



UNIVERSIDADE CATÓLICA PORTUGUESA

EDP

Shedding light on a liberalized market

The summer had ended and the sunny days had already given place to windy nights. In his office on the top floor of the historical headquarters of the Portuguese Electric company EDP, Miguel Stilwell D'Andrade, EDP's executive board member and EDP Comercial's president, looked upon the third quarter report of 2013 (see Exhibit 1 for financial indicators) while admiring the magnificent view the sunset presented him over the Marquês de Pombal roundabout, in Lisbon, the capital city of Portugal.

The detailed report confirmed the success of the path he had outlined and helped to carve: EDP not only had survived the market liberalization, which was the greatest challenge of its existence, but also emerged, against all odds, as the great victor of that process by achieving a market share never seen before on a liberalized market.

João Branco prepared this case under the supervision of Nuno Magalhães Guedes, in partial fulfillment of the Dissertation requirements for the degree of MSc in Business Administration, at Universidade Católica Portuguesa, in April 2017, as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.

The young manager was pleased and proud of the company's progress, of the way it managed to adapt to a new competitive reality and to shift the mindset to a more client oriented service.

Nevertheless, despite the long path traveled, Miguel Stilwell D'Andrade recognized that there was still much more to be done. The liberalization process (see Exhibit 2), which had officially started in the year 1998 with the creation of the Iberian market, was not yet finished: new players rose every day and the customers were more and more informed, more demanding and with growing standards of client service.

Bearing this in mind, and knowing that the hardest was yet to come, he rose from his chair and with the report on his hand headed to the executive council meeting decided to present an ambitious program that would drive the company closer towards its objective: to become the favorite company of the Portuguese people.

1 - EDP, the Company

1.1 The Birth of a National Company

It was the 25th of April of 1974 and Portugal was in the midst of a national revolution. The old regime had fallen and a new democratic system was to rise from its ashes. An immediate consequence was the nationalization of all strategic companies, and energy was no exception.

Electric companies, at that time, were decentralized and spread across the country, which didn't serve the government objectives. However, the nationalization was only the first step. In the aftermath of the revolution, in the hot summer of 1976, the provisional government decided that a new centralized organization was needed to face the upcoming challenges. The 13 nationalized companies were no more, and a new company was created. It was called Electricidade de Portugal and EDP was born.

Even though the merger happened in 1976, only in 1978 the brand and name were established and with them the three major challenges the newborn company faced:

- To complete the electrification of the country by bringing light to everyone
- To create a national energy production park
- To ensure a unique tariff for every customer

Those tasks were a banner for the young company and by the mid 80's EDP's distribution network had already covered 97% of Portugal, ensuring 80% of the low tension supply.

1.2 The Rise of a Group

Despite having a name and a brand, EDP was in fact just a public entity focused exclusively on the hardcore of the business – to ensure a continuous supply of electricity to everyone/everywhere – neglecting the commercial relationships and not safeguarding a pleasant experience in terms of customer service.

It was only after 1991, when the company became a true corporation (S.A.) that the top management, fully aware of the lack of empathy with the public, changed the company's visual identity. They tried to associate the brand with dynamism and to make it more appealing to the population. However, this effort proved to be a vain attempt. Being a monopoly utility didn't help, and the company continued to be perceived as distant, not understanding and with an abusive stand.

Despite that setback, EDP continued to carve its own path, becoming a group in 1994 and entering the Brazilian market in 1996.

Having a stable and profitable internal operation and taking the first steps abroad the government, in 1997, saw the opportunity to start the privatization process by selling 30% in the market. The operation was a huge success with the demand surpassing more than three times the offer with 8% of the Portuguese population becoming EDP shareholders. Grounded on this success, the state promoted a second and third privatization phases in 1998, maintaining 51% of the capital and total control.

1.3 The Shifting Point - an Iberian Company

By the turn of the millennium, times were changing. The European Union issued strong directives imposing and encouraging liberalized markets, being Iberia (Portugal and Spain) one of its major bets. The world was also much more aware of the environmental footprint, with growing concern about the consequences of pollution, and with polluting agents being severely penalized by public opinion.

It was in this changing and challenging environment that EDP sailed to become what it was by the end of 2013. The privatization process continued, and with the end of the fourth phase the corporation became mostly private with 70% of the capital in private hands. Leaving the public sphere allowed for the group to cement its long-term strategy

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and to prepare for the upcoming liberalization of the market. The first step was splitting its operations into different companies: EDP Comercial for the energy commercialization and EDP Distribuição for the regulated distribution sector.

However, this was not enough. The creation of the Iberian market would open the sector to the much bigger Spanish companies.

The executive board members started scouting the market, searching for a way to gain scale and to prepare for the upcoming battles. An opportunity was close-by: Hidroantábriico (HC) – a Spanish energy company of the Basque country.

