in the coming years. This evolution mainly stems from the gradual opening of the electricity sector, allowing more consumers to migrate from captive consumption (associated with the local distributor) to the free market (contracted with energy retailers).

The rise in the number of potential customers for energy retailers fosters new market entrants, boosting competitiveness and promoting the emergence of innovative energy sales models, as well as different products and services.

The share of energy consumed in the free market has shown consistent growth, increasing from 23% in 2015 to 36% in 2022. In terms of value, the free market already accounts for approximately one-third of the R\$ 227 billion Brazilian electricity sector. It is worth noting that the top 20 retailers in the country hold half of the total market.

The successive reductions in access limits to the free market, promoted by ANEEL, have enabled an increase in the number of consumers contracting electricity directly from retailers. Between January 2020 and January 2023, the limit decreased from 2000 kW to 500 kW of contracted demand, and it is expected to reach zero in January 2024 for high and medium voltage customers (usually large industries). As a result of this liberalization, the number of consumers in the free market has been growing systematically - since 2013, the number has jumped from 3.6 thousand to over 31 thousand in 2022.



1. Considers the average tariff paid by distributors of 277 R\$/MWh, long-term price of the free market of 135 R\$/MWh, share of revenue from transmission and distribution companies in each regulatory environment proportional to the volume of energy.

2. Includes generation costs, TUST, and TUSD.

Source: ANEEL, CCEE, Abradee, Abraceel, Mirow & Co. analysis

Currently, it is estimated that around 90 thousand customers are eligible to immediately join the free energy market. Demand aggregation is one of the strategies to enable such migrations. According to current regulations, consumer units belonging to Group A and located in contiguous areas (such as condominiums) or with the same CNPJ (Brazilian Business Tax Identification Number) can access the free market as special consumers. For this, the sum of the contracted demands of these units must be between 500 and 1500 kW and the acquired energy must come from renewable sources, such as Small Hydroelectric Plants, Biomass, Wind, and Solar.

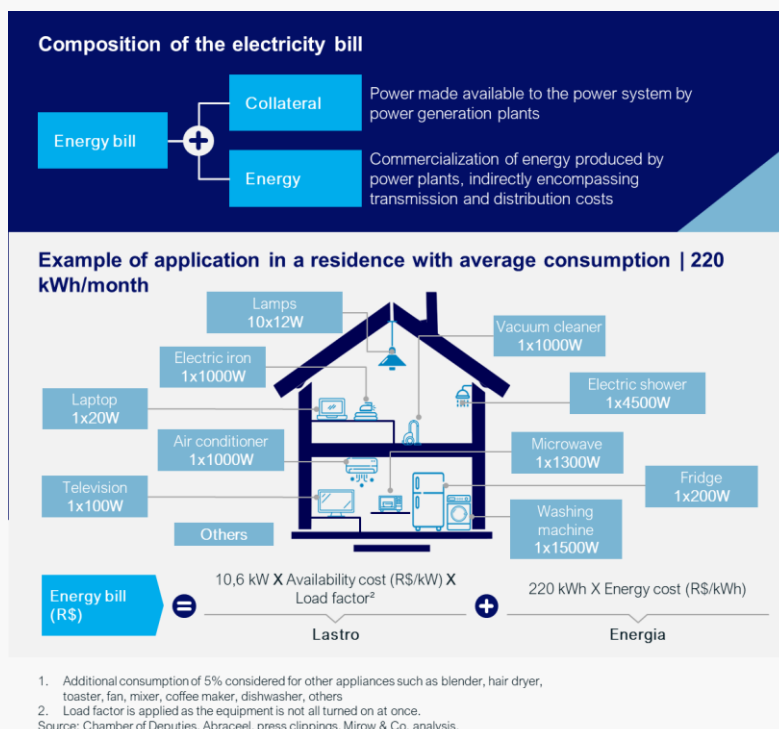
### Demand Aggregation Consolidation - Aggrega Condominiums Case

Aggrega Condominiums is a service that allows consumers to migrate to the free energy market through demand aggregation. The advantages offered by the company include up to a 30% reduction in the energy bill, renewable source supply, and real-time telemetry technology. The Le Gusta commercial complex in Rio de Janeiro was the first condominium to adopt the Aggrega model in the free energy market, with 179 condominium owners. In this case, there is a guaranteed reduction in the energy bill of 19% for 10 years. The company handles the entire migration process and the installation of smart meters, allowing real-time consumption control and promoting energy efficiency.



