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EDP Case Study: the emergence of a low cost company

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Abstract

The energy market used to be heavily dominated by conventional energy trading processes, with a high level of Government control, and characterized by a lack of competition in the sector. However, the European Union has been striving to counter this trend, by progressively deregulating the market, attempting to make the energy sector cost efficient through the introduction of competition among the players.

EDP, the largest producer, distributor and supplier of electricity in Portugal, and one of the largest gas distributors in the Iberian Peninsula, has been facing new challenges after the liberalization of the energy market, as it used to be a monopoly in the energy sector. The opening for new rivals led EDP to adjust its positioning strategy in order to maintain its leadership. However, *EDP Comercial*, the EDP Group's company which is competing in the retail energy market, is still the market leader despite the competitiveness in the sector.

A new energy rival with new approaches unexpectedly came to Portugal in order to beat the market leader by offering extremely low prices. The low cost competitor presents a great challenge, since it could potentially 'steal' much of EDP's market share. To face the new opponent, EDP has two options: either by beneficiating EDP's brand name, and offering a line extension, or by launching an independent brand. This case study provides a strategy analysis for each option, studying the consumer behavior and competitive environment, and thereby helping students to recommend the best approach for EDP.

Resumo

O mercado de energia era fortemente dominado por processos de comercialização de energia convencionais, com um alto nível de controlo governamental, caracterizado pela ausência de competitividade. No entanto, a União Europeia tem-se esforçado para contrariar esta tendência, desregulamentando progressivamente o mercado, com o objectivo de tornar sector energético mais eficiente através da introdução da concorrência.

EDP, a maior produtora, distribuidora e fornecedora de electricidade em Portugal, e uma das maiores distribuidoras de gás na Península Ibérica, enfrentou um novo desafio após a liberalização do mercado da energia, uma vez que esta empresa monopolizava todo o sector.

A abertura de novos rivais levou a EDP a ajustar a sua estratégia de posicionamento para manter a sua liderança. No entanto, a EDP Comercial, empresa do Grupo EDP que está no mercado retalhista de energia, continua a ser líder do mercado apesar da competitividade no sector.

Inesperadamente, um novo rival de energia com diferentes abordagens ao consumidor chegou a Portugal, a fim de combater o líder de mercado com preços extremamente baixos. O adversário de baixo custo será um grande desafio, uma vez que pode roubar muito da quota de mercado da EDP. Para enfrentar o novo adversário, a EDP tem duas opções: alavancar a marca EDP, lançando uma extensão do produto, ou criar uma marca independente. Este *case study* fornece uma análise de cada estratégia, estudando o comportamento do consumidor e da competitividade no sector, ajudando assim os alunos a recomendar a melhor reacção que a EDP deve ter.

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1. CASE STUDY

1.1 Introduction

Since the liberalization of the energy market, *EDP Comercial* has put all its marketing efforts in remaining competitive in a market where the difference in the core product between competitors is very small, and a good relationship might be a potential key to success. The company continues to be the Portuguese market leader in the energy sector despite the existing fierce competition.

However, the emergence of a low cost company in the energy market with different characteristics could undermine the EDP leading position. Potentially, customers might leave their current energy retailer and switch to the new one which offer the lowest price in the market.

This case study aims to understand what are the possible strategies for EDP to react to a potential low-cost rival. This response will be limited to two options in order to get a deeper knowledge of what should be done: launching a low-cost company, independent from EDP, as a fighting brand or extend the product line and offer a new low cost option that would benefit from EDP's brand name.

Dr. Eduardo Dias Pereira, marketing Director B2C of EDP Comercial since 2012, will be responsible for deciding which should be the final EDP reaction. To do so, he first decided to get an overview of the market liberalization in order to understand what allowed the appearance of new energy retailers in the last years. Furthermore, an analysis of what type of strategies are the current retailers pursuing was conducted and its current offers, so as to find out what is happening in the energy market. On the other hand, it was crucial to understand what customers most value on their energy retailer and what would be their reaction when they face a low cost energy company. Lastly, Dr. Pereira analyzed if, in fact, EDP should worry about its rival and what should be done by the company towards avoiding big losses.

1.2 Energy leads the “team”

Surprisingly or not, energy is the most valuable asset in the Portuguese economy. The energy sector (electricity, gas, water and oil) earned 39% of the total turnover out of the 1000 biggest Portuguese companies, generating 37 billion euros in revenues in 2014¹. From these 1000, 45 are described as Electricity, Water and Gas, and 25 as oil companies, resulting in the highest average company value compared to any other sector. Indeed, it is also from this field that the 10 most outstanding Portuguese companies arise from: Galp Energia, with Petrogal in the first place, and Galp Gás in sixth; and the EDP Group with four other companies in the lead (EDP Serviços Universais in fourth place, EDP Distribution in fifth, and EDP Comercial in tenth place (**Exhibit 2**). The EDP Group led by Antonio Mexia is one of the most influential groups in the Iberian Peninsula.

1.3 EDP Brand Background

Over the last fifteen years, EDP has gone through different processes, from privatization to internationalization, continually facing challenges up until today. EDP is currently a public-limited company, where state and other public entities hold a minority share in its capital. It is the largest producer, distributor and supplier of electricity in Portugal, and one of the largest gas distributors in the Iberian Peninsula.² EDP is also one of the main Eolic energy operators, being present in 14 countries, with approximately 9.7 million electric power customers, 1.4 million gas customers, and about 12 thousand employees worldwide.³

In the beginning of the 20th Century, Portugal was a heavily dependent country on British coal imports, what was called *hulha negra*⁴. Due to regular shortages of power supply during the war, a new solution emerged, taking advantage of the rivers, called the *hulha branca*. One of the strategy’s premises was to allow the exploitation of the main rivers through hydro centrals, created by the Portuguese State. The main objective was to increase the use of the country’s own resources, and reduce energy dependence.

¹ Marcelino,I.(2015). “1000 maiores empresas”. Diário Económico [Online]. (Updated: 2 Dec 2016). Available at: <http://economico.sapo.pt> [Accessed: 2 Feb 2016].

² Ribeiro,Vitor (2015) “Relatório e contas 2015”. EDP – Energias de Portugal”. KPMG[Online]. (Updated 3 March 2016). Available at: http://www.edp.pt/pt/investidores/publicacoes/relatorioecontas/2015/Relatrios%202015/RC2015_PT_CMVM.pdf [Accessed:10 March 2016]

³ Ibid.

⁴ Sequeira, Ines(2012). “Na pré-história da EDP e da REN, existiam 14 companhias”. Público [Online]. (Updated: 20 Feb. 2012). Available at: <http://www.publico.pt/temas/jornal/na-prehistoria-da-edp-e-da-ren-existiam-14-companhias-e-um-pais-virado-para-a-hulha-branca-24024930>. [Accessed: 23 Dec. 2015]

In 1945, *hulha branca*, started to gain strength and several hydro companies began to emerge. In order to take advantage of these new energy sources, it was required to invest in electricity distribution and transportation: in 1947, the *Companhia Nacional de Electricidade* (CNE) was created. Later, in 1969, the big hydro companies, including CNE, merged and formed ***Empresa Portuguesa de Electricidade***⁵, which remains in charge of the production and energy distribution.

As a result of a nationalization and merger of the leading companies in the Electric Portuguese sector in 1978, ***EDP Electricidade de Portugal*** emerged⁶. It was constituted as a vertical integrated company, whose primary objective was to establish and exploit the public service production, transportation and distribution of electric energy throughout the country. As the brand icon shows, EDP was purely focused on electricity.

Figure 1 – EDP brand history



Source: EDP's official website, <www.edp.pt>

“In the nineties, the Portuguese government decided to change the legal status of the EDP, *Electricidade de Portugal*”⁷, which ceased to be a public entity, to become a public limited company capital, leading to a change in the brand icon in order to fully disassociate it from the old brand. Linked to change and dynamism, the symbol represented the company's three business areas: production, transportation and distribution of energy. Despite this change, the brand was perceived as "expensive", "abusive" and "distant"⁸

Concerned about its image, the EDP Group put forth a great rebranding and repositioning in 2004. The new identity appeared with a forthcoming and simple smile in order to convey a more transparent EDP, as well as a closer relationship with its stakeholders.

⁵ Pederson, J.P. (2001) *International directory of company histories: Volume 38*. 38th edn. Detroit: St James Press. p. 108-117. [Accessed: 6 Feb. 2016]

⁶ Pederson, J.P. (2001)

⁷ Pederson, J.P. (2001)

⁸ EDP (2009). ‘História da Marca’. Available at: <https://www.edp.pt/pt/aedp/sobreaedp/marcaEDP/Pages/HistoriaMarca.aspx> [Accessed: 3 December 2015]

The red symbolizes the passion, differentiation, emotion, and heat⁹. The group also changed the slogan from “ Electricidade de Portugal” (Portugal Electricity) to “ Energias de Portugal” (Portugal Energies), since the business had already covered other activities in the sector, like gas.

In 2006, “Sinta a nossa energia” (Feel our energy) was the next step, after the market liberalization. This was when the company aimed to be even more transparent, and attempted to establish a stronger relationship with its customers, adding a future vision for the company.

In 2009, it reflected a more enthusiastic and innovative brand, “Viva a nossa energia” (Live our energy) - this acted as an invitation to a further involvement in an experience through energy.

Thereafter, the brand entered a new phase, focusing on values of humanity, innovation and sustainability, arguing that those values were timeless and universal, independent of product changes or competitiveness in the market, becoming more flexible and adaptable in each context.

1.4 Changing games

“Europe has been engaged in a debate aimed to build an integrated and competitive energy market since the early 1990s”.¹⁰ Europe, which is highly dependent on oil and gas from external sources, has been trying to build an integrated and competitive energy market, in an attempt to change the previous national energy models controlled by a single prevailing national actor.

The motivation for the energy market liberalization was driven, mostly, by economic reasons to make the energy sector cost-efficient through the introduction of competition among the players¹¹. According to José Durão Barroso, former President of the European Commission, the energy strategy of the EU is composed of three pillars: securing an expanding energy supply from both domestic and foreign sources; developing a more competitive internal energy market and finally, encouraging and supporting environmental protection and development of clean and renewable energy sources.

⁹ Ibid.

¹⁰ Karan, M. and Kazdağlı, H. (2011) *Financial Aspects in Energy*. Springer Berlin Heidelberg. pp. 11-32

¹¹ Sioshansi, F.P. (2016) ‘Electricity market reform and ‘reform of the reforms’, *Int. J. Global Energy Issues*, pp. 2–34

The condition undermines the control of the implicit market, previously regulated as a monopoly, and almost state-owned, leading EDP Group towards a strategic repositioning that prepares the company for the entry of competitors in the market.

The energy market was heavily dominated by conventional energy trading processes. These included a high level of Government control, the absence of competition in the sector, the existence of barriers to enter the high market, and a lack of transparent pricing and regulation¹². The energy market is very different from other industries, with distinctive characteristics: the product cannot be differentiated; in terms of quality and regarding electricity, it cannot be stored, and its cost depends mainly on the way it is produced. Energy has an inelastic demand, and has almost no substitutes, which implies that suppliers must be sure that they can deliver the energy required to satisfy the customers' needs. Due to all these factors, the energy sector has been mainly controlled by the state in most European countries.

Before the liberalization, the entire energy value chain, from production to sale, was regulated by the State.¹³ It was responsible for setting up the sales' prices annually, and consequently the rate charged to the customers by the supplier/retailer.

Figure 2 – Value chain before the liberalization (red square means it is regulated)



Source: *A Glance at the European Energy Market Liberalization*, Delia Vasilica Rotaru, 2013

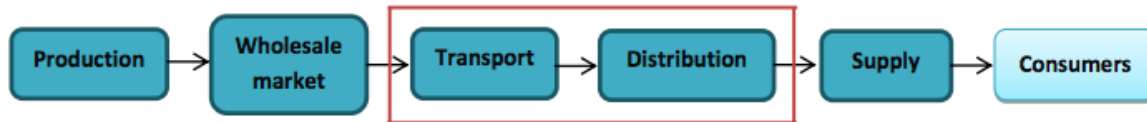
The liberalization of the energy market deliberated by the European Commission stems from the creation of the internal energy market: developing energy-efficient infrastructures and a more competitive environment, avoiding a high concentration of markets. Therefore, production and supply (retail) were separated; measures to prevent big market shares of one single player were applied; and an increase of competition in the retail market was promoted¹⁴. The transport and distribution – as natural monopolies due to high investments – are still activities to a public interest, being required a payment of the regulated tariffs. The wholesale market allowed multiple suppliers to freely trade energy, which led to a new supplier entrance:

¹² Rotaru, D. (2013) 'A Glance at the European Energy Market Liberalization', CES Working Papers, 5(1)(1), pp. 100–110.

¹³ It was regulated by ERSE, Energy Services Regulation Authority.

¹⁴ Grimston, M.(2004) "Liberalised Power Markets, World Nuclear Association Annual Symposium".[Online](Updated: 10 Sep 2004). Available at :<http://www.worldnuclear.org/sym/2004/pdf/grimston.pdf>. [Accessed: 3 Feb. 2016]

Figure 3 – Value chain after the liberalization (red square means it still regulated)



Source: *A Glance at the European Energy Market Liberalization*, Delia Vasilica Rotaru, 2013

Following the liberalization, EDP Comercial was created, which is the EDP GROUP's Company that operates in the free energy market.

As in most European countries, the energy market liberalization in Portugal was carried out in stages, starting in 2006 by including customers from higher consumption and higher voltage levels. In 2012, the new panorama in the energy sector entered its full phase, where almost all the electricity and gas customers were able to choose their energy providers freely. Thenceforth, customers were forced to change their energy suppliers in the liberal market, in order to avoid paying a Transitional rate: a rate set quarterly by ERSE, which applies to consumers who have not switched to a supplier in the market regime yet.

The market is considered liberalized when multiple operators can compete freely in prices and trade conditions, following the rules of competition¹⁵, the general law, and regulations. It presented new opportunities, requiring, however, a greater need of information for consumers to be able to make conscious and informed choices that would match their interests. The opening of the energy market intended to increase competition between operators, reflecting the level of prices and improving quality services, and consequently bring about a greater consumer satisfaction.

For the energy trading companies' (electricity and gas) sector, liberalization requires a new approach to consumers and competitors, by applying an extensive and comprehensive understanding of its effects on the market. The main advantage of this environment is the ability to negotiate customized products with deadlines, volumes, prices and adjustments of indices that meet the buyer's expectations. Without any changing costs, customers can easily switch from one energy supplier to another if they do not agree with the new conditions.

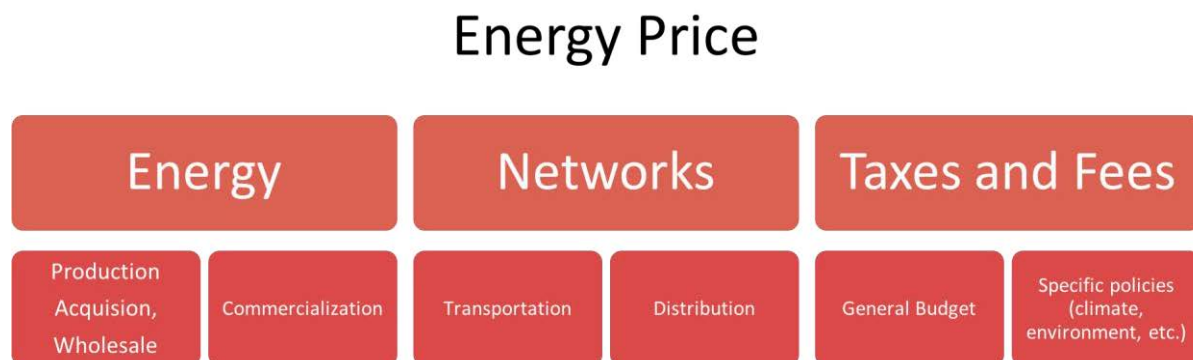
The liberalized market approach is more relevant now that there are new competitors in the market, and a significant number of customers are being transferred from the regulated market to the liberalized market. The free market has reached a cumulative number of about 4,187 million customers in electricity in August of 2015, and the active customers in the gas

¹⁵ ERSE (2013) Extinção das tarifas reguladas. Available at: <http://www.erse.pt/consumidor/Documents/Extin%C3%A7%C3%A3o%20Tarifas/FAQ-%20extin%C3%A7%C3%A3o%20das%20tarifas.pdf> [Accessed: 13 Jan. 2016]

market increased to around 924 thousand in the second trimester of 2015. Since last year, the number of consumers in the free market in both sectors grew approximately 36%¹⁶.