The Spanish giants neither saw it coming nor had the time to properly react, and between 2001 and 2004, EDP assumed total control of HC capital, becoming truly Iberian.

It was in that same year of 2004 that a major rebranding, focused on proximity, took place. That would be the keyword in how the group aspired to be perceived by its clients – a transparent company concerned with each and every stakeholder. To better personify this new identity, a smile was chosen as the brand image and with it a new name: “Energias de Portugal” (see Exhibit 3). It wasn’t just an electric company anymore: it was a true Iberian energy group.

1.4 The Renewable Bet

With a new face, and a boost in scale, EDP still had to determine its own path to differentiate and thrive on a sector that was experiencing challenging times.

The integration of the Spanish acquisition brought along a new and interesting asset: wind farms. Until then, EDP only had renewable sources in the form of hydro dams and this new type of generation had the potential to play a key role in a future greener world. The seed was planted and EDP’s investment in this area flourished. It reached its peak with the 2007 acquisition of the American company Horizon Wind Energy. The portfolio of renewable actives became large enough to justify the creation of an independent entity – EDP Renováveis – which had its own IPO in 2008, becoming the biggest renewable company in Europe and the third global player.

This environmental conscience, renewable bet and clear path toward a cleaner and sustainable future made EDP the first and only Portuguese company to be included in the Dow Jones Sustainability Indexes, leading those indexes for five consecutive years. This helped to differentiate the group from all the other conventional utility companies.

1.5 The Financial Crisis Consequences

When EDP seemed sure of its path, the financial crisis of 2008 unexpectedly hit hard and strong.

Despite having a significant portfolio of valuable assets, EDP had always been, due to the nature of its investments, a high debt company. And so, with the collapse of the financial system, its future loans, investments and liquidity were at stake.

In addition to these constraints in accessing the global markets, the crisis drove the Portuguese republic, which still had 21.35% of the company, into financial distress and turmoil. The downfall of the economic situation led to an international bailout program, whose conditions involved selling the remaining share in the energy company.

Needing fresh cash, the Portuguese state decided to sell to the highest bidder, who turned out to be the Chinese national energy company China Three Gorges (CTG). It became EDP's major shareholder and, consequently by being on the same industry, one of its major partners.

1.6 The Leap Forward - a Global Brand

With a new strong and stable shareholder whose powerful partnership allowed not only to access important credit lines but also to open new investment perspectives, EDP was ready to face the global markets as more and more countries seemed to adopt a green energy approach, subsidizing carbon free energy sources.

The presence in Brazil showed good perspectives as the big investments made promised to pay up faster than expected thanks to its high ROI and steady cash flows.

Finally, the international financial crisis and its consequences for Portugal and Spain led to an acceleration of the liberalization process, exerting pressure on energy companies to adopt an Iberian approach.

By 2011, after the financial turmoil and before the liberalization storm, the company decided to reshape itself with a new brand: human, innovative and sustainable; a brand that would light up the path the company would have to take - inwards in terms of internal culture, and outwards regarding service quality and efficiency (see Exhibit 3).

2 - The Energy Sector

2.1 Energy Industry

The energy industry could be divided into two major segments:

- Electricity
- Natural Gas

Both are utilities which were used as sources of energy and delivered directly to the consumers.

2.1.1 Electricity Sector

The supply chain of the electricity industry included different stages, each one playing its own role:

- Generation;
- Transport;
- Distribution;
- Commercialization

Generation

The production of electricity consisted in the construction and management of energy power plants. These were high value, long term investments, which required large amounts of capital, took a long time to build and a long time to reach the breakeven stage. Due to these facts, most generation projects depended on regulated or contracted purchase agreements. Energy companies agreed to build the power stations with state guarantees that a minimum revenue level would be achieved. This had been the standard business model for the sector.

However, the 2008 financial crisis and the following country debt crisis, led to a significant drop on electricity demand which created an excess offer in many industrialized countries. This allowed for the governments to shift the market operational risk to the companies by implementing free market policies on energy production.

This liberalization of the energy generation consisted in a daily energy market matching the offer and demand of energy on each hour, half an hour and, sometimes, quarter of an hour. This way companies had to adjust their production and pricing accordingly to the market conditions and from competitors offer.

Nevertheless, the rise of renewable energies, especially in Europe, represented an exception to this “no subventions” energy policies. To promote green generation,

countries had to subsidize the building of renewable energy power stations, namely wind and solar generators.

Despite this bet on clean energies, renewable energies were still expensive and did not offer sufficient guarantees of network stability, as they depended on external factors (such as stable wind, sunny days or sufficient river flow).

Thus, coal and natural gas had been the preferred choice of generation. And, although natural gas achieved higher efficiency rates (51%) on the modern combined cycle power plants¹, the 34% efficient rate of coal, had a higher value for money due to its low price, making it the most used electricity source in the world.