The implementation of a new regulatory framework has the potential to significantly boost the number of customers in the free energy market. Expected to come into effect in January 2024, the reduction of the access limit from 500 kW to zero (for consumer units in Group A) will enable approximately 100 thousand additional consumers to acquire energy in this segment. Thus, in the coming months, the free energy market could reach around 220 thousand consumers - about 7 times the current total.

However, the true disruption in the sector may come with Bill 414/21, which is pending in Congress. The bill proposes the inclusion of low-voltage consumers with demand below 500 kW in the free market, covering the over 89 million current consumer units, predominantly residential. According to the proposal, energy trading would be the responsibility of retail agents, responsible for representing consumers in the Chamber of Electricity Commercialization (CCEE). Another change suggested in the Bill is the division of the electricity bill into two parts: the energy actually consumed, according to the current model, and the "collateral", a new portion related to the provision of system capacity, accounting for the infrastructure and resources needed to ensure a reliable supply of electricity.

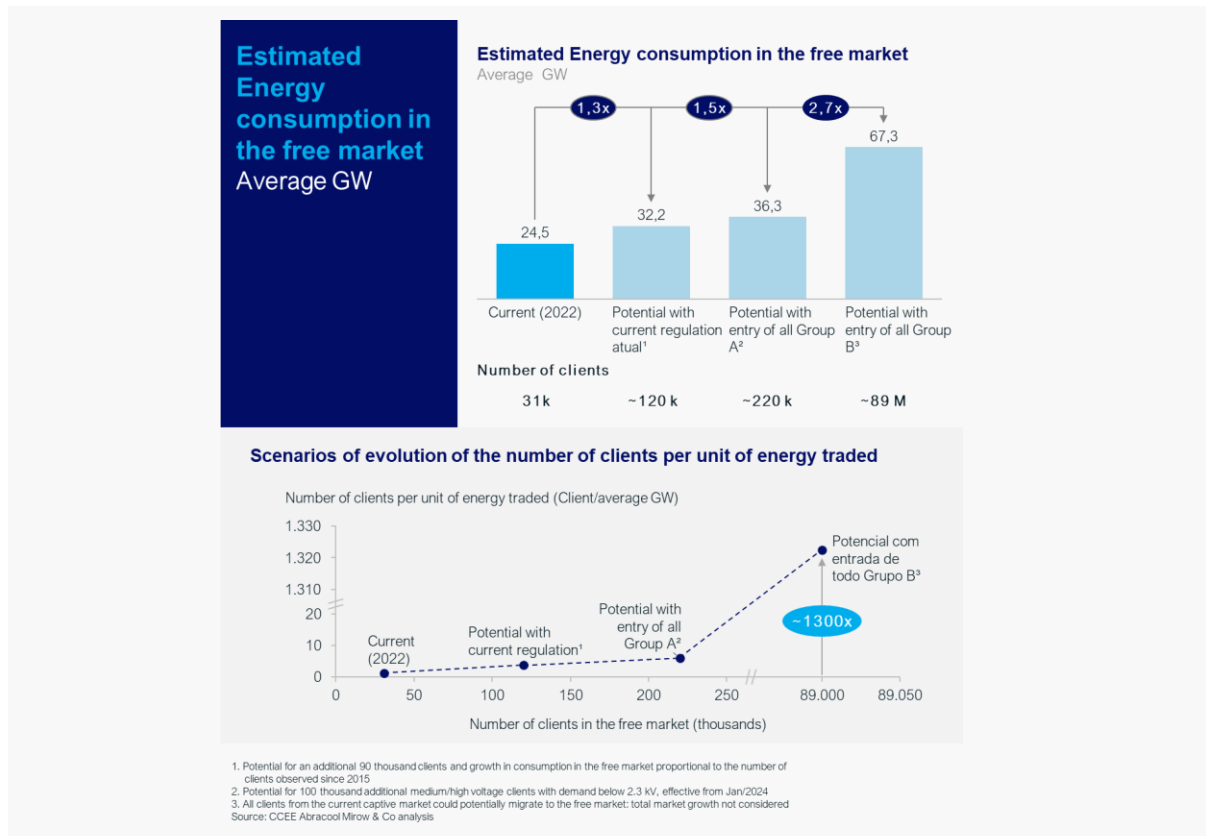


In July 2023, the text is under consideration in Congress and, if approved, should come into effect in January 2026, in two stages, according to representatives of the electric power sector:

- The first stage would come into effect from 2026 for commercial (B3) and government (B4) low-voltage consumers, representing about 11 million customers;
- The second stage would start in 2028 for low voltage including residential and rural (B1 and B2) consumers, covering the remaining customers, totaling 89 million consumer units.