1.5 Energy invoice

Figure 4 – Energy invoice composition



Source: Graphics created by the Case writer, based on a communication from the Commission to the European Parliament. The European Economic and Social Committee and the Committee of the Regions, Brussels, 29 Jan 2014

The prices of energy for European consumers have been increasing sharply since 2010 (24,6%, especially in Portugal, where the Euro per Kilowatt almost doubled since that date (**Exhibit 1**). The significant difference between Portugal and the European Union regarding energy prices can be explained by several reasons besides the energy price itself.

The energy bill has included the three pillars: energy, networks, taxes and fees (as can be seen in the figure above). The first pillar is the one that is liberalized, so market are not subjected to regulated tariffs, which means that wholesalers and retailers may freely negotiate energy prices.

The wholesale electricity price has suffered a reduction due to the separation of electricity production and operation of the system. The increase of power generation capacity with low operating costs (such as wind and solar energy, to join the existing nuclear power and

¹⁶ ERSE – Entidade Reguladora dos Serviços Energéticos(2015). “Resumo Informativo Mercado Liberalizado Electricidade 2015” (Updated: Agu. 2015) [Accessed: 10 Dec. 2015]

ERSE – Entidade Reguladora dos Serviços Energéticos(2015). “Resumo Informativo Mercado Liberalizado Gás, 2º trimestre 2015” (Updated: Agu. 2015) [Accessed: 10 Dec. 2015]

hydropower) also helped the price decreased.¹⁷ The wholesale gas price, being indexed directly to oil price, becomes very unpredictable, preventing those who sell gas to adjust to demand.¹⁸

However, the fall in wholesale prices does not result in a reduction of the 'energy' component in retail prices. The result could be supported by the weak competition and by the increase of the network prices, taxes and fees.

Taxes and fees are used for multiple purposes. For instance, to obtain general revenues (such as health and education), or to internalize the external costs of production and energy consumption, and to finance specific policies in the energy field, promoting energy efficiency and renewable energy production. Indeed, added to retail prices, the cost of renewable energies represents 6% of the average electricity price for households the EU12¹⁹

The network access, which includes transportation and distribution costs, weighing heavily on energy bill. It is conditioned by national practices of tariff regulation and allocation of network costs, as it also differs from one country to another due to physical differences in networks and in the efficiency of its operation systems.

In 2015, 43% of electricity prices resulted from the energy itself, 31% from the electricity network, and 26% from taxes and fees²⁰. This price composition hampers wholesalers and retailers to reduce the electricity price, since more than 50% is out of their control.

However, energy customers still consider that the price of energy is overvalued by the retailers (**Exhibit 20**). Yet, this figure can be both true and ambiguous. True because, according to Bernstein,²¹ the gap between the expensive and cheaper tariff is wise, ranging around 23%. Ambiguous because the energy retail business has an operation margin of about 5-6%²². Nonetheless, “public fear and ignorance have been a short-term boon for many retailers, which have been able to play to these fears and encourage consumers onto capped

¹⁷ European Commission (2014). ‘Energy prices and costs in Europe’: Communication from the commission to the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Brussels, 29 Jan 2014. [Online](Available at: eur-lex.europa.eu/resource.html?uri=cellar:d252db5d-8102-478a-b2ce-5147c62e9467.0001.02/DOC_1&format=PDF) [Accessed: 8 Feb. 2016]

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ EDP Comercial(2016). “Composição dos preços a Electricidade”. [Online]. Available at: <https://energia.edp.pt/corporate/apoio-cliente/composicao-precos-eletricidade>. [Accessed: 28 Jan.. 2016]

²¹ Richard, B. (2016). ‘UK energy: To the switcher the spoils’. Financial Times Limited (2016) Available at: <http://bawire.com/uk-energy-to-the-switcher-the-spoils> (Accessed: 5 March 2016).

²² Ibid.

price products”²³, increasing their margins besides the limitation of the energy invoice composition.

1.6 Which is the cheapest one?

“Energy brands face problems such as the unemotional nature of the utility sector and hassled consumers trying to choose from a glut of suppliers”²⁴

EDP Comercial is competing with its rivals in different segments: domestic consumers, big consumers, industrials and small businesses. This competing environment influences how the energy companies approach its customers, and, more precisely, its domestic consumers, engaging in a fierce fight for differentiation to gain market share.

The energy market in Portugal is highly concentrated, being more pronounced in the electric sector than in the gas sector, yet still high in both. Regarding the electricity sector, EDP remains the leader, holding 80,5% of the domestic consumers on electricity, followed by Galp with 5,6%, and Iberdrola with 4,5%²⁵ (**Exhibit 5**). The electricity sector, according to the Herfindahl-Hirschman Index, has a value of 6559, which can almost be considered a monopoly. Concerning the gas sector, the market leader is again EDP, with 40% of market share of the domestic consumers, Galp with 29% and Gold Energy with 25%²⁶ (**Exhibit 6**).

Aside from shares, being the market leader is not equivalent to being the cheapest option. In fact, what customer’s value most after price is transparency in invoice, besides trust, and simplicity in bureaucracy (**Exhibit 18**). The reasons they provide for not changing their current retailers are habit, high switching costs, and a belief that the price gap is not enough to make them want to change (**Exhibit 19**).

In order to analyze the price offers within the energy market, Pereira based his calculations on tariffs with an online subscription, online invoice and direct debit, thereby obtaining the lowest values that customers could pay for their electricity bill regarding each retailer. On electricity bills, the demanded power (€/day) is included, which allows consumers to have several connected devices, as well as the amount of electricity consumed (€/kWh).

²³ Ibid.

²⁴ Grimmer, G. and Moseley, H. (2008) ‘Are energy brands justified in increasing marketing spend’, The Marketing Society Forum. [Online] [Accessed:13 Feb. 2016]

²⁵ ERSE – Entidade Reguladora dos Serviços Energéticos(2015). “Resumo Informativo Mercado Liberalizado Electricidade 2015” (Updated: Agu. 2015) [Accessed: 10 Dec. 2015]

²⁶ ERSE – Entidade Reguladora dos Serviços Energéticos(2015). “Resumo Informativo Mercado Liberalizado Gás, 2º trimestre 2015” (Updated: Agu. 2015) [Accessed: 10 Dec. 2015]

Depending on demanded power,²⁷ customers pay a fixed amount per day plus their energy consumed. Since each consumer has his/her own light power and consumption, it becomes exceptionally difficult to compare prices between the electricity retailers. Bearing that in mind, Dr Pereira decided to look for the most common demanded power -6,9 kWh- for an average family in Portugal²⁸ in order to compare the cheapest deals on the market:

Table 1 – Available retailer’s offers regarding electricity

	<i>Fixed Term (€/day)</i>	<i>“Electricity” (€/kWh)</i>
<i>EDP Casa Click</i>	<i>0,2873</i>	<i>0,1539</i>
<i>Endesa Tarifa Luz</i>	<i>0,2827</i>	<i>0,1617</i>
<i>Galp Plano Energia</i>	<i>0,1827</i>	<i>0,1592</i>
<i>Iberdrola Casa Conecta</i>	<i>0,2962</i>	<i>0,1533</i>
<i>YELCE</i>	<i>0,2468</i>	<i>0,1471</i>

Source: Table created by Case writer based on data ERSE (2015). “Preços de referência do mercado liberalizado 2015” (Updated: Agu. 2015) [Accessed: 10 Dec. 2015]

The gas bill depends on the level of gas (€/day)²⁹ and, like electricity, the amount consumed (€/kWh). In Portugal, there are only three retailers who provide gas to its customers and, based on the most required level in Portugal – *level 2* – Dr. Pereira has analyzed the offerings in the gas market:

Table 2 – Available retailers’ offers regarding gas

	<i>Fixed Term (€/day)</i>	<i>“Gas” (€/kWh)</i>
<i>EDP Casa Click</i>	<i>0,102</i>	<i>0,0674</i>
<i>Galp Plano Energia</i>	<i>0,0491</i>	<i>0,0687</i>
<i>Gold Energy</i>	<i>0,0898</i>	<i>0,0689</i>

Source: Table created by Case writer based on Data from ERSE – Entidade Reguladora dos Serviços Energéticos. “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental” n.p. Agosto 2015. Web. 10 Dec. 2015

In the energy market, there is also the possibility of hiring the same retailer for electricity and gas in order to get discounts, because the payment may be easier, and customers may have a better organization and payment control (**Exhibit 16**). However, more

²⁷ The demanded power is the voltage level of an electrical installation. It limits the instantaneous consumption of energy, interrupting the supply when the threshold is exceeded.

²⁸ Mendonça, C. and Guerreiro, J. (2015). ‘Que fornecedor posso escolher saindo da tarifa regulada’. [Online] (Updated: Agu. 2015) Available at: <http://static.publico.pt/homepage/infografia/economia/TarifaLuz/> (Accessed: 17 January 2016) [Accessed: 7 Jan. 2016]

²⁹ The natural gas tariffs available to customers who have joined the free market are divided into levels according to the annual consumption done in their homes.

than 50% of the energy customers do not have the same energy retailer (**Exhibit 15**), which can be explained by different confidence levels, higher differences in price, or simply because they are not aware that their electricity retailer also offers gas (and vice-versa)(**Exhibit 17**). The options available in the market for the dual pack (gas and electricity) are the following:

Table 3 – Available retailers’ offers regarding dual pack (gas and electricity in the same offer)

	<i>Fixed Term (€/day) Elect.</i>	<i>“Electricity” (€/kWh)</i>	<i>Fixed Term (€/day) Gas</i>	<i>“Gas” (€/kWh)</i>
<i>EDP Casa Click</i>	0,2873	0,1539	0,0989	0,0654
<i>Galp P. Energia</i>	0,1827	0,1592	0,0491	0,0687
<i>Gold Energy</i>	0,2370	0,1587	0,0308	0,0689

Source: Table created by the Case writer based on data from ERSE – Entidade Reguladora dos Serviços Energéticos. “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental” n.p. Agosto 2015. Web. 10 Dec. 2015

In some of the available options the dual plans have monetary advantages over the separate plans, but this is not always the case. Even with a disparity between prices, EDP Comercial continues to stand out from the other competitors in the energy market, despite not being the cheapest alternative. Indeed, energy customers affirm that EDP is still leading the market due to habit/commodity, trust, and high switching cost to another supplier (**Exhibit 35**).

Energy retailers have been trying to differentiate one another also through its services and its partnerships, or even by focusing on costumers with specific consumptions.

EDP Comercial offers several extra services. Besides its technical assistance, it can guarantee the invoices’ payment in difficult times, as well as an annual energy audit (helping customers to manage their consumption). It is also associated with banks like Millennium BCP; football clubs such as Benfica and Sporting; ACP (Automóvel Club de Portugal); and even with CTT – “Correios de Portugal”, presenting advantages for customers connected with its partnerships.

Similarly, *Galp Energia* is trying to stand out from its competitors through its agreement with Continente (a national hypermarket) and Galp Gasoline pump, giving customers discounts in their purchases depending on their gas and electricity consumption. This energy retailer also includes partnerships with banks like Caixa Geral de Depósitos and Dutch Bank, and with APFN (Associação Portuguesa de Famílias Numerosas).

Endensa focuses on customers with specific consumption amounts, and provides extra services as well, such as hints to saving energy or technical assistance. The same is true for Iberdrola, which also offers an extra service for the energy emergencies.

Regarding Gold Energy and YELCE, both provide a similar relationship for their customers: direct and simple. Both companies focus only on energy without any extra services, which might simplify customers' choice, avoiding some unwanted/unexpected costs. Gold Energy allows every type of payment. It has customer shops throughout the country, retails gas and electricity, and recently made an agreement with ACP (Automóvel Club de Portugal). As for YELCE, it also enables every type of payment, but has no customer shops. It only provides electricity, and has an exclusive relationship with customers through its web platform, greatly reducing its structure and operational costs.

1.7 Low Cost Company

“Who says that the utilities have no competition? They may be natural monopolies now, but tomorrow they may be natural deaths”³⁰

Many other industries, such as airline companies, hypermarkets, or furniture retailers³¹ were already making low price movements in order to attract a different type of target – price seekers. People are increasingly looking for low-cost travel, low-cost telecommunication tariffs, seeking low cost meals, or flying in low cost airlines. Nowadays, the consumer is more informed and also more attentive to prices. Low cost brands³² offer more affordable prices, often due to suppression of certain services that are not directly related to its core business. In 2015, the Portuguese stood out from other Europeans by being the ones to show a greater desire to economize, a trend maintained in other parameters as well: the Portuguese are the ones who pay more attention to prices (91% against a European average of 83%),³³ and those who most actively negotiate them since the crisis.³⁴

³⁰ Levit, T. (1960) ‘Marketing Myopia’, Harvard Business Review(July)

³¹ Scilly, M. (2016) ‘Examples of cost leadership & strategy marketing’, Small Business Chron, , pp. 10–27.

³² For example, Ryanair, IKEA, Skype, Booking or Primark

³³ Económico (2015) Portugueses são os europeus que mais negociam preços desde a crise. . [Online] Available at: http://economico.sapo.pt/noticias/portugueses-sao-os-europeus-que-mais-negoceiam-precos-desde-a-crise_216732.html [Accessed: 21 December 2015]

³⁴ Ibid. [About 77% of the Portuguese claim to do so, a percentage significantly higher than the European average (59%).]

In 1 October, 2015, a low cost company emerged, with a clear purpose of allowing customers to have access to energy prices closer to the market value, without adding costs as major energy company's structures. This new low cost company intends that all consumers have access to cheaper energy, providing a more direct link between the prices of the energy market and the consumer:

Table 4 – Low Cost offer regarding dual pack (gas and electricity in the same offer)

	<i>Fixed Term</i> (€/day) Elect.	<i>“Electricity”</i> (€/kWh)	<i>Fixed Term</i> (€/day) Gas	<i>“Gas”</i> (€/kWh)
Low Cost company	0,2369	0,1412	0,0392	0,0608

Source: Table created by the Case writer, based on the Solver Excel tool. The data was discussed with Prof. Jorge Vasconcelos

To achieve the low prices, the company is running with the lowest possible operating costs, so that the final energy prices are not reflected significantly in these costs. This company maintains a relationship with the customer through its web platform, besides only allowing direct debit payments, and the bill is electronic. In addition, the low cost company has no customer support shop, which greatly reduces its structure and operating costs.

Customers who are willing to work with online services alone would benefit and take advantage from the lower energy prices; on the other hand they would not have any other support services besides what is available online. Despite limitations, more than 50% of energy customers are willing to sacrifice these services, or any other support in order to get lower prices (see **Exhibit 26**). However, 39% do not consider joining this low cost company since the only payment option is direct debit, the subscription and invoice are only online, and it does not offer technical assistance (see **Exhibit 30**).

1.8 What now?

“Energy has always been characterized as a ‘necessary evil,’ one of life’s essentials we hate to live with, but cannot live without. The challenge of marketing energy is in promoting the positive attributes of the energy industry while minimizing the negative”³⁵

Although EDP Comercial remains the market leader, with a major difference from its competitors, the low cost company can be a challenge as soon as people start to see the price

³⁵ Jeff, S. (2010) ‘Energy Marketing: Can You Afford Not to’, Pipeline and gas Journal, 237

gap. The market leader should be prepared and avoid big losses on its revenues when customers begin to change to this new low cost.

The most direct way to face the new competitor is by dropping the brand's price, which can be called the 'Marlboro option'³⁶, but this movement has huge financial impacts and might destroy the brand's image. According to Dr. Eduardo Dias Pereira:

If there are customers in EDP Comercial who accept the contract price and pay for the extra associated services, there is no sense in moving the entire company to a downscale market. Indeed, it will be very difficult to decrease the actual price thanks to the augmented product offered by EDP.