Transport

Transport consisted in the connection between power plants and the distribution areas. After being produced, electricity could not be stored and had to be injected in the energy grid by means of the high tension cables.

High tension cables were an optimized electricity transport system since it carried large amounts of energy with small losses, normally below 1%. To ensure that this process was the most efficient, transport was considered a natural monopoly, having a regulated tariff of passage defined by state entities and impacted on the consumer electricity bill.

Distribution

From the production centers, electricity was transported to the customers' regions where it had to be distributed. Distribution consisted in low tension cables which delivered the energy to each consumer point. If transport could be compared with the large arteries of the human body, transporting blood from the heart (power plant) to the different organs, distribution was then similar to the capillaries which then distributed the blood on needed areas. This comparison illustrates the role of the energy distribution, as a network of cables that allowed for every person to access electricity on the comfort of the home.

Like transport, distribution was considered a natural monopoly since it wouldn't be optimal to have several companies with their own distribution network. So, it was

¹ Combined cycle power plants also known as CCGT were state of the art gas energy generators which used a dual pressure boiler recovering part of the heat from the exiting gases making it more efficient in electricity production.

regulated with “use of network” prices, which, were also a cost of the system payed by every consumer.

Commercialization

Electricity was a service and so had to be contracted, sold and billed to the end customers. This was the commercialization (retail) role.

Commercialization was then the contact with the client, bridging production and consumption.

This end of the electricity chain was very similar to many other sectors like telecommunications and banking. In order to maximize the market efficiency and the prices optimization (in the consumers’ view), the sector had been liberalized under free competition.

This market setting was intended to promote competition, reduce margins and consumer prices. However, this had yet to prove effective as most regional markets had evolved to oligopolies with all the companies having similar pricing policies.

These four segments were generally present in all electric companies, since most of them were created to act as monopolists in their respective countries or regions of control. This way, they had to ensure the whole value chain, and vertical integration was the natural option.

Even within the recent liberalization, vertical integration was still a standard for these companies as it allowed for the hedging of the different businesses. Generation created the offer while commercialization provided the demand. Hence, by having both, companies minimized the risk of the operation.

Both the production and selling of energy were liberalized, therefore having higher risks and more volatile cash flows. Consequently, distribution balanced the portfolio of electricity companies by delivering a predictable, low risk, regulated revenue.

To ensure that there was no distortion of the market, transport was in most cases a separate entity and could not belong to any of the generation/commercialization companies.

2.1.2 Natural Gas Sector

Like the electricity sector, the natural gas had four segments:

- Sourcing
- Transmission
- Distribution
- Commercialization

Sourcing

The main distinction between electricity and natural gas was that natural gas wasn't generated. Natural gas was a commodity like oil, and consequently was extracted from the land and supplied to the market by the producer countries.

There were two ways to bring the gas from the producers to the import countries:

Pipeline – which were, as the name indicates, long pipes that brought the gas in high pressure from the supply to the delivery point. They were extremely efficient in distances up to 5.000 km.

Liquefied Natural Gas (LNG) – that consisted in condensing the natural gas into liquid form by means of low temperatures. The advantage of this method was that the gas in liquid state had 1/600th of the volume; this way it could be transported across long distances with significant cost efficiency.

After being received, the gas, was either injected into the network, stored in natural caves or special storing deposits. If it was supplied in LNG form it had to be first heated and aerated.

Transmission and Distribution

To be properly used, gas had to be transported from the storing facilities to the points of consumption. The gas transmission was made by means of pipelines, like those described in the sourcing section.

Transmission and distribution pipelines can be compared to the high tension and low tension electricity cables. In this case the distinctive characteristics were the pressure

and thickness of the pipes: distribution pipes had lower pressure, were smaller and spread around larger areas.

Commercialization

The commercialization of natural gas was similar to electricity: a utility service. They were so identical that most energy companies combined both products into one bundle offer.

2.2 Energy Markets

2.2.1. Electricity Markets

Despite the electricity sector's common characteristics across the world, the markets were far from homogenous.

The natural barriers allied with poor or close to none electric connection between most countries prevented the free circulation of electricity. This created price distortions and variances in the different markets.

Those discrepancies were justified mostly due to the production portfolio of each country as it had a severe impact on the final price.

Nations with nuclear power or with high natural gas or coal resources were able to produce electricity with much lower costs. A lower cost for megawatt/hour (MWh) would influence all the tariffs of transport and distribution, as well as the needs and values of production subsidies. Henceforth, the final price was highly influenced by the generation expenses.

There have been recent efforts for the creation of transnational markets. The Iberian market (MIBEL) was in an advanced stage.