This change has transformative potential in the electric power sector but is accompanied by challenges, especially on the supply side. The entry of consumers with different profiles and sizes than current consumers is expected to generate demand for different types of products and services, for a potential customer base three orders of magnitude larger than the current base. In addition, there is the challenge of educating consumers generally inexperienced in electricity-related topics (unlike Group A customers, who have some knowledge about the supply and use of electric power).

Assuming the migration of almost 90 million energy consumers to the free market, the volume of energy traded under this regime could almost triple. However, operational complexity would increase significantly with the need to serve millions of low-consumption customers. In this scenario, the average number of customers to be managed for each average GW of energy would be multiplied by 1300, providing a reference for the significant increase in operational complexity that retail marketers could face compared to the current scenario.

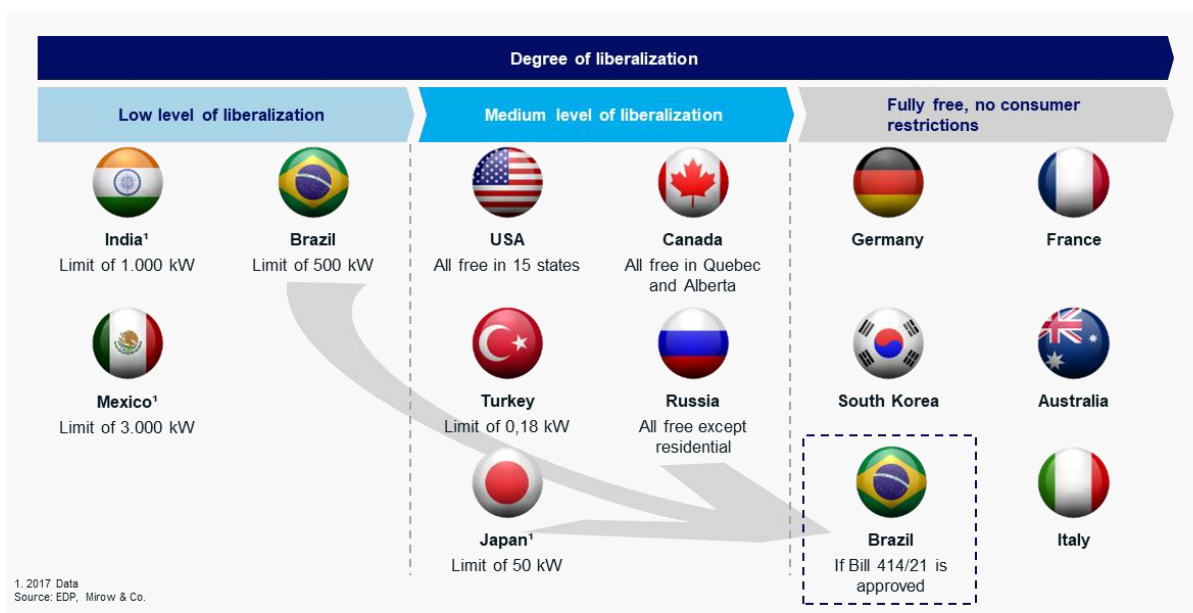


This market change is expected to require a significantly different operational model from what current retailers are accustomed to, with a greater emphasis on customer experience-related competencies. It represents a mindset shift in companies, where consumers will be seen as clients, with efforts aimed at understanding their needs, personalizing service, and products.

Although it's something new for Brazil, this process of opening up the electricity sector has been experienced in other countries around the world, especially those with more mature markets. Similarly, other sectors of the economy have also undergone opening processes, such as the telecommunications sector. What these experiences show us is that, in these cases, market opening has generated greater competition among service providers, who needed to differentiate themselves in terms of products, price, and experience, benefiting the consumer. For regulators and other market agents, a fundamental challenge is to ensure that the conditions allowing for this healthy development are guaranteed.