Creating a sub-brand or launching a new one seemed like the best option in order to maintain the parent brand credibility, but at the same time, he was afraid that this straddling³⁷ movement from EDP could bring serious internal and external problems.

Dr. Pereira provided two strategies suggestion: launch a fighter brand or act as a driver to its sub-brand. In the first option, the fighting brand is not visibly connected to the parent brand (EDP Comercial), which can protect the parent brand while still providing the required recourses. Additionally, it allows complete autonomy for the new brand to freely position itself.

On the other side of the coin, EDP Comercial can act as a driver and its sub-brand as a descriptor, using the name "EDP" and the words "low cost" to inform the customer that the company is offering a slight variation on the same product, in this case, on price, and at the same time it would benefit from the recognition resulting from the parent brand's name.

Taking all this into account, Dias Pereira is facing a dilemma: should it create a low cost company as a line extension in order to be more visible in the market **OR** should EDP Comercial launch a new fighting brand, in order to acquire also those customers who are looking for reduced prices?

³⁶ On April 2, 1993, Marlboro engaged in a 40% price cut in order to face off price oriented rivals.

Aaker, D. (1997) 'Should you take your brand where the action is', Harvard Business Review, 75(5), pp. 135–143

³⁷ A concept originated by Michael Porter, which is called **straddling**: when companies tend to occupy two or more positions in the market place, without full commitment of their actions

2. Teaching Notes

2.1 Introduction

The EDP case-study was prepared by João Maria Malpique under the supervision of Professor Paulo Marcos and within the scope of the Marketing Case Studies dissertation seminar at Católica-Lisbon School of Business and Economics.

This case is based on actual experiences and real events. However, the dilemma is based on an assumption proposed by Dr. Claudia Rocha, EDP Marketing B2C director, and so the veracity of the case study should not be undermined. Some of the available data was acquired through a survey done by the case writer to help students get an overview of customer choices.

2.2 Synopsis

EDP is a Portuguese company, which has been the market leader in the energy market since its creation in the middle of the 1970's, controlling the electricity monopoly in Portugal until the market liberalization. After the deregulation in the energy market, EDP Comercial emerged in order to freely compete with other energy retailers without being subject to any regulation from the State. However, the opening for new competitors did not really affect EDP Comercial's performance, since it remains, prominently, the electricity and gas market leader.

Notwithstanding, the changes in the economic environment and in consumers' habits have led to a growing number of successful low cost companies. The energy market is not an exception, and hence EDP Comercial should be prepared for the arrival of new energy competitors, with new features and reduced prices, which can threaten its top position.

This essay focuses on discussing EDP Comercial's strategy to face a new low cost competitor that can steal many of their current customers and clearly reduce its leading performance. At this stage, EDP Comercial has to decide whether it will tackle its rival by using its existing brand, taking advantage of its name, but which might lead to high cannibalization levels, and actually damage the existing brand; or launch a new brand as a fighting brand to a downscale market, offering different features, and avoiding association with the brand's existing name, yet requiring a great investment to create brand awareness.

2.3 Suggested Assignment Questions

The suggested assignment questions have the purpose of guiding students through their analysis of the case study, providing them with the insights needed to find a solution for the dilemma presented. As such, in their preparation for discussion in class, students are expected to answer the following questions:

1) Contextualize and describe the main consequences of the market liberalization, and how it influences brand-customer relationships.

2) Characterize the competitiveness of the energy market, and describe the kind of generic strategy the energy retailers are pursuing. Recommendation: for a deeper analysis you might mention the term ‘strategic maneuvering capacity’.

3) For a family who consumes on average 4500 kWh/year of electricity and 300m³/year of gas, which is the cheapest retailer? Could it be considered a price war? (Do not limit your calculation to retailers who offer both electricity and gas).

4) Assess the amount of euros/year for the same average family in the previous question, if they decided to subscribe to the low cost company. Explain how this company can achieve such a low price, and its influence on customer’s choice. Should EDP Comercial react? (use the “Framework for Responding to Low Cost Rivals” in order to analyze it).

5) Assuming that EDP wants to be present in the low cost segment, analyze the strategies that a brand can engage in order to access downscale markets. In your opinion, should EDP launch a fighting brand or should it act as a driver of its sub-brand?

2.4 Teaching objectives

The present case study has the following teaching objectives:

1. To familiarize students with the energy market and its deregulation, by highlighting its main consequences before and after the liberalization;
2. To understand the competitive landscape of the energy market, and the kind of strategies the energy retailers are pursuing based on the generic strategy approach;
3. To recognize the main features of energy retailers that influence the customer’s choice, and how they differ from a typical commodity business;

4. To comprehend how the introduction of a low cost in a highly concentrated market can change the traditional approach taken by the incumbent companies and customers' choices;
5. To introduce a “framework for responding to low cost rivals” in order to help them to think how an incumbent company can react with the entrance of a low cost business;
6. To present students the different types of strategy that a brand can engage in, in order to access a downscale market;
7. To understand the risks and benefits of a line extension, on having or not having the parent brand name associated.

2.5 Use of the Case

The present teaching can be used to analyze the different types of marketing strategies within a commodity business, and how the market reacts with the entrance of low cost businesses. Instructors may use the case study to address issues such as competitive analysis, customer choice behavior, development of fighting brands, and types of downscale strategies. Courses like Marketing Planning or Strategy Management are perfectly correlated with the use of this EDP case study.

2.6 Relevant Theory

For students to be well prepared for class discussion and to have a deeper knowledge regarding the types of vertical extensions, strategies to access a downscale market and fighting brands, the following readings are recommended:

- Akker, David A., Sep 1997. “Should You Take Your Brand Where the Action Is?”, Harvard Business Review, vol. 75 n. 5
- Ritson, Mark. Oct 2009. “Should You Launch a Fighter Brand?”, Harvard Business Review, vol. 87 n. 10

2.7 Literature Review

Line Extension

A particular case in brand extension is the Line extension, which reflects an existing brand's new product offerings within the same product class or product category (Keller 1999; McCarthy et al. 2001). The advantages of a line extension strategy include relatively lower costs and lower risk arising from leveraging the parent brand (Loken et al. 2010). Also, it has the ability to increase sales quickly and inexpensively (Fombrun, Charles and Mark Shanley, 1990), having positive associations with the parent brand (Sood et al. 2012). However, it can be costly and risky to introduce innovations with an established brand due to negative spillovers if the new line extension fails (Barwise, Patrick and Thomas Robertson, 1992), thus mitigating the potential benefits of a line extension strategy and damaging the parent brand (Sinapuelas, Wang, Bohlmann, 2015).

Vertical Extension

Line extensions, and more precisely vertical extensions, emerge from the need to fight with competitors or just simply to catch some targets (Munteanu, 2014). According to David A. Aaker (1997), the challenge of vertical extensions is to leverage and protect the value of the original brand while taking advantage of the new opportunity. He recommends that managers avoid vertical extensions as much as possible. If they have enough resources, they should simply create a new brand, since a vertical extension could easily distort the brand equity, which was built on image and perceived worth. On the other hand, the author also argues that managers might face situations where alternatives to vertical extensions are risky and costly, and hence the vertical line extensions become the best option

David A. Aaker (1997) explains the danger in a moving to a down market: once a brand has associated its name with a downscale offering, even if the move represents only a slight change in price or performance, it runs the risk of losing its status as a higher priced (and by inference, higher quality) brand. One way to avoid the negative effects of accessing a downscale market is to launch a new brand, but it would imply to build brand awareness, establish perceptions of identity and quality, and develop a customer base. If launching a new brand, it is not an options. Managers should think about ways to leverage the power of the existing brand, one of them being to reposition the entire brand in the new market. The most

direct way to do so is by dropping the brand's price', but this is a very risky move as it may have great financial impacts and can damage the brand's image.

Managers might consider a Sub-brand a brand that uses the name of its parent brand in some capacity to bolster equity. One type of relationship between the parent brand and the sub-brand mentioned by Aaker is the driver/descriptor:

The parent can retain its primary influence as a driver, and the sub-brand can act as a descriptor - a word that informs customers that the company is offering a slight variation on the same product or service they have come to know (Aaker, 1997). Within the different types of relationship this is the riskiest one because the parent brand is exposed to cannibalization once the difference is little between the two brands. The risk is higher when the sub-brand is simply low-quality offering, but in turn the risk can be minimized when the descriptor points out a different application or a slightly different target market.

However, David Aaker stresses that if a company can purchase a new brand to face its competitors, do so. Sub-brands should only be used if their launches are done with the same care as those of the core brand.

Fighter brand

A fighter brand it is a strategy to combat, and ideally eliminate the low price competitors, and at the same time protect the premium-price company offers (Mark Ritson, "Should You Launch a Fighter Brand", May 2009). In some cases, a fighter brand is not only able to eliminate the competition, but also to open up a new lower window for the parent organization.

Fighter brands are created to win back customers who have switched to low price rivals. However, in most of the cases it also acquires customers who were paying premium-prices, leading to cannibalization in revenues. In order to avoid such losses, Ritson argues that fighter brands should match low price with low quality, or at least with lower services and, at the same time, include cannibalization in their calculations. The same author mentioned that cannibalization is the most obvious hazard, but there are other issues that a company should take into consideration: be prepared to recalibrate its price and performance to ensure it matches the customers' needs, without being afraid to lose some profits. Fearing big losses, some companies do not decrease the price as much as they could, and end up competing with themselves rather than with the low cost rivals.

Moreover, Ritson explained that a fighting brand must achieve a sustainable level of profits. Unfortunately, for companies who are used to higher price points and substantial operating models, this might be challenging and difficult to pursue, as both have different DNA's. Indeed, those premium companies who launch a fighter brand may have to strip back the fighter brand costs and change their traditional idea of what creates a successful strategy.

Ritson affirms that the value equation between the two brands must be sufficiently differentiated on customers' minds, and premium brands must be sure when launching a fighter brand that it will be competitive enough to damage the enemy and profitable enough to continue over the long run.

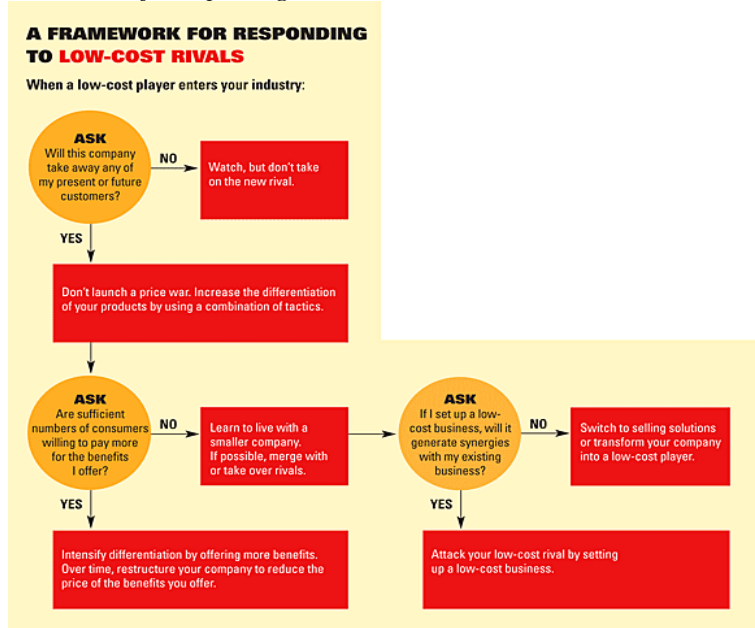
Beating low cost rivals

Over the past fifteen years, Nyrmalia Kumar has studied around 50 incumbents and 25 low cost businesses, and his research shows that ignoring cut-price rivals can force companies to leave entire market segments (Kumar, Nyrmalia, Dec 2006). When incumbent companies react, they usually set off price wars, hurting themselves more than their challengers. Kumar argues that companies respond in two possible ways: some become more defensive and try to differentiate their products (this strategy only works if they can meet a stringent set of conditions), and others more offensive, launching a low cost business option (this only succeeds if synergies occur between the incumbent and the new low cost).

Moreover, low-price warriors are aided by the fact that consumers are becoming skeptical about brands, better informed because of the Internet, and more open to value-for-money offers. Kumar's research suggests that only new entrants with even lower cost structures can compete with the price warriors.

In order to help companies respond to its new low-cost rivals, Kumar created a *Framework for responding to low-cost rivals*:

Figure 5 – Framework for responding to low-cost rivals



Source: Kumar, Nymalia, Dec 2006, “Strategies to fight Low-cost rivals”, *Harvard Business Review* <<https://hbr.org/2006/12/strategies-to-fight-low-cost-rivals>>

Some strategies including the “wait-and-watch” often work for companies that market products for people at the very top of the pyramid, such as wines, perfumes, and cosmetics, but which could go wrong with commodities such as gas, sugar, salt or electricity.

The differentiation strategy can also work, but companies must be able to persuade customers to pay a price for benefits, by introducing new products, new features or a greater service. Kumar believes that the differentiation strategy may help an established player to beat the low-cost rivals initially, but as consumers become more familiar with low-cost options, they tend to migrate to them.

On the other hand, when companies start to see how large the low cost segments are, they set up low cost ventures. What they do not realize is that those low cost should only be launched if the traditional operations become more competitive than what it was before and the low cost venture should derive some advantage than if it was an independent entity. Those synergies are crucial for the success of the two companies.

Additionally, Kumar claims that a successful “two-pronged approach” requires that the new low cost business launched by an incumbent should use a unique brand name. It helps the low cost to communicate that fewer services go together with lower prices. Indeed, with a different name, customers’ expectations will focus on the low cost venture rather than on the traditional operations. Setting up an independent unit helps the incumbent company to create

new operation structures, systems, staff, and values that are different from its own, avoiding its subsidiary to cannibalize directly the incumbent's sales.

A two-pronged strategy delivers results only when the low-cost operation is launched offensively to make money—not as a purely defensive ploy to hurt low-cost rivals (Kumar, 2006). Companies should include cannibalization estimates into business models, and allow their traditional and new launch ventures compete among themselves. It might also help customers to understand the benefits of the traditional operations and make them willing to pay a premium price for it.

If incumbents do not take on low-cost rivals quickly and effectively, they can blame no one for their failure but themselves (Kumar, 2006).

2.8 Analysis and Discussion

This section of the Teaching Note contains a detailed pathway to direct the class discussion around EDP's case study. Instructors are recommended to lead the discussion following the suggested assignment questions, as the following analysis will be organized accordingly.

The first question is meant to give an overall idea of what the energy market liberalization was, and how it affected competitiveness. In order to analyze the different types of strategies that a brand can engage in (differentiation strategy, cost leadership or specialization), the second question is introduced. The third question leads students to think about how the existing retailers are competing, accessing their price offers through the available data, and what most influence on customer choice.

Topics such as the emergence of low cost companies, and how an incumbent company should react are addressed in question four, thus providing a “Framework for Responding to Low Cost Rivals” (Nyrmalia Kumar, 2006), which is crucial for a better analysis. Finally, the different types of vertical brand extension to access a downscale market (cf. David Aaker, 1997) should be introduced, and the survey data should be provided so that students are able to respond correctly to the last question.

1- Contextualize and describe the main consequences of the market liberalization, and how it influences brand-customer relationships.

In this first question, students must understand what was the energy market liberalization and its main consequences. To answer this question, students are expected to contextualize the liberalization, explain the purpose of the creation of a deregulated market, its main consequences on the value chain of the energy sector, and say how it has influenced the relationship between energy supplier and its customers.