2.2.2 Natural Gas Markets

Contrary to electricity, the natural gas market had been fairly homogeneous. However, it went through an unusual evolution in the past years.

Until 2010 it had a somehow global standardized price in the major gas hubs: American, European and Asian.

This was due to the globalization of the market, thanks to the two heavily disseminated transport alternatives, pipeline and liquefied natural gas (LNG), allowing for a distribution cost optimization and, thus, a flattening of the price variations.

After 2010 the global market was broken into the three mentioned continents. This break had two major reasons:

- 1) In Asia, the Fukushima (Japan) accident in March 2011 caused the shutdown of all nuclear power plants. Incapable of fulfilling its energy needs without nuclear power, Japan had to import huge quantities of natural gas. Pressure was on price and higher prices affected all Asia.
- 2) On the other hand, the shale gas discoveries and extraction developments on the United States considerably increased the offer in the American market. In addition, the gas export restrictions led to a substantial decrease on the price on Henry Hub².

Europe kept the price along the same trend and, although affected by the Japanese demand, it now had a price range in between the American and Asian hubs.

Meanwhile, Japan's imports had significantly decreased, but the gap between the continents remained and the futures markets expected it to withhold in the next few years.

2.3. Competitors

Due to the nature of the business, which required physical interconnections and a certain degree of proximity, competition had been low, usually with a company per designated area/region/country.

In the Portuguese and Spanish market, including the natural gas sector, and within the liberalization process, EDP faced some relevant competitors (see Exhibit 4).

2.4. Iberian Energy Market – MIBEL

The EU endeavor to establish a single European market also had repercussions on the more rigid energy sector. Due to the proximity between Spain and Portugal, European guidelines pushed both countries into the creation of a common market.

2.4.1. The Birth of MIBEL

² It is the name for the pricing point for natural gas futures contracts traded on the New York Mercantile Exchange (NYMEX) and the OTC swaps on Intercontinental Exchange (ICE).

This project had its starting point in 1998, although it only formally initiated in November 2001, when the baseline was established for the construction of the “Mercado Ibérico de Electricidade” also known as MIBEL. This project would create a unified market both in the production and in the commercialization of energy. Only transport and distribution would be maintained as natural monopolies, heavily regulated by the state agencies.

From this point on, many steps were taken in order to ensure the harmonization of all entities and players of both markets. One of those was the official agreement between Spain and Portugal in 2004, which defined the integration program and outlined the development of the project.

Another further defining moment was the 2006 extension of the cooperation into the natural gas segment, reinforcing both governments’ commitment to the project.

Finally, after several delays due to political and regulatory constraints, all these efforts culminated in the launch of MIBEL on July 1st 2007 with the perspective that, by having one common market, the costs and the general consumer energy bill would be reduced.

2.4.2. The Evolution of MIBEL

The takeoff of the MIBEL should have marked the start of a new liberalized paradigm. This was observed in the production sector. Both Spanish and Portuguese power plants started producing to a common energy pool, acting in a free market environment.

However, in the commercial sector, growth was slow and with very low adherence. The inertia to change made the market very stringent and static. Each company controlled its incumbency area and initially little to no switching from the regulated to the new liberalized market was observed.

In the advent of the financial crisis, Europe pressured the Iberian governments to implement policies to promote the migration of clients from the regulated to the liberalized market. This led to higher regulated tariffs which created major switching movements in the past years.

By 2013, already 40% of the consumers had moved into the liberalized market and it was expected that, by the end of 2017 the regulated market would only serve the economically vulnerable customers³.

³ Economical vulnerable customers would have a special above the market price tariff

2.4.3. MIBEL Consequences

The implementation of a unique market had led to significant challenges for the companies present in Iberia, exposing them to higher levels of operational risks.

On one hand these risks were on the production side, since now their energy would be sold at market prices with an increased volatility and, thus, less predictable future cash flows and lower ROI.

On the other hand, commercialization also had increased risks. Since most of these companies were operating in an incumbency zone and, by having their zone of interest open to competitors, they were now exposed to aggressive competition which meant loss of clients and lower selling margins.

Thereby the market players had to engage into defensive strategies on their natural zones, in order to keep market share, and aggressive actions outside their areas so that they could increase their client base.

In addition, scale now played a more important role as efficiency was a key factor to compete with lower margins. Thus, the MIBEL companies engaged in several merger and acquisition attempts.

However, most of the tries were rejected by the state entities due to competition issues and political options. Those attempts included Endesa and Iberdrola merger effort in 2000 which failed due to impositions of the Spanish government; Gas Natural's try to acquire Iberdrola in 2003 which was vetoed by the Spanish national energy commission; and Gas Natural's attempt to acquire Endesa in 2006 blocked by the Spanish court of competition due to its negative impact on the market.