## Experience from other countries and industries: increased competition for consumer benefit

Some countries with a more mature electricity sector have a completely free and competitive market, as is the case in Germany, France, South Korea, Australia, and Italy, among others. Some countries have an intermediate degree of liberalization, where some segments, regions, or consumption ranges are prevented from accessing the free market, as is the case, for example, in the USA, Canada, Turkey, Russia, and Japan. In a lower degree of liberalization, where there is a significant restriction on access to the free market, are, for example, India and Mexico, along with Brazil. Following this trend of reducing the access limit, which could culminate in full opening with Bill 414/21, Brazil is following a path of greater liberalization and opening of the energy market.



As a reference, France is a case of a country with a highly open electricity sector, where all consumers have the option to choose between energy retailers. Initially monopolized by the state-owned EDF, the electricity sector underwent a transformation in which generation and retailing were opened up to competition. In generation, EDF remained the largest player, but other relevant players emerged, such as Engie. Transmission and distribution were separated from EDF, continuing with its subsidiaries RTE and Enedis, but each with independent management. Finally, with the opening of retailing, there was a significant increase in new players, many coming from other sectors, such as oil and gas production and distribution, energy generation, and others.

In these open markets, retailers need to have a go-to-market (GTM) strategy that includes, in addition to energy sales, other services such as consumption management and multi-channel support. Among the products offered are natural gas commercialization, renewable energy supply, energy efficiency solutions, and rental of solar infrastructure for residences.

Regarding service channels, retailers in these markets use web portals, telephone and email service networks, and consumption control and invoice management applications.

In Brazil, 2W is an example of a retailer with access to smaller consumers and a more retail-oriented go-to-market system, with operational revenue of around R\$ 1.5 billion in 2022. The number of about 1000 clients served by 2W, which is significant for the Brazilian market, is still much lower than the millions of clients of open market retailers.

With the anticipated regulatory changes and the advancement of market opening, the energy sector may undergo a similar movement to what happened in the telecommunications sector, where the traditional way of selling the service was modernized into different package options. Previously, companies charged a fee for line rental plus a tariff for minutes spoken. Currently, package options are diverse, ranging from post-paid (similar to the previous model), pre-paid (purchase of credits), subscription (fixed monthly payments), to customized packages tailored to user demand.

### Seizing Opportunities In Retailing

Success in the retailing market will depend on mastering a wide range of competencies:

- **Operational model:** serving and managing a large set of clients with low average ticket; processes, systems, organization, governance, and team training
- **Channel:** access to channels and a broad customer base
- **Sales and marketing:** customer segmentation, product development (energy), bundling, pricing, sales force management, advertising, marketing, branding
- **Customer experience:** user-friendly experience/journey, omnichannelity, self-service possibility, and personalization
- **Trading/risks:** market and trend analysis, sourcing energy from different sources and suppliers, risk management (position/leverage/credit), access to capital