To contextualize the liberalization of the market, students must understand what led to the creation of this market:

- Europe was highly dependent on oil and gas from external sources **(p. 4 in the case study)**
- High level of Government control **(p. 5 in the case study)**
- Almost no competition in the sector **(p. 5 in the case study)**
- High market entrance barriers, and no transparent pricing and regulation **(p. 5 in the case study)**

It should be mentioned that the energy value chain in most European Countries, including Portugal, was regulated by the State, from production to energy sale (**2nd Figure in the case study**), which set up the sale price for the energy consumers. The sector has been mostly organized as a state-owned monopoly with high market entrance barriers, given the characteristics of the market: energy cannot be differentiated in terms of quality; electricity cannot be stored; the cost depends on how it is produced; demand is inelastic, and it has no substitute **(p. 5 in the case study)**. For these reasons, the State owned and controlled the entire market to ensure that the required amount of energy was delivered to satisfy customers' needs, leading to a high level of Government ownership, which prevented competition in the sector. In addition, the price might be overestimated given the absence of competition, and thus there were huge price disparities throughout the Europe.

According to the case **(p. 4 in the case study)**, the energy market liberalization was driven by economic reasons to increase efficiency in the sector, allowing the entry of new competitors in the market. The liberalization stems from the creation of an internal energy market, by developing energy-efficient infrastructures and a more competitive environment, avoiding high concentration markets. It was intended to increase competition between operators, reflecting the level of prices and improving service quality. This should

consequently result in greater customer satisfaction. Students may also mention the three pillars of the liberalization according to Durão Barroso: (i) securing an expanding supply of energy from both domestic and foreign sources, (ii) developing a more competitive internal energy market, and (iii) encouraging and supporting environmental protection and the development of clean and renewable energy sources.

Furthermore, students should identify the consequences of the value chain in the energy sector (**p. 5 and 6 in the case study**). The production and supply of energy was separated in order to prevent big market shares from one player, and promote the competition in the retail market (**3rd Figure on the case study**). The emergence of the wholesale market allowed multiple suppliers to freely trade energy, which led to new supplier entrance avoiding the monopoly condition. Each retailer can buy energy in the wholesale market and sell it to each customer without any regulated prices from the state. The transport and distribution - as natural monopolies due to high investments - remain active in the public interest, regulated by an entity, being guaranteed third-party access to networks in conditions of transparency and non-discrimination.

The market is considered liberalized when multiple operators can compete freely in prices and trading conditions, following the rules of competition, the general law and regulations (**p. 6 in the case study**). It must be clear to students that the emergence of the new competitors completely changed the relationship between energy suppliers and its customers (**p. 6 in the case study**):

- (i) A greater need for information for consumers is required in order to enable them to make conscious and informed choices that match their interests;
- (ii) A new approach to consumers and competitors, requiring an extensive and comprehensive understanding of the effects on the market, where a great effort by marketing teams is fundamental to convince customers regarding each competitor;
- (iii) Competitors have the ability to negotiate customized products with deadlines, volumes, prices and adjustments of indices that meet the buyer's expectation;
- (iv) Customers can easily change to each energy supplier if they do not accept the new conditions.

Indeed, the number of customers in the liberalized Portuguese market grew approximately 36% compared to 2014, having in this year 4187 million customers in the liberalized electricity market (**p. 6 in the case study**), and around 924 thousand in the gas

market (**p. 7 in the case study**). This growth was justified by the strong presence of the energy retailers, who were competing to gain market share, and also due to the payment of a regulated tariff by those who have not yet switched to the liberalized market.

2 – Characterize the competitiveness of the energy market, and describe the kind of generic strategy the energy retailers are pursuing. Recommendation: for a deeper analysis you might mention the term ‘strategic maneuvering capacity’.

This question is made so that students can perceive how the rivalry between energy retailers works in Portugal, and what they are doing differently to stand out from each other. First of all, students should characterize the competitiveness in the energy market, and the three generic strategies should be mentioned. Students must understand the difference between generic strategies, and indicate which company is following which strategy.

The following information is available in the case study regarding the competitiveness in the energy market:

- EDP remains the leader, holding 80,5% of the domestic consumption on electricity, followed by Galp with 5,6%, and Iberdrola with 4,5% (**p. 9 in the case study**). (**Exhibit 5**);
- The electricity sector, according to the Herfindahl-Hirschman Index, has a value of 6559, which can almost be considered a monopoly (**p. 9 in the case study**);
- Concerning the gas sector, the market leader is again EDP, with 40% of the market share of domestic consumers, Galp with 29% and Gold Energy with 25% (**Exhibit 6**).

The generic strategies provided three different paths that a company can take, separating an industry's companies into three main groups: differentiation strategies, cost leadership strategies and those that take the form of specialization. There is also a strategic dimension that students may refer to, which cannot confer a competitive advantage directly, but helps companies to achieve one of the others: strategic maneuvering capacity.

There are three main generic strategies:

- **Overall cost leadership:** low cost in relation to competitors becomes the main objective of the company. It can be achieved by efficient scale facilities, cost

reduction through experience, avoidance of marginal customers accounts, focus on the core product, and reduction in extents such as R&D, services, sales force, advertising, and so on;

- **Differentiation:** to differentiate the product or a service, being perceived as unique, creating brand loyalty, which makes customers less sensitive to price or other rivals. This strategy may imply a trade-off between cost positioning if the required actions for creating it are expensive: research, customer support, marketing advertisement, etc;.
- **Focus/Specialized:** by focusing on a particular customer's niche it is able to serve its buyers better than the other competitors who are competing more roughly.
- **Strategy maneuvering capacity:** as it was argued before, this is not a competitive advantage itself but might improve a company's performance. Strategic dimension, including strategic alliances or partnerships, are not competitive advantages, however it enables firms to achieve it.

Given that, students should mention which strategy each retailer pursues:

- EDP Comercial - differentiation strategy: EDP Comercial offers not only electricity and gas, but also many other services, including technical assistance, invoice payment guarantees in difficult times, and an annual energy audit (helping customers to manage their consumption). Furthermore, this company has several partnerships with Banks like Millennium BCP, football clubs such as Benfica and Sporting, ACP (Automóvel Club de Portugal) and even with CTT- "Correios de Portugal", giving advantages to customers who are associated with its partners, as well as a sense of exclusivity. **(p. 11 in the case study)**. A strategic maneuvering capacity is pursuing through these alliance, which gave to the firm an advantage to increase its target. EDP Comercial has several customer shops, and also focuses on customer support. It holds high brand loyalty resulting from its historical performance, as it used to be a monopoly (can be considered an experience curve). Customers perceive EDP as a trustworthy brand, accessible to the entire Portuguese population **(Exhibit 25)**, providing miscellaneous services in an attempt to meet every need.

- Galp On – differentiation: as EDP Comercial, Galp On is trying to come out with a differentiation strategy. The agreements with Continente and Galp Gasoline pump might give customers a sense of uniqueness, allowing them to benefit from discounts, which increase with their energy consumption. The partnerships with Caixa Geral de Depósitos, Dutch Bank or APFN (Associação Portuguesa de Famílias Numerosas) also help this energy retailer to stand out from competitors, by offering distinct advantages (**p. 11 in the case study**) Galp business network provides a strategic maneuvering capacity like that of EDP, helping the company to increase its differentiation and competitive advantage.
- Gold Energy – students may face difficulties in positioning the strategy of this company since its perceived price is not the cheapest, neither does it offer many extra services or advantages for its customers. However, Gold Energy is more likely to pursue a cost leadership strategy than one of differentiation. This company only has one partnership, with ACP, and it focuses solely on the core business: selling electricity and gas. (**p. 12 in the case study**) Doing a deeper analysis, Gold Energy is the cheapest company to provide the dual pack – Galp Energy customers (which is the perceived cheapest option) need to make purchases in Continente’s hypermarkets in order to get the discounts – overall, Galp customers are paying more, but the extra amount is charged on the Continente cards. This might put Gold Energy in advantage since it follows a simple and direct cost leadership strategy to its customers, with no obligation to belong to an institution to have access to cheaper prices or discount cards.
- YELCE – cost leadership: this company has the best price in the electricity market. It focuses on selling electricity, has no customer shops, and its relationship with customers is based on a web platform, greatly reducing its operational and structure costs. YELCE does not sell gas, and is an unknown brand for the majority of the population. (**p. 16 in the case study**). Its lack of advertisement and its weak economic power might explain its low market share in the electricity market.

These three generic strategies are, as the name shows, too generic and broad. Regarding energy retailers, it does not mean that if one retailer is following a differentiation strategy more accurately it cannot achieve lower costs and compete with those who follow a

cost leadership strategy. EDP Comercial and Galp Energia have the advantage of being well-known companies. With unique brand associations, and a strong brand history/experience, they are also benefiting from the experience curve and high brand credibility, and even brand superiority when compared to other retailers (**Exhibit 25 and 49**). Both have gained the trust of the Portuguese people in the energy market, increasing customers' brand-loyalty. Generally, when a product or a service is perceived as a commodity, or nearly so, customers' choice is largely based on price and service, resulting in high competition pressure. However, other brand features that energy companies are offering, as explained before, can dilute that pressure.

3- For a family who consumes on average 4500 kWh/year of electricity and 300m³/year of gas³⁸, which is the cheapest retailer? Could it be considered a price war? (Do not limit your calculation to retailers who offer both electricity and gas).

This question aims to make it clear to students how the energy invoice is calculated, and also to make them compare the prices between retailers. The limitations of the results should be noticed. Students must decide whether or not the Portuguese energy market is engaging in a price war, and justify their answer not only based on their calculation, but also through the case study and the available survey data.

For a more profound analysis, students might mention how the energy invoice is composed. This helps them to understand what retailers are doing to continue to profit without competing directly on prices, or decreasing their small margins.

Given the data available in the case study (**Table 1, 2 and 3 in the case study**), students should determine the amount spent per year for the average Portuguese family within the different retailers. They should calculate the sum of the gas and electricity invoices for the different retailers, and also the amount spent per year for those retailers who have a dual pack: gas and electricity together. The calculation method is explained on **Appendix 2**.

Separate Offers:

³⁸ 1m³ = 10,5306 kilowatts

Table 7 – Amount spent per year for an average family regarding gas and electricity (separate offers)

		GAS		
		<u>EDP Casa Click</u>	<u>Galp Plano Energia</u>	<u>Gold Energy</u>
ELECTRICITY	<u>EDP Casa Click</u>	€ 1 060	€ 1 045	€ 1 061
	<u>Endensa Tarifa Luz</u>	€ 1 093	€ 1 079	€ 1 094
	<u>Galp Plano Energia</u>	€ 1 046	€ 1 031	€ 1 047
	<u>Iberdrola Casa Conecta</u>	€ 1 060	€ 1 046	€ 1 061
	<u>YELCE</u>	€ 1 015	€ 1 000	€ 1 015

This table represents the amount spent/year for an average family who decides to choose different energy retailers, with the exception of EDP and Galp. However, students must also determine, with the same method as before, those retailers who have a dual pack, offering gas and electricity at the same time, which can differ from the amount previously calculated:

Table 8 – Amount spent per year for an average family regarding dual pack (gas and electricity in the same offer)

Amount spent/year (Gas and Electricity)	
EDP Casa Click	€1 052
Galp Plano Energia	€1 031
Gold Energy	€1 029

The cheapest price combination is to contract YELCE as the electricity provider, and Galp Plano Energia for the gas consumption, which is 1000 €/year for the average family. YELCE is a new company which greatly reduced its operation cost, and is thus able to achieve such low prices for electricity. It is also important to mention that the retailers who provide the dual pack are not the cheapest, as was expected.

After checking the amount spent for an average family regarding each retailer, students must understand that those calculations only take into account the energy itself, and discard all other factors that can influence the customer's choice. Hence, customers will probably choose the cheapest retailer, and the energy market can be considered to be facing a price war.

However, the price gap between competitors is not meaningful that customers change their retailer just based on price (**Exhibit 19**). Customers look beyond cost and base their retailer's choice on other features:

- Retailer's partnerships where there is an advantage for customers as well (**Answer 2**)
- They prefer to stay with the retailer which is most familiar to them (**Exhibit 19**)
- Customers may not change simply because of commodity, high perceived switching costs, or trust in a specific energy retailer (**Exhibit 19**)
- Immediately after price, the transparency of invoices and company trust are the attributes which customers value most (**Exhibit 18**).

Customers are aware that EDP is not the cheapest retailer in the market, but given the lower price gap, they prefer to stay with their usual retailer – EDP Comercial (**Exhibit 21**). The differentiation strategy followed by EDP (**Answer 2**) is clearly an advantage, which clearly influences the customer's choice.

In fact, energy retailers are also competing in prices, so it cannot be considered a price war since customers' choices are not only based on price, but also on the characteristics explained above. Although the price is an important feature, the difference in energy retailers might not be large enough to overcome the customer's choice; otherwise, customers might be induced to switch to the low cost retailer, sacrificing in service quality or other areas.

(The following approach is not mandatory; it is an extra)

The link between this question and the composition of the energy invoice is not well-defined and might not be easy to understand, however it has a clear connection.

The energy invoice consists of three pillars (**p. 7 and 8 in the case study**):

- (i) **Energy** - composed by the profit margins production/acquisition, wholesale and retail market;
- (ii) **Networks** - which include the cost of transportation and distribution that every customer should pay in order to gain access to energy. The cost is conditioned by national regulated tariffs, and differs from country to country due to physical differences in networks and efficiency in their operations;
- (iii) **Taxes and fees** - are used to obtain revenues to the State and can be used for multiple purposes, such as (i) health or education, and also for (ii) suppressing

the external cost of energy production and consumption, or even (iii) to finance specific policies in the energy field. Following the case study, the cost of renewable energies represents 6% of the average electricity price for households in the EU

It should be noticed that 43% of the electricity price is a result of the energy itself, besides 31% for the electricity network and 26% for taxes and fees **(p. 8 in the case study)**. This means that more than 50% of the energy invoice does not come from the energy itself. Indeed, of these 43% in the energy invoice (coming from the energy itself), only about 5-6% remain as operation margins for the retailers, which means that they have limitations on setting up and controlling the prices. However, they are not directly competing with one another's margins, otherwise it would be a price war that would decrease their profits. In fact, they often increase those margins through the public fear and ignorance, which have been a boost for retailers' revenues, playing on these fears, and encouraging consumers to buy overvalued products: "there are enough indolent consumers to keep the margins safe". **(p. 8 in the case study)**

4 - Assess the amount of Euros/year for the same average family in the previous question, if they decided to subscribe to the low cost company. Explain how this company can achieve such a low price, and its influence on customer's choice. Should EDP Comercial react? (use the "Framework for Responding to Low Cost Rivals" in order to analyze it).

In order to gain a better understanding of how the low cost company might affect the energy market, students must show the calculations to get the amount spent /year for the average family, and enumerate the reasons for the low cost to get such low prices compared to others, even with tight business margins. Students should underline what might change on how customers choose their energy retailers.

Price calculation is available at **Appendix 2**:

Table 10 – Amount spent per year for an average family with the Low Cost Company

Amount spent/year

(Gas and Electricity)

<i>Low Cost Company</i>	€940
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The low cost company provides a more direct link between the price of the energy market and the consumer, achieving a more affordable price due to suppression of certain activities that are not directly related to its core business, running with the lowest possible operating costs **(p. 13 in the case study)**:

1. Relationship with customers through a web platform
2. Only allows direct debt
3. Electronic invoice (saving on paper and shipping costs)
4. Does not have any customer support shop
5. No extra services
6. Technical assistance is outsourced

Such strategies led this new company to its lower price, being the cheapest gas and electricity retailer in the market, and also changing how consumers make their retailer's choice.

Since the price gap has substantially increased with the emergence of this new low cost business, the majority of customers reconsidered their energy retailer's choice **(Exhibit 26)**. Furthermore, students must point out the reasons of adherence to show what made them reconsider their choice (obtained by the survey):

- Price gap and absence of commitment or contracts are the main reasons for adherence **(Exhibit 31)**;
- Customers value the fact that no additional costs are included **(Exhibit 31)**;
- They consider the low cost retailer to be simpler, since it is focused on energy alone **(Exhibit 31)**
- The new low cost arouses their curiosity for not being associated with any other known retailer **(Exhibit 32)**

Additionally, students can mention that (i) the Portuguese people are the most active price negotiators, and those with the greatest willingness to save money among Europeans. Likewise, the (ii) increasing trend of online purchases in Portugal is another positive sign for the low cost's success **(p. 12 in the case study)**. Students should stress that brand loyalty, and

even brand superiority, can be damaged by low prices, leading customers to reconsider their retailer's choice, or even to sacrifice services, warranties or customer shops (**Exhibit 34**).