Even so, some successful acquisitions occurred in this period as the Hidrocantábrico deal by EDP and the Gas Natural purchase of Union Fenosa in 2009.

2.5 Sector Evolution

The energy industry has suffered major changes in the last decades. Those changes had different drivers and different impacts in the profitability and structure of the market players.

2.5.1 Financial Crisis

The 2008 financial crisis and the ensuing debt crisis severely affected the energy companies.

The previous period of positive stable growth of energy demand collapsed since the crisis caused many corporate clients to default. This demand decrease not only penalized the returns, due to lower energy sales, but also ruined the profitability of the investments made in the previous years, mainly in electricity production.

In addition, the excess of energy offer, the specificity of this industry, and the financing needs of the governments led to an increase in taxes on both the companies' profits and the energy's fixed assets.

Furthermore, the crisis also impacted debt costs. Energy companies had a large portfolio of assets and high value investments, requiring large amounts of debt to maintain those assets and invest in new ones. The costs associated to these operations (debt emission and interest) were correlated with the company and country rating. As the crisis had devastating consequences in Europe, especially in the southern countries, the rating of both companies and countries fell significantly, leading to an increase of debt expenditures.

2.5.2. Environmental Awareness

Environmentalism had been a rising force as the impact of global warming was studied in more depth and its dangers exposed to the general public.

The growing concern and exposure led to the international Kyoto Protocol in 1997, binding states to the commitment of reduction of greenhouse gases emissions. The protocol was made effective in 2005 and ended in 2012. Although it had yet to be renewed by 2013, its implications during the applicable years are still felt in all the CO₂ issuers.

In Europe, this was visible through the EU emissions trade system (EU ETS), that created a cap on the total emissions allowed in the 28 EU countries plus the 3 EEA⁴-EFTA⁵ states. The EU ETS affected all industries, including energy, which emitted greenhouse gases.

Each year companies received emission allowances which could be traded according to each other's needs. Companies could increase their emission allowances by buying a limited amount of international credits from emission saving projects around the world. Having both these options they had to ensure that, at the end of each year, they would have enough allowances to cover for all the emissions or heavy fines would be imposed.

⁴ European Economic Area

⁵ European Free Trade Association

The limit of emissions was reduced over time in order for the global emissions to be reduced year after year. The pricing of emission created a financial value for the savings. This led to an increase in efficiency on the energy production and carved the path for non-polluting energy sources.

Consequently, taking in consideration the financial benefit and how pollution was negatively perceived, energy players started investing in renewable energies. This change of paradigm, endorsed and partially supported by the governments, had been a major focus in recent years.

3 - The Dark Clouds of Liberalization

The liberalization of a closed monopoly market brought a disruption to the status quo with a negative impact to the monopolist company, representing a huge threat to its prevailing model of business and a challenge to its adaptation capability.

The Portuguese energy liberalization was no exception and EDP, as the incumbent company, was the one with more to lose in the process: it came from a starting point of 100% market share where it could only decrease.

Furthermore, as previously stated, the crisis made the EU accelerate the process by pressuring the regulators and the government.

The process to create a new commercialization company was made easy and simple. To fasten the liberalization movement, entry barriers were reduced to the minimum. Anyone could ask for a permit to sell electricity or gas and become an energy commercial company. This way, not only the competition rapidly increased, but also large clients (mainly industrial ones) had the opportunity to organize themselves, buy a commercial license and engage directly with the distributor, cutting the intermediates and eliminating the commercial margin for the energy companies.

In addition, EDP, as a utility company, offered a non-differentiable product – electricity. Electric power didn't come in many shapes and forms, it was the same either coming from company A or company B, either from a hydro-dam in Portugal or a nuclear plant in Spain. It entered our houses discretely and people would only notice it if it started to fail. It was an indispensable need, and people just wanted it to have a continuous supply. This was a real threat to the company. When selling a non-differentiable basic need, price was a key factor. This rationale represented a serious hazard to the operational

cash flows of EDP as, adding up to the loss of market share to the new competitors in the market, it could trigger a price war that would seriously damage margins.

But the menace wasn't exclusively on the commercial side. The distribution was also on check. To make sure that all electric companies had equal ground, the distribution business had to be completely separated and independent to guarantee that no possible advantage would come. EDP group already had the distribution and commercial business separated into two different companies: EDP Distribuição and EDP Comercial, for the distribution and commercialization respectively. Despite this, they had common shared services, intertwined processes and direct communication channels. This had to be severed, causing synergies to be lost, processes separated and some efficiency sacrificed, in order to give the proper balance to the system. If somehow that independence and fairness was questioned, the EDP group could lose the distribution which was a reliable, safe and predictable cash flow source.