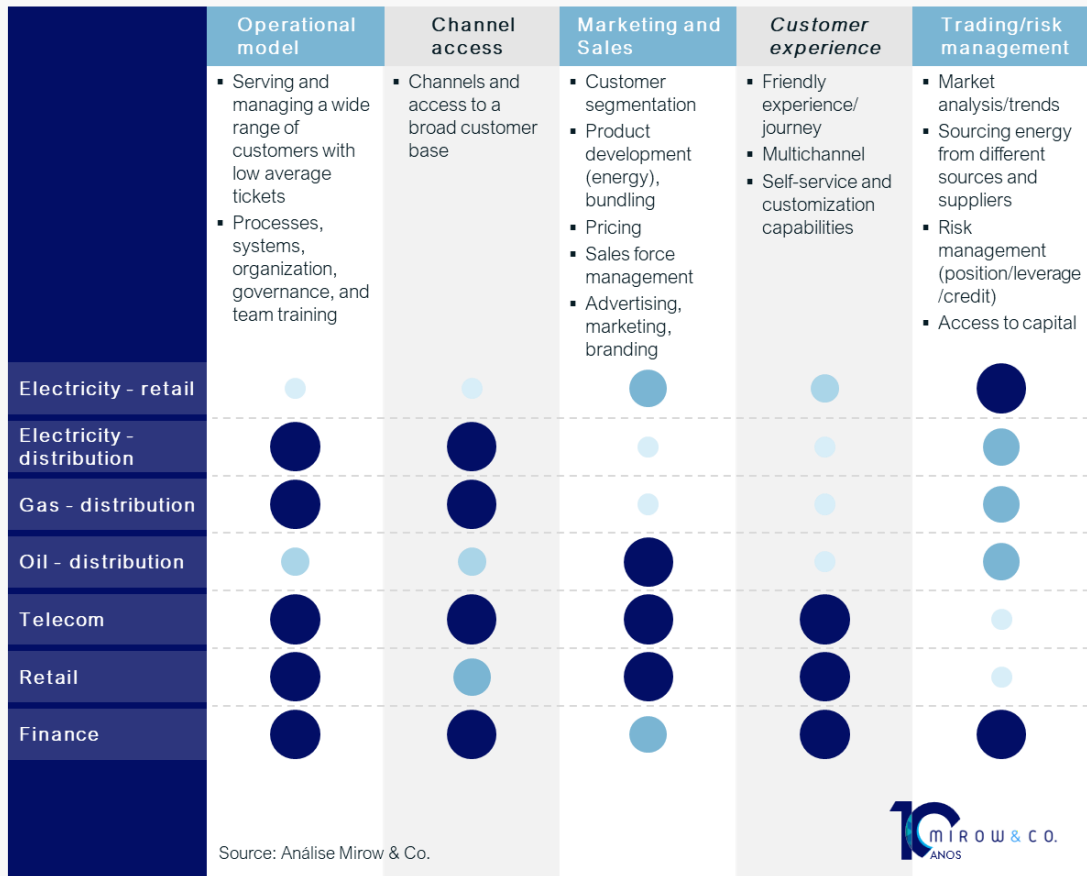
Players from different sectors can seize opportunities in retailing, depending on the level of maturity and evolution in these key competencies. Given the characteristics required by their own sectors of operation, players from these sectors should be more capable of mastering, or at least capturing a slice of, the retail-open market.

Among them are naturally the current energy retailers, due to their know-how in energy trading operations, even with gaps in the other four dimensions. Other sectors include energy distribution and gas distribution, which have retail operational models and channel access but do not have strong marketing and user experience competencies.



## Map Of Necessary Competencies In Retail Energy Commercialization By Selected Sector

High expertise ● ● ● ● Low expertise



Another group consists of telecom, retail, and financial sector companies, which have good (or excellent) capabilities in retail operations, channel access, marketing, and customer experience, with only specific skills in the electricity sector needing development, making them strong candidates to enter this market robustly.

The development of an energy retailer capable of facing the challenges of the new energy market should address several key dimensions. These include:

- **Strategic aspirations:** defining the company's aspirations for the retailer, target customer segments, and how this new business connects with the company's strategy
- **Processes:** designing key processes for managing the retailer, such as sales and marketing, customer journey, customer service, portfolio management, operations/trading, risk management, and back-office processes
- **Systems and tools:** identifying systems and tools that can be leveraged, mapping new necessary tools, evaluating the most appropriate technologies

- **Governance:** structuring management mechanisms for the retailer, leadership involvement level, interfaces between areas, and positioning the new business within the organization
- **Structure and people:** designing the team structure, the involved areas, key roles and responsibilities, necessary competencies
- **Culture:** mapping values and behaviors that should be encouraged in the retailer and identifying actions that can accelerate necessary cultural changes (e.g., communication, training, incentives)

Just like in other markets and sectors, disruptive changes are expected to favor companies that adapt best to the new market conditions. The opening of the free market for low voltage should create opportunities for both current retailers and companies from other sectors that can leverage existing competencies or even develop the necessary skills. Two questions arise:

- What changes do current retailers need to implement to remain competitive and make the most of the opportunities from the market opening?
- How can players from other sectors with a high degree of similarity (in terms of necessary competencies) take advantage of the moment to diversify their activities and enter the energy retail sector?

In any case, those who anticipate changes and prepare for the emerging challenge will be better positioned.