In order to help students to better analyze if EDP should react to the entrance of the new low cost, the "Framework For Responding to Low Cost Rivals" (**Figure 5**), developed by **Nyrmalia Kumar (Harvard Business School)** must be provided.

When a low cost player enters your industry:

- **1st Question of the framework:** *'Will this company take away any of my present and future customers?'*

In order to respond to this question, students must look at the information available on the survey (**Exhibit 26**), which shows that more than 50% of EDP's customers are interested in the low cost company, driven mostly by the price difference (**Exhibit 31**). Since the answer is Yes, they should move on to the next step of the framework: *'Don't launch a price war. Increase the differentiation of your products by using a combination of tactics.'* EDP Comercial is making a great effort to differentiate itself, offering a bunch of services and engaging in partnerships to attract new customers, or at least to keep their current ones (answer 3). Given that, students should move on to the next question:

- **2nd Question of the framework:** *'Are sufficient number of customers willing to pay more for the benefits I offer?'*

Through **Exhibit 24** it is possible to verify that the majority of the customers are not willing to pay an extra for the benefits that EDP Comercial offers. As it was shown before, customers prefer to sacrifice those benefits in order to get lower prices. This means that there are not enough customers willing to pay more for EDP Comercial's offers.

Moving on to the next step, since the answer is No: *'Learn to live with a smaller company. If possible, merge with or take over rivals.'* With the entry of the low cost company, EDP's market share is expected to decrease. A merging strategy with the new low cost might be an option, but this would lead to another analysis. EDP needs to take over its rivals, which takes us to the next question:

- **3rd Question of the framework:** *‘If I set up a low cost business, will it generate synergies with my existing business’?*

To create synergies between the two businesses, by setting up a low cost business, EDP should be careful and realize that the traditional prices might become premium prices and thus, the traditional operation should become more competitive in order to fulfill the needs of those who will continue to pay the traditional prices. This separation might help customers to understand the benefits of the traditional operations, and make them willing to pay a premium price.

5- Assuming that EDP wants to be present in the low cost segment, analyze the strategies that a brand can engage in order to access to downscale markets. In your opinion, should EDP launch a fighting brand or should it act as a driver of its sub-brand?

In this final question, students should analyze the strategies that a brand can engage in to compete with the new low cost brand. Students are expected to underline the “pros and cons” of each strategy. In the second part of the question, students must proceed to some cannibalization calculations in order to assess which is the most profitable option.

To gain access to a downscale market, EDP has two possibilities: (i) drop the brand price, or (ii) create a sub-brand/launching a new one. Regarding the first possibility, take for example the ‘Marlboro’ option **(p. 14 in the case study)**:

- It has an enormous financial impact - the company has to sharply decrease its margins
- It can destroy the brand image – people might feel cheated, since higher prices were charged before **(Exhibit 36)**.

Additionally, Dr. Pereira claims that it makes no sense to move the entire company to a downscale market when there are customers who accept the contract prices, and pay an extra amount for the associated services **(p. 14 in the case study)**. Indeed, it will be too difficult, as EDP offers much more than just simple energy; it has customer support shops, and it is associated with music festivals, football clubs, etc., which in turn is charged indirectly to its customers. It must be clear for students that the first possibility to access a downscale market is not feasible based on the arguments mentioned.

The second possibility to be presented in the low cost segment is the creation of a sub-brand, or launching a fighting brand, in an attempt to maintain the brand's credibility and respect, since it keeps the parent brand's values. Depending on the type of strategy, the idea is to safeguard the original brand from cannibalization and beat the low cost rival. Dr. Pereira suggested to Dr. Antonio Mexia two types of strategies:

- **Fighting brand** – A fighter brand is a strategy to combat, and ideally eliminate the low price competitors, and at the same time protect the premium-price company offers (Mark Ritson, May 2009). In some cases, a fighter brand is not only able to eliminate the competition, but also opens up a new lower window for the parent organization.
- **Driver** – the parent brand can act as a driver and the sub-brand as a descriptor, a word that informs customers that the company is offering a slight variation on the same product or service they have come to know. Using the name “EDP” and the words “low cost” to inform the customer that a company is offering a lower price, it would have the benefit of being perceptible in the market in some capacity to bolster equity.

Once Students explain each strategy and its benefits, it is also crucial to look specifically to the EDP dilemma and point out the “pros and cons”.

Launching a fighting brand:

Pros

- **Avoid any misunderstanding on customers' minds.** When facing the new low cost brand, customers have no past experience and thus they do not make any type of comparison. The features of the new low cost energy tend to be clear for them: web-only platform, direct debit, online invoice and no customer's shops.
- **Protect EDP Comercial.** Regardless of the performance of the new brand launched by EDP, EDP Comercial will still be protected from misjudgments (**Exhibit 33**), as it is not visibly connected to the new one.
- **Cannibalization is reduced.** As it is not visibly connected, the EDP change rate for the new low cost is reduced. EDP is still viewed as a trustworthy and premium brand.

Cons

- **Huge financial impacts to create awareness**
- **It might be simply a price.** Since the EDP's name will not be visible, the creation of a new brand would simply discard a strong name, which is in the minds of all

Portuguese consumers, transmitting ideas of safety and trust. Launching a new brand would put it at the same level of the other low costs, which would then result in an aggressive price war.

Driver and descriptor:

Pros

- **Takes advantage of the notoriety and reputation of the parent brand.**
- **Reduces implementation costs, with the advantageous use of services and logistics from the EDP brand.** The name EDP as a driver would boost awareness without requiring large investments.
- **It shows that EDP is committed to innovation, as well as to meeting the new customers' needs.** Energy customers are mainly looking for energy only, without any actual extra services (**Exhibit 24**). Additionally, people think that the energy price is overvalued (**Exhibit 20**), and therefore, such a movement by EDP to decrease energy prices through different features and limitations shows a commitment to changing this paradigm.

Cons

- **The EDP low cost customers cannot benefit from any support given by EDP Comercial.** In order to achieve lower prices, the EDP low cost has to eliminate some extra services, such as customer support shops or any client support. Such limitations can lead to a misunderstanding in low cost customers, since they might not understand their restrictions. It implies a great effort of effective communication.
- **Dissatisfaction and possible dropout of EDP customers.** Traditional EDP Customers might not understand why they pay more for the same product, and reasons like better service, customer shops or paper invoice may not be sufficient to justify it to them. With the introduction of low cost, “traditional” prices become, in the mind of customers, premium, and one must be careful with that.
- **Discrimination.** The low prices are only accessible to a niche: online customers, online invoice, and direct debit cannot receive any shop support. This might bring some sense of discrimination, as customers who are able to purchase online are the only ones who benefit from lower prices (**Exhibit 33**).

In the second part of the question, students should calculate the decrease in revenues from cannibalization for both options, and the increase in revenues as well, in order to make a final decision. The calculation method is on **Appendix 3**.

Table 5 – Best option calculation

	(1) Cannibalized revenues	(2) Increase in revenues by acquiring other customers' retailers	Total (1)+(2)
EDP Low cost	-147,03 M/€	411,462 M/€	264,432 M/€
New low cost	-79,168 M/€	379,81 M/€	300,642 M/€

Source: Case writer based on data available in the Case study

2.9 What should be done?

Based on calculations, EDP should launch an independent low cost as a fighter brand. It might not reach as many customers as EDP Low Cost, but it has less cannibalized revenues and so, it can get higher revenues. Facing the launch of EDP's low cost as an opportunity cost, it means that launching an independent low cost has an opportunity cost of 264,432 M/€, but since revenues obtained are higher than the opportunity cost, it is the best option. Furthermore, it will also preserve EDP's value and culture, avoiding any misunderstanding on customers' minds, as well as protecting EDP's brand overall. In fact, the value equation between the two brands must be sufficiently differentiated on customers' minds, and EDP Comercial must be sure when launching a fighter brand that it will be competitive enough to damage the enemy, and profitable enough to continue over the long run (Mark Ritson, "Should You Launch a Fighter Brand", May 2009).

Reference List

- Akker, David A, Sep 1997. "Should you take your brand where the action is?", *Harvard Business Review*, vol. 75, No. 5, pp. 135-143
- Barwise, Patrick and Thomas Robertson (1992), "Brand Portfolios," *European Management Journal*, 10 (3), 277-85.
- Claudiu-Cătălin, Munteanu, Oct 2014, "Brand extensions positioning guidelines for competitive differentiation", *Business Management Dynamics*, Vol. 4, No. 4, pp. 19-26
- Fombrun, Charles and Mark Shanley (1990), "What's in a Name? Reputation Building and Corporate Strategy," *Academy of Management Journal*, 33 (2), 233-58
- Keller, Kevin Lane (1999), "Designing and Implementing Branding Strategies," *Journal of Brand Management*, 6 (5), 315-32
- Kumar, Nyrmalia, Dec 2006, "Strategies to fight Low-cost rivals", *Harvard Business Review*, Vol.84, No. 12, pp. 104-112
- Loken, Barbara; John, Deborah Roedder, Jul 2010, "Diluting Brand Beliefs: When Do Brand Extensions Have a Negative Impact?", *Journal of Marketing*, Vol. 57, No. 3, pp. 71-84
- McCarthy, Michael; Heath, Timothy; Milberg, Sandra, Feb 2001, "New Brands Versus Brand Extensions, Attitudes Versus Choice: Experimental Evidence for Theory and Practice", *Marketing Letters*, Vol. 12, pp. 75-90
- Ritson, Mark, Oct 2009, "Should You Launch a Fighter Brand?", *Harvard Business Review*, Vol. 87, No. 10, pp. 86-94
- Sinapuelas, Ian; Wang, Hui-Ming; Bohlmann, Jonathan, Sep 2015, "The interplay of innovation, brand, and marketing mix variables in line extensions", *Journal of the Academy of Marketing Science*, Vol. 43, Issue 5pp. 558-573
- Sood, Sanjay; Keller, Kevin Lane, Jun 2012, "The Effects of Brand Name Structure on Brand Extension Evaluations and Parent Brand Dilution", *Journal of Marketing Research (JMR)*, Vol. 49, No. 3, pp. 373-382

Appendices

Appendix 1 –List of Exhibits

Exhibit 1 – Price of kilowatt in Portugal and Europe

YEAR	Average family – Euro/kWh			Medium-size enterprise – Euro/kWh		
	Portugal	EU27	Eurozone	Portugal	EU27	Eurozone
2010	0,158	0,167	0,1777	0,090	0,091	0,092
2011	0,165	0,180	0,190	0,090	0,930	0,093
2012	0,199	0,188	0,198	0,105	0,930	0,096
2013	0,208	0,200	0,212	0,102	0,960	0,093
2014	0,218	0,203	0,215	0,103	0,094	0,091
2015	0,228	0,208	0,218	0,099	0,089	0,086
Growth	44,3%	24,6%	23,2%	10,0%	-2,2%	-6,5%

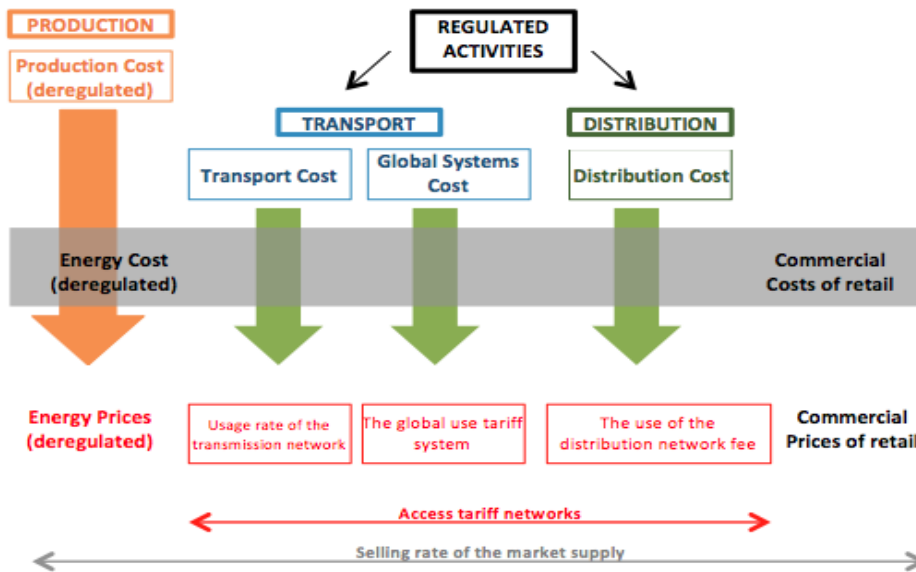
Source: done by the Case writer based on Eurostat.com

Exhibit 2 – Top 10 Biggest Portuguese Companies

Company ranking	Business Volume in 2014	Turnover Evolution 13-14	Net income in 2014	Net income Evolution	Gross Value added	No. of employees	Site www.	
1	PETROLEOS DE PORTUGAL-PETROGAL	9.757.142.427	-10,21%	414.632.017	344.417.801	118.015.41	1.714	galpenergia.com
2	PINGO-DOCE - DISTRIBUIÇÃO ALIMENTAR	3.446.582.784	2,30%	21.457.892	22.743.835	359.047.44	22.117	pingodoce.pt
3	MODELO CONTINENTE HIPERMERCADOS	3.357.898.183	0,72%	77.329.630	9.165.982	466.918.79	22.115	sonae.pt
4	EDP SERVIÇO UNIVERSAL	3.345.162.000	-24,70%	96.164.000	97.626.219	20.361.000	25	edpsu.pt
5	EDP DISTRIBUIÇÃO - ENERGIA	3.155.798.000	19,11%	225.725.000	26.472.000	976.013.000	3.017	edpdistribuicao.pt
6	GALP - GÁS NATURAL	2.990.408.710	10,88%	241.340.852	66.573.387	246.790.933	7	galpenergia.com
7	EDP - ENERGIAS DE PORTUGAL	2.518.100.727	1,64%	785.779.974	5.095.127	23.605.925	34	edp.pt
8	TRANSPORTES AÉREOS PORTUGUESES	2.442.180.717	0,59%	46.358.308	80.363.362	562.717.246	7.153	tapportugal.com
9	MEO - SERVIÇOS DE COMUNICAÇÕES E MULTIMÉDIA	2.416.975.362	41,49% -	2.271.393.590	2.061.168.286	1.195.630.347	7.649	telecom.pt
10	EDP COMERCIAL - COMERCIALIZAÇÃO DE ENERGIA	2.416.770.000	23,62% -	9.083.000	975.000	8.340.000	5	edp.pt

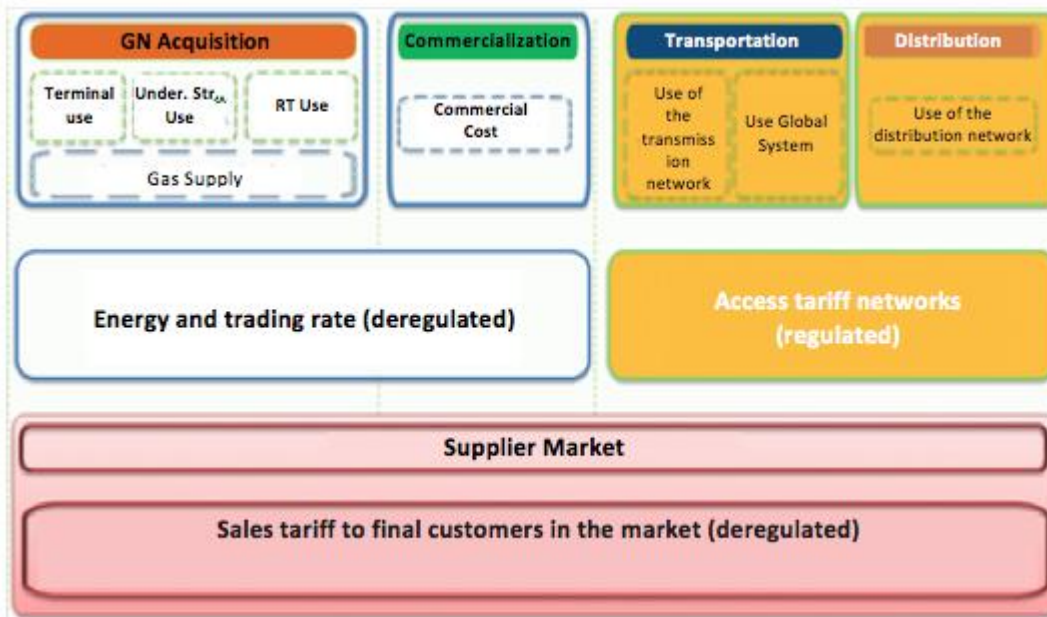
Source: done by the Case writer, based on *Diário Económico's* article, "1000 maiores empresas de Portugal"