Beside all this external conundrum, there was an internal issue: for as long as the company existed it had acted as the one and only supplier and so the one and only option the clients had. Being electricity an essential need, customers had no choice but EDP, like it or not. This made the company's mentality to be more product focused rather than client oriented: the key issue was to expand the network, take care of the malfunctions, respect the quality patterns, guarantee a continuously supply and make sure the clients paid. Client service was not a priority.

EDP's task was not easy. It had to devise not only a strategy plan to address the new competition, defending its position and minimizing the market share loss, but also it had to rethink the way it approached the business and served clients.

The panorama was not pleasant, there were dark clouds approaching and time was of the essence.

4 - Seizing the Opportunity the EDP Way

Standing still would have led EDP to be swallowed by the incoming change and had the potential to be catastrophic.

Management decided the company had to leverage its strengths and turn the threat of liberalization into an opportunity; an opportunity to modernize the company and to find new ways to profit.

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Looking at the telecommunications sector example, which was a decade ahead, and on a more mature state of liberalization, EDP engaged on a more commercial approach. For that the company focused on three different axes: brand awareness, product differentiation and client service.

To increase awareness and have a more commercial attitude it needed to further involve the clients and to reinforce and fortify brand recognition. EDP chose to do so through the investment in marketing, by endorsing social actions and through the promotion of innovation in the energy sector.

The marketing campaigns were very aggressive and involved strong partnerships such as the one developed with the Portuguese retail giant “Continente”, whose notoriety and client base helped to give a strong boost to the EDP liberalized market share. (see Exhibit 5)

EDP showed its social responsibility side by supporting both solidarity actions, sponsoring more than 142 projects presented by non-profit institutions, and cultural activities, through scholarships and prizemoney to young aspiring artists.

EDP’s Innovation department funded several startups and out of the box ventures, such as the well-known Wind Float project (see Exhibit 6) launched in December 2011 which was an offshore non-fixed wind turbine, a one of a kind project whose sustainability wasn’t yet clear but that served the purpose to make a statement to the market that EDP was an innovative, “green” and engaged company.

A strong commercial campaign, a recognized social footmark and a leading role on innovative services were all part of the process by creating an emotional bond with customers. But management thought that more was needed.

EDP had an extra challenge: how to differentiate something as non-differentiable as electricity? The way to go was to reinforce the energy offer with some complementary value added services.

So, after a successful experience in the Spanish market, EDP implemented the service “Funciona” (see Exhibit 7) – an electric and gas installation revision which was complemented with an insurance for any broken equipment. This way EDP would be able to:

1. Charge an extra monthly fee – increasing the client margin
2. Bind the customer in annual contracts – giving a higher predictability of client payments

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3. Promote customer satisfaction – reducing the probability of switching to the competitors.

Another service made available was “Fatura Segura” which consisted on a percentage of the monthly billing going to an insurance premium in case, for some external reason, the client became unable to fulfill its duties. EDP was able to give a supplement to the service provided, showing social conscience while reducing the risk of client default. Following the lead of “Funciona” and “Fatura Segura”, EDP continued to increase its portfolio of services with innovative, niche and costly offers. Services such as “re:dy”⁶ or “Bombas de calor”⁷ (see Exhibit 8) were created with the objective to not only capture higher margins but also to reinforce the statement that EDP was a state of the art company.

All this would send an external message and open the company to new business. But EDP would still need to change internally. If the organization was to adjust the focus on what mattered in the end: the client. Something that required mentalities, habits and routines to shift.

It was with all this in mind that Miguel Stilwell D’Andrade made his way to the council board meeting. The path was well defined but the organization still needed to truly engage on exceeding the clients’ expectations.