Exhibit 3 – Electricity access tariffs (regulated and non regulated)



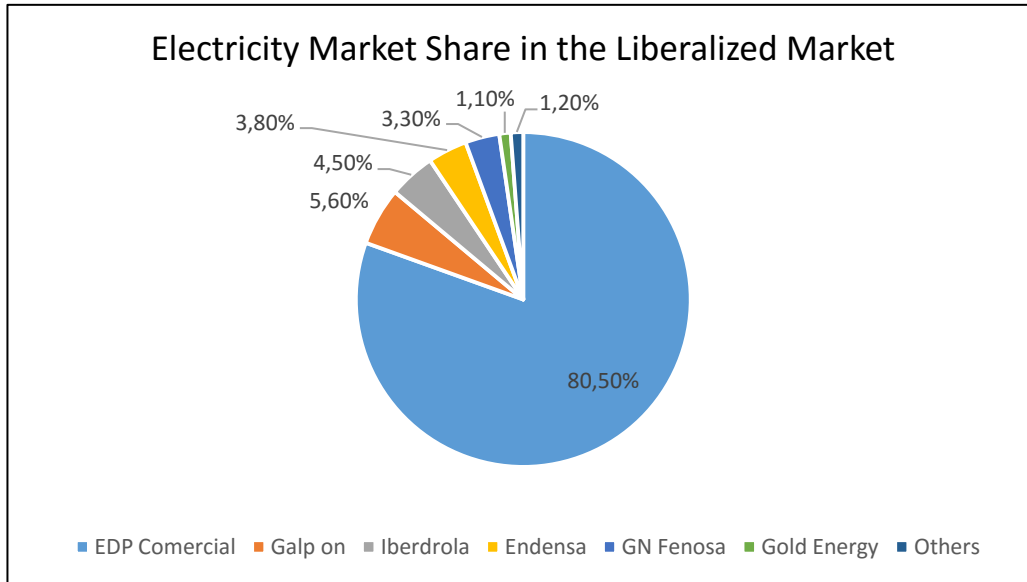
Source: Done by the case writer based on official ERSE site : www.erse.pt

Exhibit 4 – Gas access tariffs (regulated and non regulated)



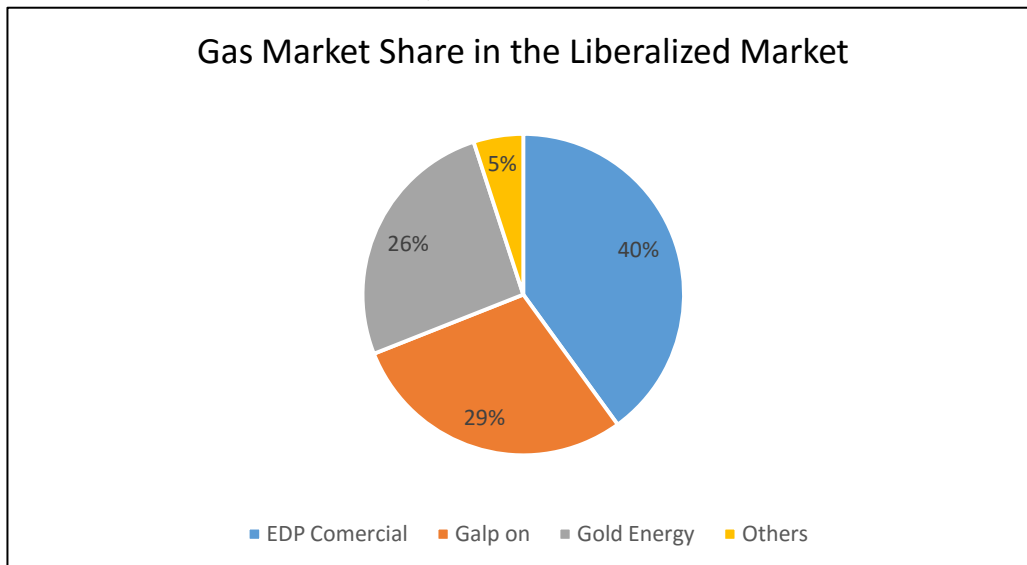
Source: Done by the case writer based on official ERSE site : www.erse.pt

Exhibit 5 – Electricity Market Share Composition



Source: done by the Case writer based on “Resumo informativo, informação Mercado liberalizado electricidade 2015”, www.erse.pt

Exhibit 6 – Gas Market share composition



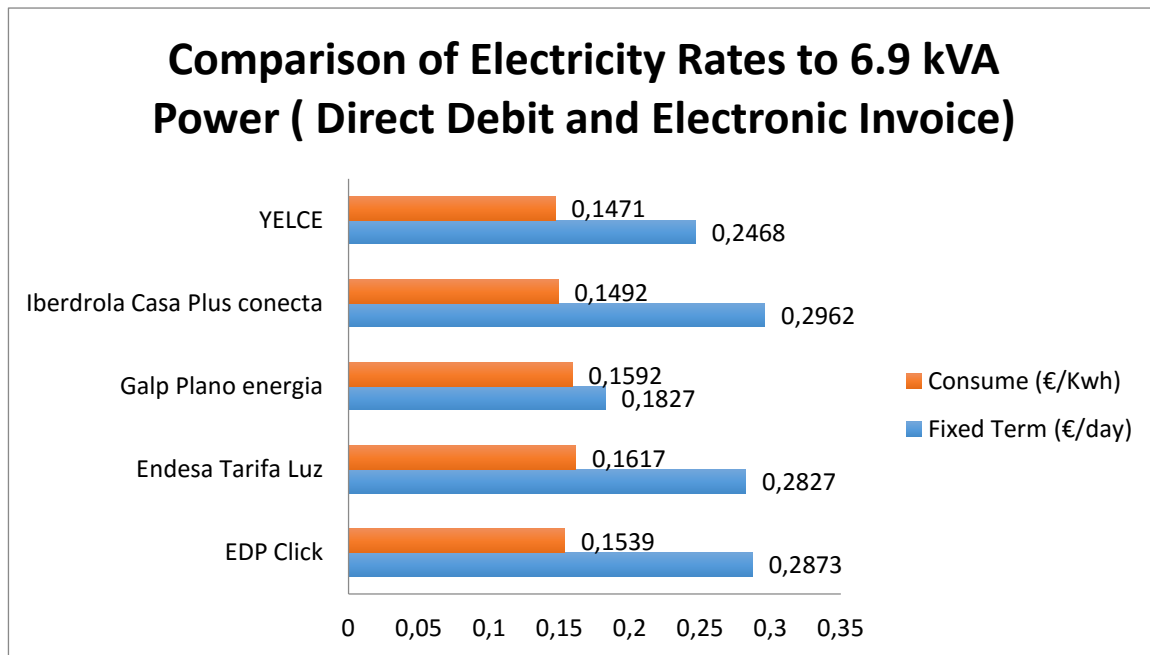
Source: done by the Case writer based on “Resumo informativo, informação Mercado liberalizado electricidade 2015”, www.erse.pt

Exhibit 7- Example of the electricity tariff

Contracted power (kVa)	Simple tariff	
	Power (€/day)	Energy (€/kWh)
1,15		
2,3	0,0820	0,1617
3,45	0,1489	
4,6	0,1936	
5,75	0,2384	0,1617
6,9	0,2831	
10,35	0,4159	
13,8	0,5490	
17,25	0,6825	0,1553
20,7	0,8160	

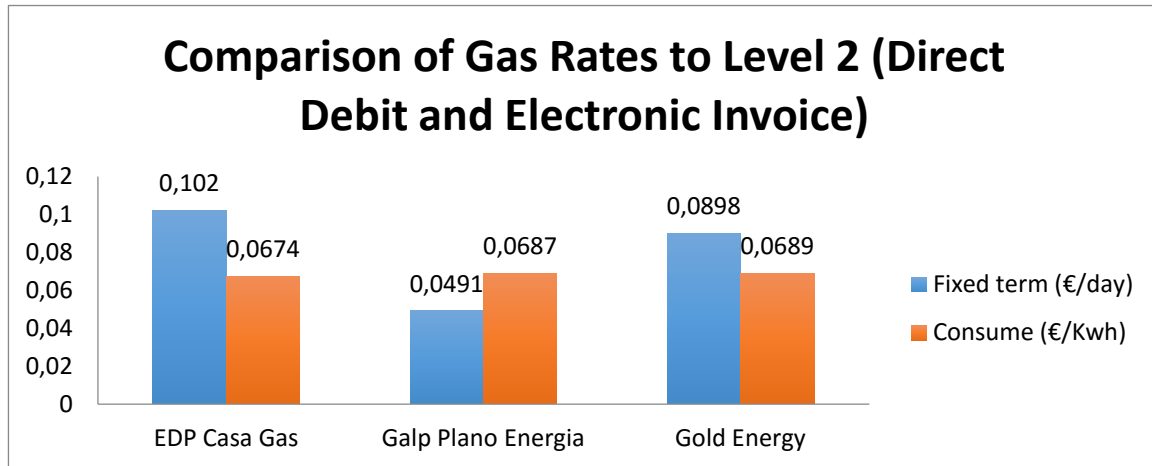
Source: Table created by Case writer based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Exhibit 8 – Electricity price for different retailers – 6,9kVA demanded power



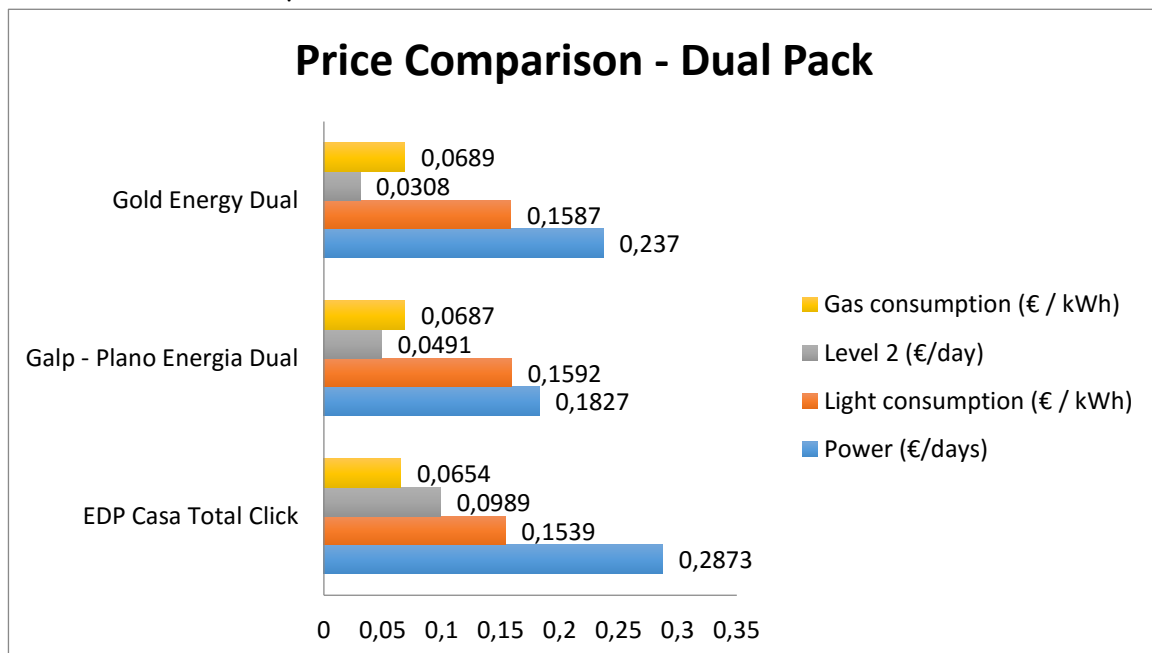
Source: Charts created by Case writer based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Exhibit 9 – Gas price for different retailers, level 2



Source: Charts created by Case writer based on data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Exhibit 10 – Price Comparison - Dual Pack



Source: Charts created by Case writer based on on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Exhibit 11 - Questionnaire

No. of responses: 110

The questionnaire was created by the case writer and delivered to respondents via email. The survey was originally distributed in Portuguese, however for consistency purposes it is presented here in English.

My name is João Malpique and I am currently finishing my Master’s in Strategy at Universidade Católica Portuguesa. This questionnaire will be key to the completion of my thesis. The aim of my project is to study the habits of consumers regarding energy consumption (electricity and gas), as well as their perception of different suppliers and new offerings. The questionnaire will take about 10 minutes and your answers will be anonymous.

Q1 - Are you responsible in your household for the payment of the energy invoice?

- Yes (respondent is led to the third question)
- No (respondent is led to the second question)

Q2 - Even if you aren't, do you have any knowledge about the energy market? (Retailers or payment methods)

- Yes (respondent is led to the third question)
- No (respondent is led to the end of the survey)

Q3 - Which is your energy supplier?

	EDP	Galp Energia	Endesa	Iberdrola	Gold Energy	GN Fenosa
Electricity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(if respondent chooses the same supplier, he/she is led to the fourth question, otherwise is led to the fifth)

Q4 - Why do you have the same gas and electricity supplier?

- Ease of paying bills
- Greater organization and control of payment
- Discount for getting the two types of energy
- Brand loyalty
- Others

Q5 - Why do you not have the same gas and electricity supplier?

- The trust level is different between the two suppliers
- I can benefit through price difference
- My electricity supplier has no gas (vise-versa)
- I am not aware that my gas supplier also provides electricity (vise-versa)
- Others

Q6 - Regarding to energy traders, how important are the following features (0 to 100):

- _____ Price
- _____ Trust
- _____ Gas and Electricity in the same pack
- _____ Quality of technical assistance
- _____ Availability
- _____ Bureaucratic simplicity
- _____ Transparency in invoices
- _____ Discounts
- _____ Online Accessibility

Q7 - Point out the reasons why you not change your energy retailer:

- Habit/Convenience
- Trust
- Difficulties in changing to another retailer
- The price for the other retailers is almost the same
- The technical assistance quality
- Other

Q8 - Do you feel that the energy price is overvalued by energy traders?

- Yes
- No

Q9 - What is your payment method?

- ATM
- Bank Transfer
- Post Office
- Authorized Shops
- Branch Service Companies
- Direct Debit
- Online

Q10 (respondent is led to this question if he does not choose the Direct Debit option)

If there was a payment option via direct debit that was 100% safe and that could bring you advantages, would you change de previous answer?

- Yes
- No (respondent is led to the end of the survey)

Q11 - What is your level of familiarity with the EDP Comercial?

- Very Low
- Low
- Neutral
- High
- Very high

Q12 - EDP Comercial, in addition to the supply of gas and energy, offers the following services:

	Subscribe	No Subscribe
Re:dy (manage home energy consumption anywhere) + 35€ per plug	<input type="radio"/>	<input type="radio"/>
Bombas de Calor (water heating) + 120€/110 litres	<input type="radio"/>	<input type="radio"/>
Factura Segura (guarantee the payment of your energy bill in difficult times) + 1,40€ /month	<input type="radio"/>	<input type="radio"/>
Funciona Plus (Funciona + Ensure the maintenance of your boiler) + 14,90€/month	<input type="radio"/>	<input type="radio"/>
Funciona (Safety and care for your home) + 7,90€/month	<input type="radio"/>	<input type="radio"/>

Q13 - How do you classify (0 to 100) the image of EDP Comercial, taking into account:

- _____ Trusted Brand
- _____ It has fair prices
- _____ Innovative
- _____ Adapts to all consumers
- _____ Transparent
- _____ Accessible to the entire population

Assuming that a new energy company **came to Portugal** (electricity and gas) / Assuming that **EDP launched a new energy company (...)**

(...) with a different approach to the consumer as well as the prices charged. The new company is characterized as a Low Cost: payment by direct debit, invoice and subscription are online. The company focuses on energy trading, without any extra costs associated with customer shops, or technical assistance, thus enabling its customers to reduce their energy bill by 5 euros per month!