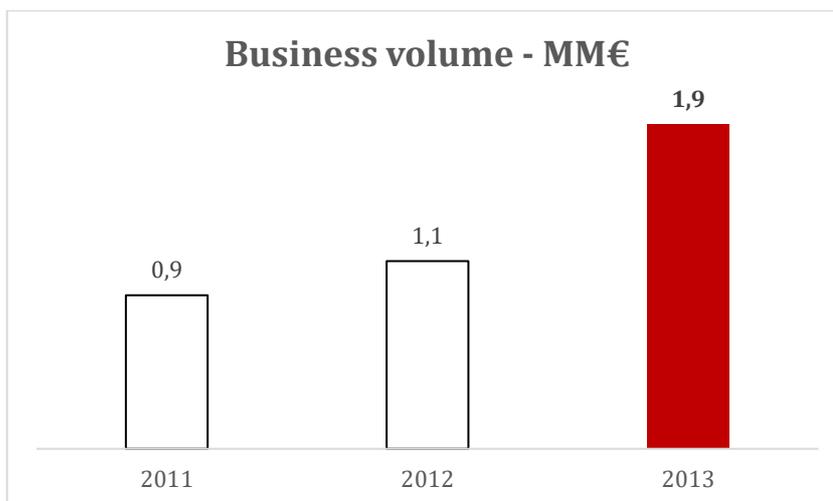
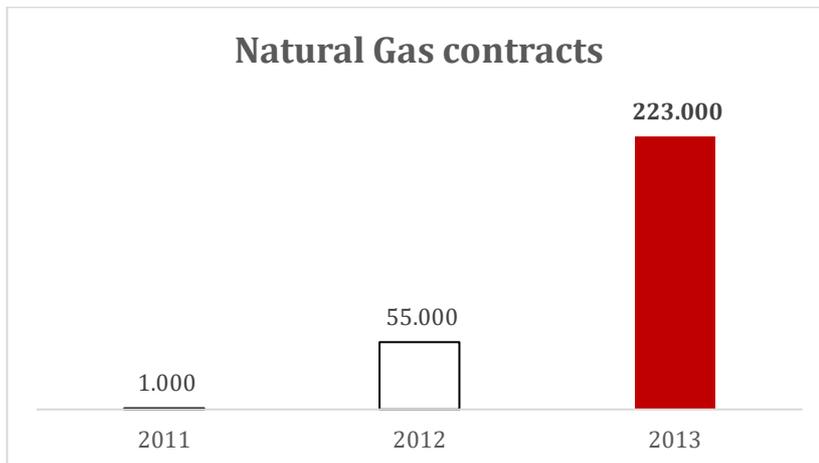
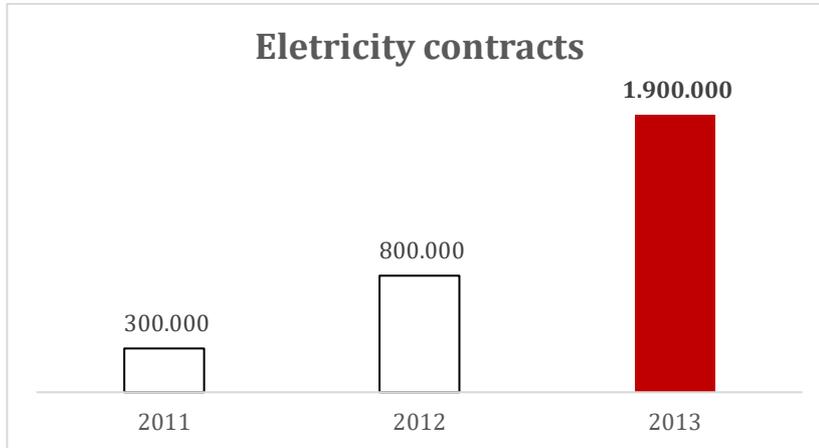
As he opened the meeting room door his mind became clearer and clearer: EDP needed to make the client the center of everything. For that an ambitious program was needed. A program that would include cultural initiatives and client service transversal projects. All this to ensure that EDP’s excellent service would carve the path to the ultimate goal: to make EDP the favorite company of the Portuguese people.

⁶ a house electric management solution

⁷ a solution to efficiently heat the water using solar energy

Exhibits

Exhibit 1 – EDP Comercial results 2011, 2012, 2013



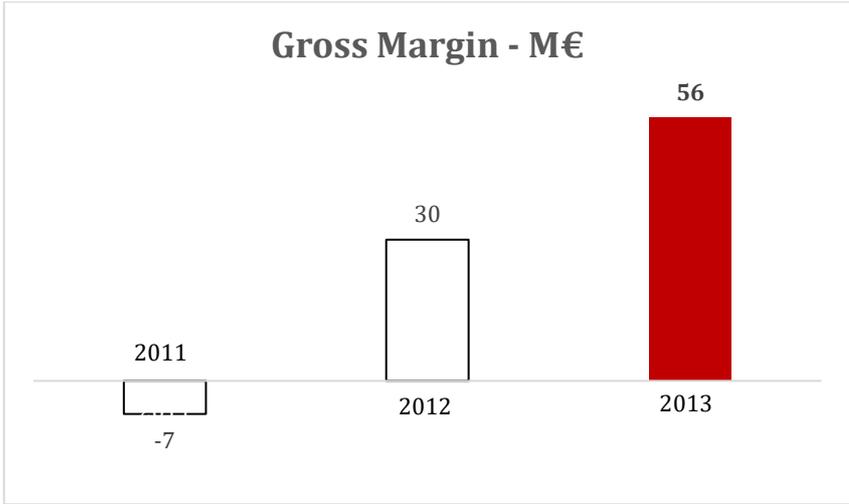


Exhibit 2 – Electricity Liberalization

	1999	1 January, 2002	26 February, 2004	4 September, 2006
Eligible Market	MAT, AT, MT, Consumption 9G Wh / year	MAT, AT, MT ALL	BTE	BTN
Clients (#)	2000	21.000	52.100	6 million
Volume (TWh)	8,1	19,9	22,2	45,4

ERSE

Exhibit 3 – EDP Logo Evolution



EDP

Exhibit 4 – EDP Competitors

4.1. Galp

Galp was a Portuguese company created in 1999 from the merging of all the oil and gas companies, after the restructuring of the national electric sector.