(This text was shown to respondents, with the choice of the 2 companies being randomly assigned)

Q14 - Would you be interested in joining this new energy Low Cost company?

- Uninterested
- Little Interest
- Indifferent
- Interested
- Very interested

Q15 – Explain the reasons why you were indifferent/uninterested regarding the low cost?

- It does not provide any service beyond the supply of gas and electricity
- It has no technical assistance
- The subscription and the bill are only online
- I am only allowed to pay through Direct debit
- Other

Q16 - How much do you agree with the following statements (0 to 100):

- _____ The price difference is the main factor of my interest
- _____ The payment is faster thus avoiding concerns about deadlines
- _____ The approach to the consumer is simpler being online, avoiding superfluous bureaucracies
- _____ I appreciate that there are no additional costs that I am often paying with no extra benefits
- _____ It is simpler, since it reduces all operating costs and only focuses on energy
- _____ Without membership commitment, if I'm not satisfied with the service I can change it at any time

Q17 (this question will appear if respondent has seen “a new energy company came to Portugal...”

"Since it is a new brand and is not associated with any known supplier ...

- ... it arouses my curiosity "
- ... it becomes more attractive "
- ... I trust in the low cost energy, regardless of it being associated with another well-known brand "

Q18 - Let's assume that the low cost company belongs to the EDP Group. Rate your level of agreement:

- _____ I rely more on the Low Cost since it is associated with EDP Comercial

- _____ EDP is taking a major step toward innovation
- _____ EDP Comercial is finally adjusted to the current needs of consumers
- _____ EDP Comercial is discriminating consumers who do not have access / knowledge to make an online subscription

Q19 - Adhering to the EDP low cost, you could not take advantage of ant available services or support stores. How do you feel about this limitation?

- I feel discriminated
- It has no technical assistance
- It is unfair
- Indifferent
- It is fair

Q20 - Why do you think that EDP continues to lead the energy market, even after the entry of new competitors?

- Habit/Convenience
- Trust
- Difficulties in changing to another supplier
- It is cheaper
- It has more quality
- Other

Q21 - Would you feel fooled if EDP was to sharply drop its prices?

- Yes
- No

Q22 - Do you feel that EDP charged high prices before, by having now a low cost line?

- Yes
- No

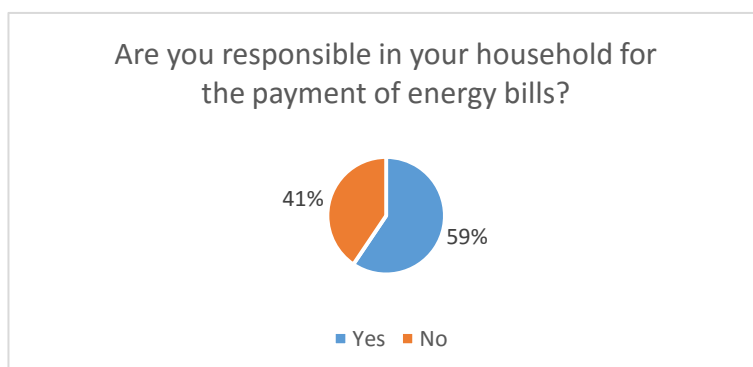
Q23 - What is your level of familiarity with (Galp Energia, Endensa, Gold Energy, Iberdrola, Gas Natural Fenosa)? **(the brands will appear randomly to responders):**

- Very Low
- Low
- Neutral
- High
- Very high

Q24 - How do you classify (0 to 100) the image of the supplier you answered before?

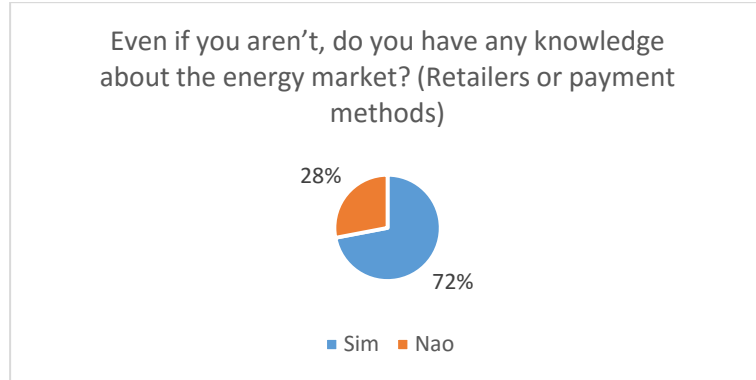
- _____ Trusted Brand
- _____ It has fair prices
- _____ Innovative
- _____ Adapts to all consumers
- _____ Transparent
- _____ Accessible to the entire population

Exhibit 12- Survey responses to Question 1



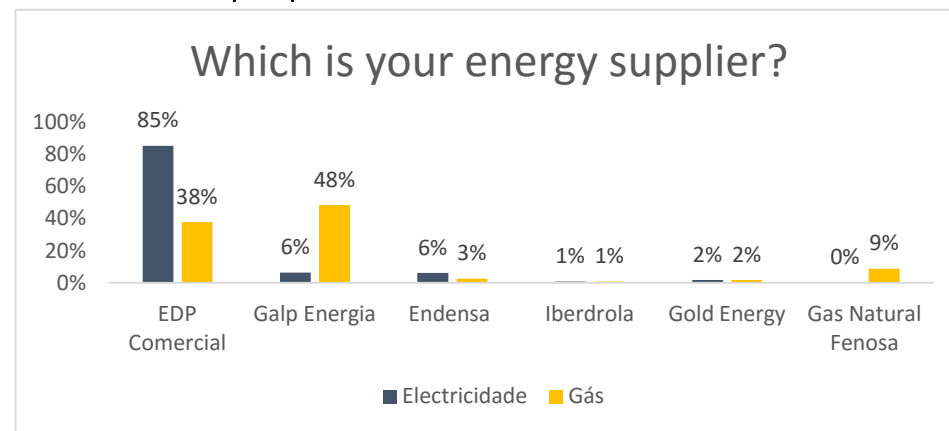
Source: results from a survey conducted by the case writer

Exhibit 13 - Survey responses to Question 2



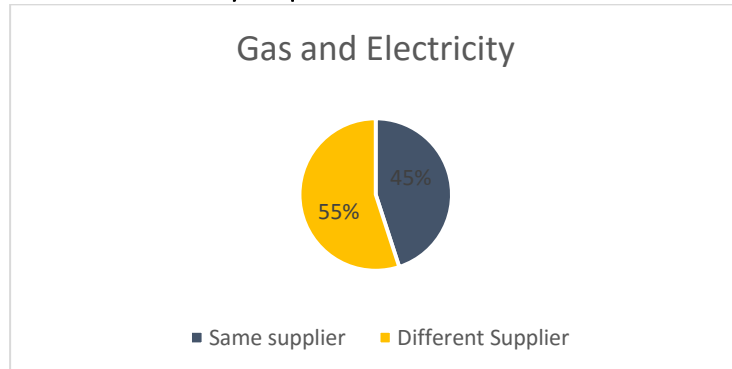
Source: results from a survey conducted by the case writer

Exhibit 14 - Survey responses to Question 3



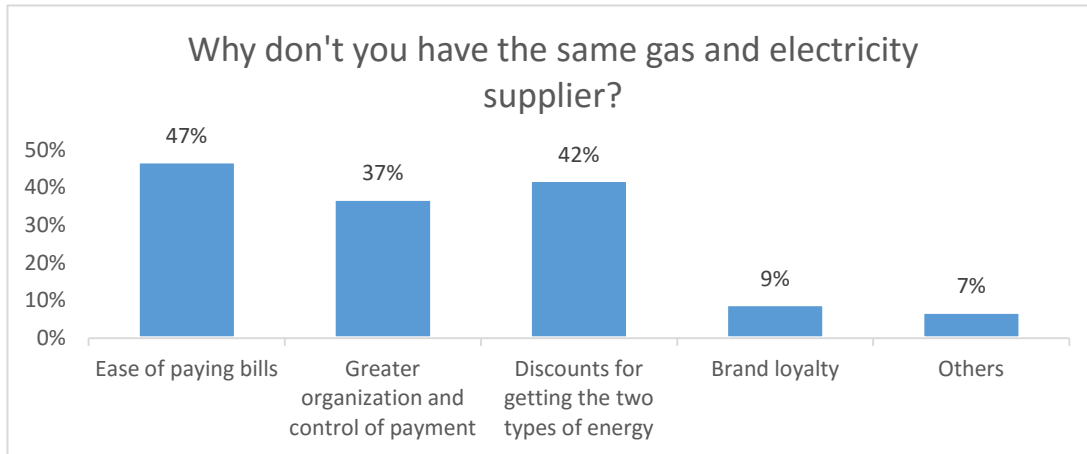
Source: results from a survey conducted by the case writer

Exhibit 15 - Survey responses to Question 3



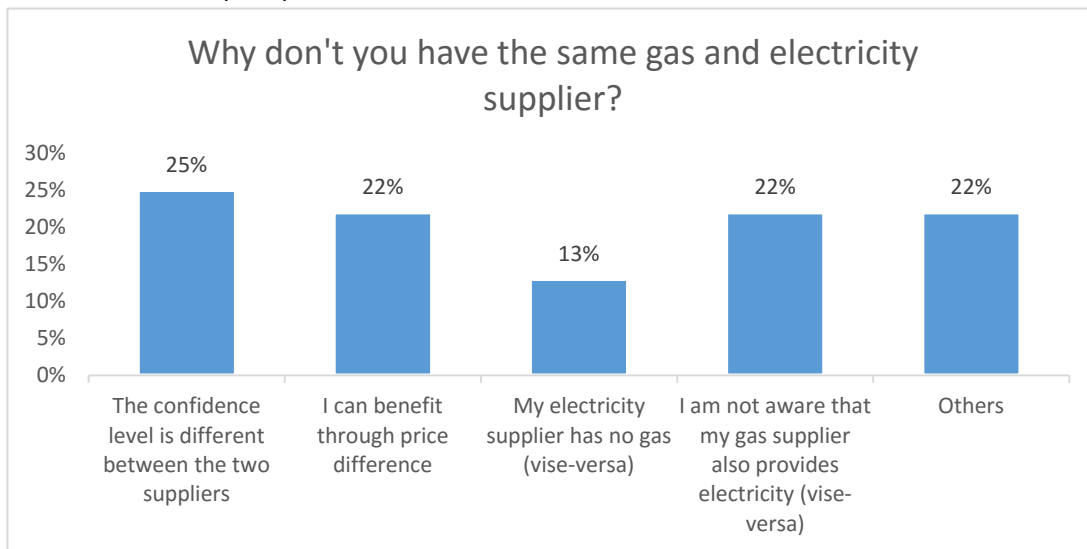
Source: results from a survey conducted by the case writer

Exhibit 16 - Survey responses to Question 4



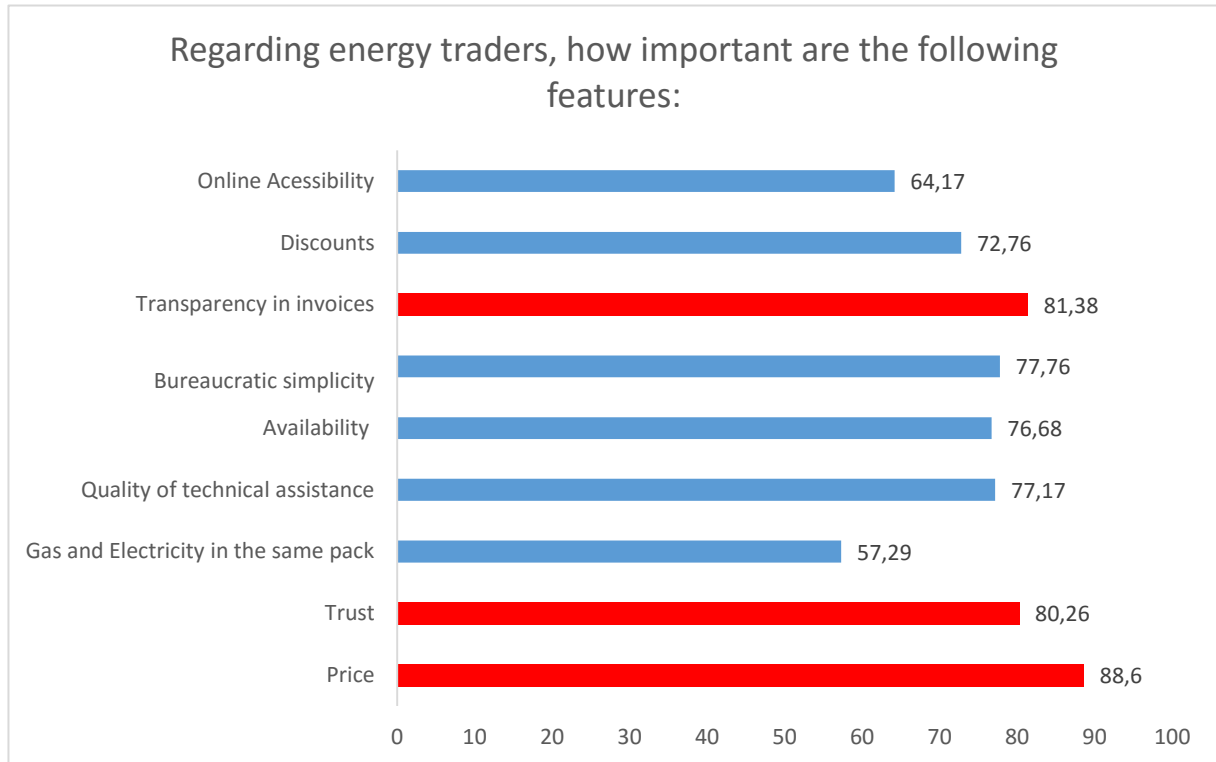
Source: results from a survey conducted by the case writer

Exhibit 17 - Survey responses to Question 5



Source: results from a survey conducted by the case writer

Exhibit 18 - Survey responses to Question 6



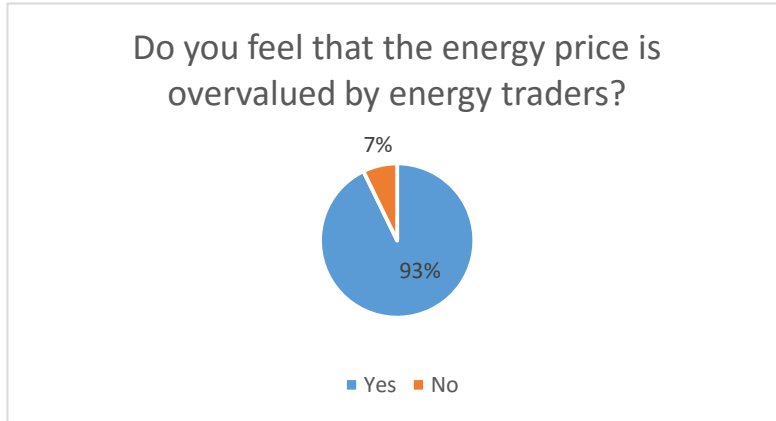
Source: results from a survey conducted by the case writer