The brand Galp itself already existed since 1976, belonging to Petrogal, one of the companies that was merged into the consortium.

The group was responsible for all the refining, distribution and commercialization of oil products, like gasoline and diesel, and was also the incumbent for the sourcing, distribution and commercialization of the natural gas.

With the liberalization of the energy markets, Galp and EDP became competitors as the watertight sectors where they both acted became intertwined: EDP could now commercialize natural gas and Galp was allowed to sell electricity in the market.

Since the joined billing of services had the potential to increase the margin per client, through synergies, both companies had the natural incentive to compete heads on: Galp in order to maintain its gas customers, which could switch to EDP, and to gain that extra margin by selling electricity to those same clients, and EDP the other way around for the exact same reasons.

And so, by the end of 2013 Galp had an electric market share of 5.1%, being number three in terms of number of clients, and showing an increased interest in fighting for this tandem market.

4.2. Endesa

Endesa was a Spanish group created in 1983 after the original Endesa electric company, born in 1944, acquired several other Spanish electric companies. It had a strong worldwide presence with operations in several countries where EDP also acted, such as Portugal, Spain and Brazil.

After a failed merger try and several unsuccessful buyout attempts from other Spanish companies and from German's E-ON, Endesa was eventually bought by the Italian energy company Enel in 2008.

With the creation of the Iberian market, Endesa invested strongly in expanding its client base, achieving a sturdy presence in the Portuguese market. With 21% of the total electricity volume sold and 7.2% of the market share of residential clients supplied, it

was considered one of the strongest and most fierce competitors with more than twice the market cap of EDP.

4.3. Iberdrola

Iberdrola was the largest energy company in Iberia, with twice the market cap of Endesa and four times EDPs'.

Its origins date back to 1901 with the creation of Hidroeléctrica Iberica in Spain, one of the companies that was part of Hidroeléctrica Española, whose merge with Iberduero, in 1992, gave birth to Iberdrola, a group born with a strong focus on internationalization. The willingness to invest abroad was materialized with the entrance on the Latin-American market, namely Mexico and Brazil, in 1995. In 2007 the company entered the Scottish and US markets.

Furthermore, in addition to the international expansion, Iberdrola saw the future of the sector on renewable energies, investing strongly on wind generators.

Iberdrola entry strategy in the Portuguese market was focused on the high margin clients. So it targeted the top industrial customers managing to achieve 21.3% of the energy sold despite having just 2.8% of the market share of residential clients.

The company didn't seem to show much interest on the low margin residential clients.

4.4. Gas Natural Fenosa

The third biggest energy player in Spain, and the first to integrate electricity and gas, was created in 2008, through the merge between the Catalan company Gas Natural and the Galicia and Madrid corporation Unión Fenosa.

The new group not only covered a large area of Spain, from Coruña to Barcelona, but also had a strong presence in the Spanish speaking Latin America, namely Argentina, Chile, Colombia, Guatemala and Costa Rica.

Due to this strong international presence and a large incumbent area in Spain, Gas Natural Fenosa attention and priority had not been the Portuguese market, having a marginal market share of only 0.7 % of clients and 4.1% of energy sold.

Exhibit 5 – EDP Continente Campaign



EDP



Continente

Exhibit 6 – Wind Float Project



Principle power

Exhibit 7 – “Funciona” Service

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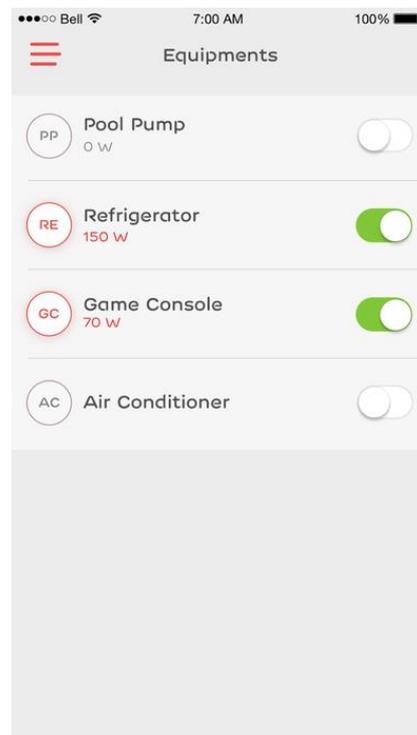
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Exhibit 8 – “Re:dy” and “Bomba de Calor” Products



EDP