Exhibit 19 - Survey responses to Question 7



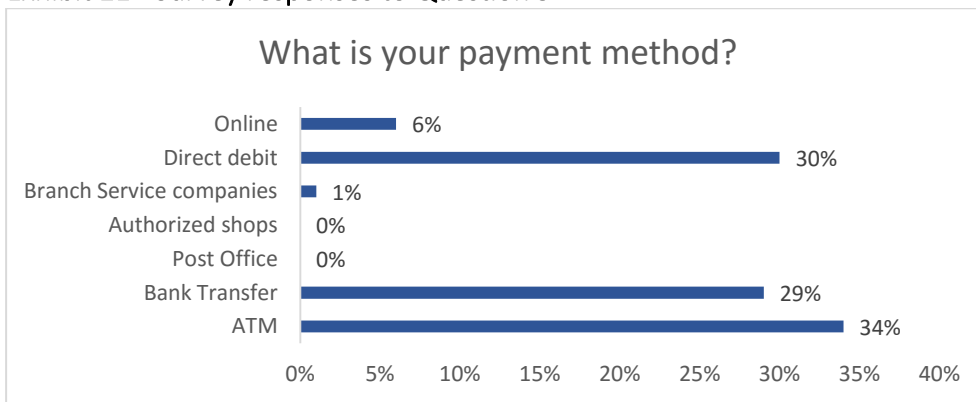
Source: results from a survey conducted by the case writer

Exhibit 20 - Survey responses to Question 8



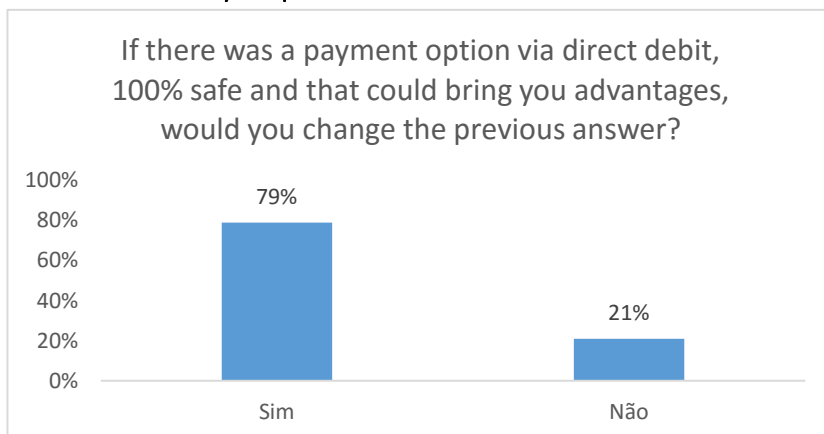
Source: results from a survey conducted by the case writer

Exhibit 21 - Survey responses to Question 9



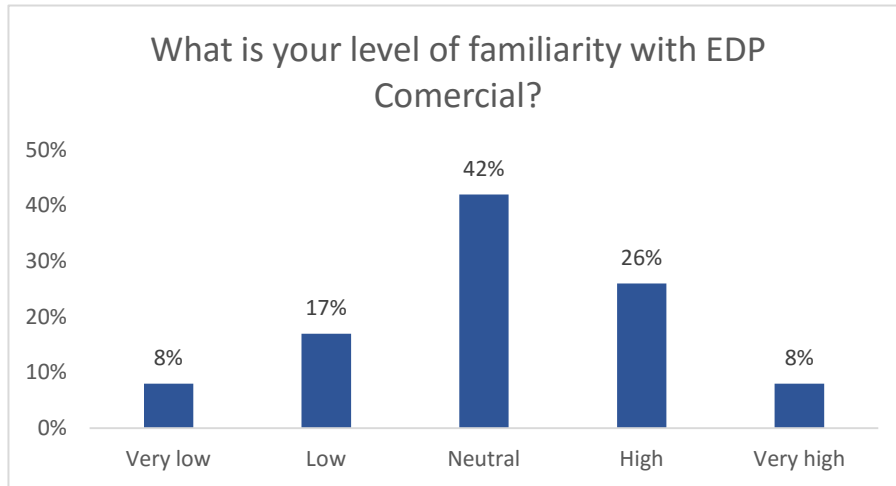
Source: results from a survey conducted by the case writer

Exhibit 22 - Survey responses to Question 10



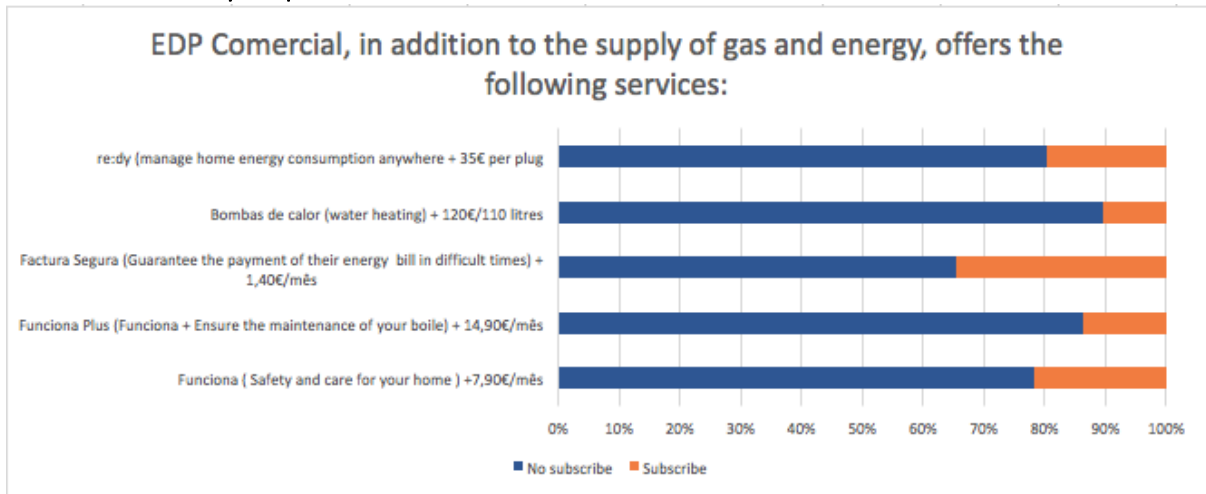
Source: results from a survey conducted by the case writer

Exhibit 23 - Survey responses to Question 11



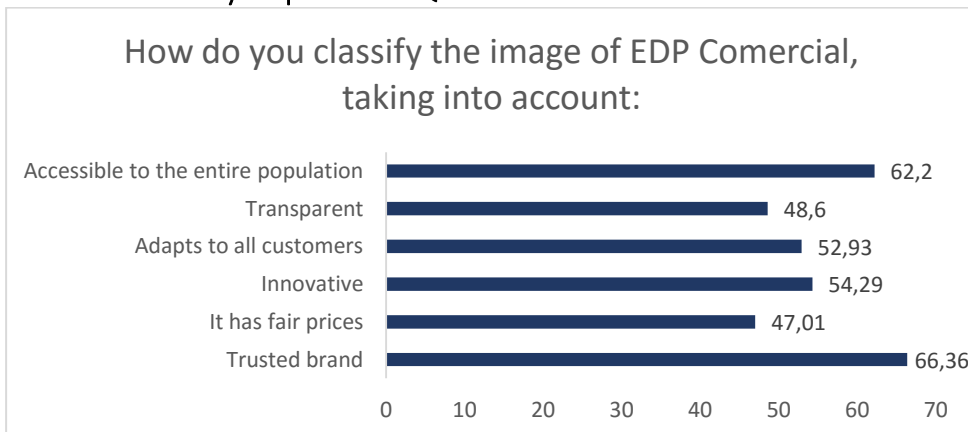
Source: results from a survey conducted by the case writer

Exhibit 24 - Survey responses to Question 12



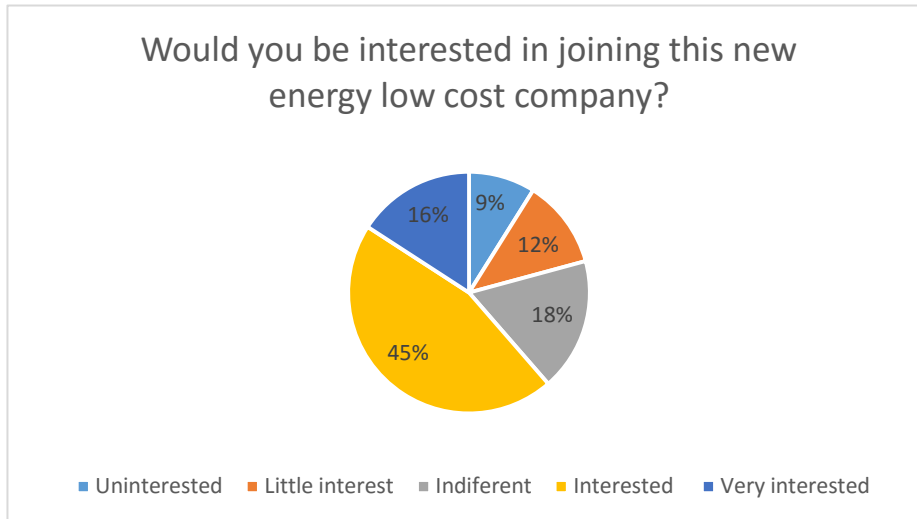
Source: results from a survey conducted by the case writer

Exhibit 25 - Survey responses to Question 13



Source: results from a survey conducted by the case writer

Exhibit 26 - Survey responses to Question 14



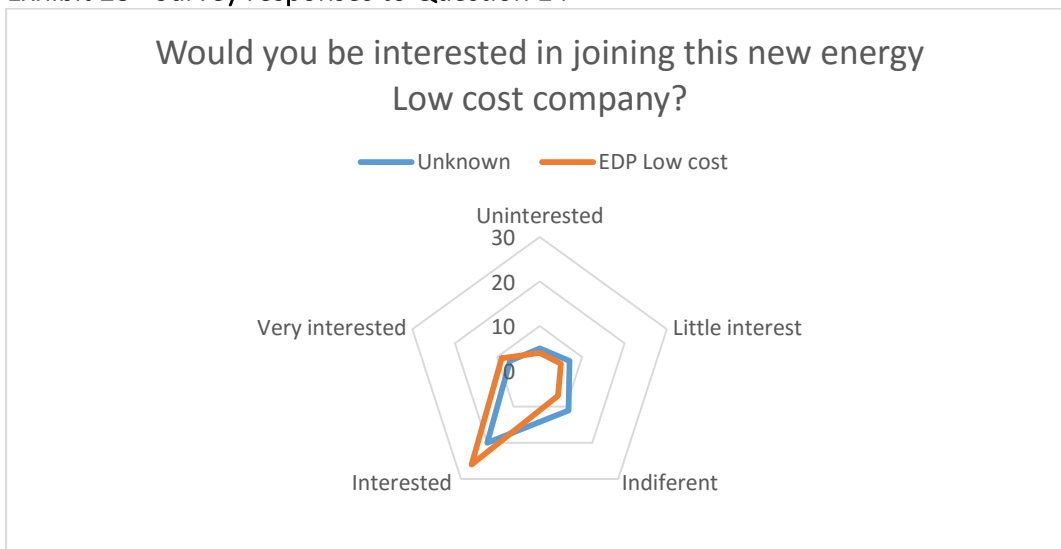
Source: results from a survey conducted by the case writer

Exhibit 27 - Survey responses to Question 14

	<i>Interested</i>	<i>Not Interested</i>
<i>All respondents</i>	61%	39%
<i>EDP respondents</i>	54%	46%
<i>Other respondents</i>	71%	29%

Source: results from a survey conducted by the case writer

Exhibit 28 - Survey responses to Question 14



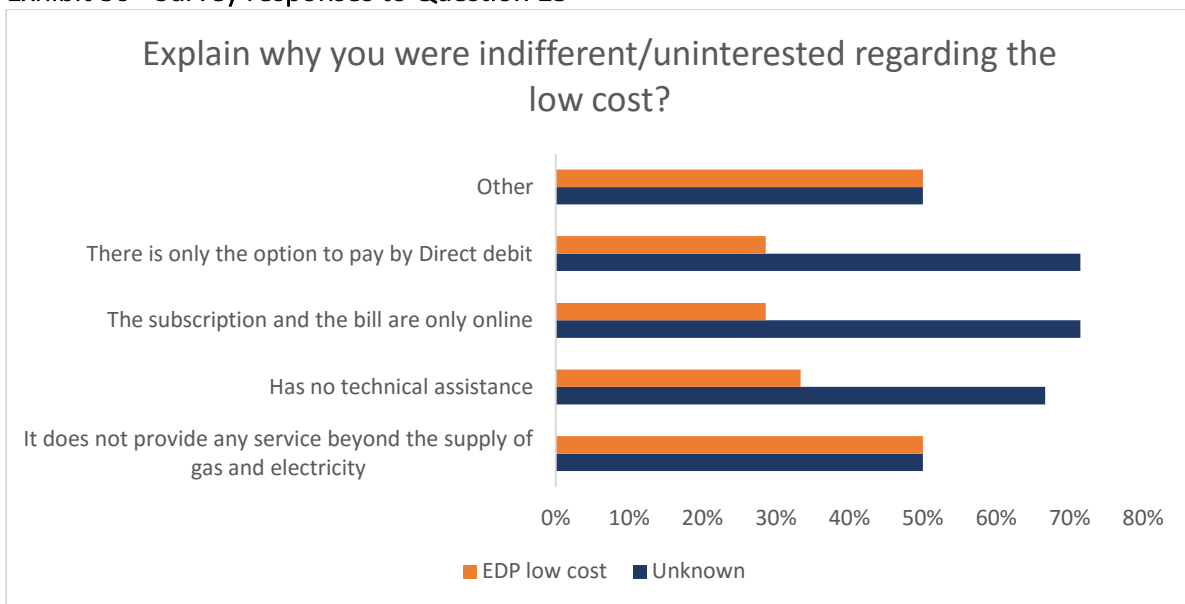
Source: results from a survey conducted by the case writer

Exhibit 29 - Survey responses to Question 14

	<i>EDP Low Cost</i>	<i>Unknown Low Cost</i>
<i>All respondents</i>	59%	41%
<i>EDP respondents</i>	65%	35%
<i>Other respondents</i>	54%	46%

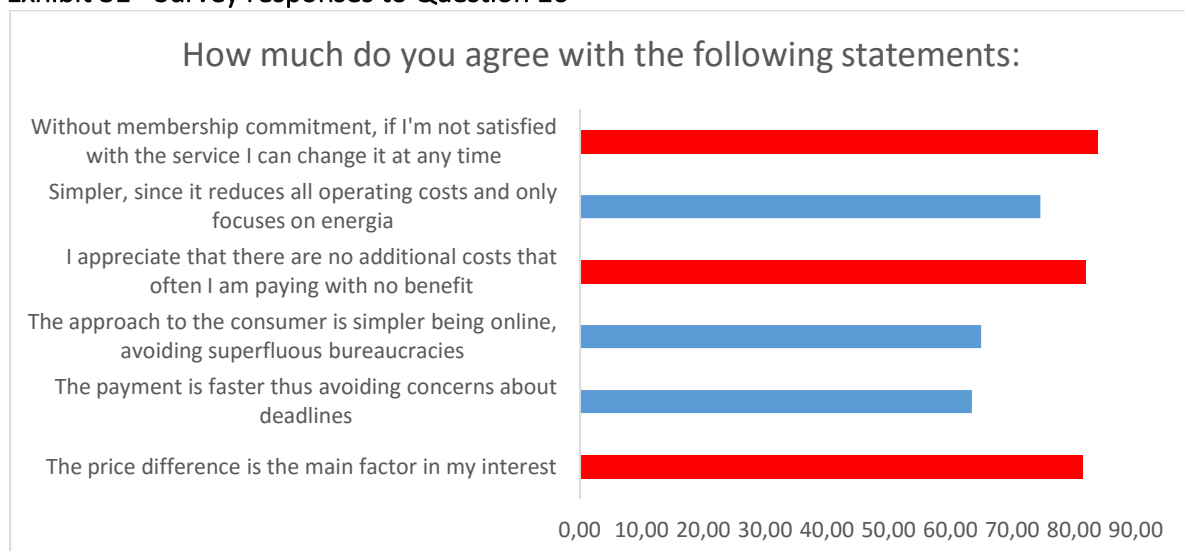
Source: results from a survey conducted by the case writer

Exhibit 30 - Survey responses to Question 15



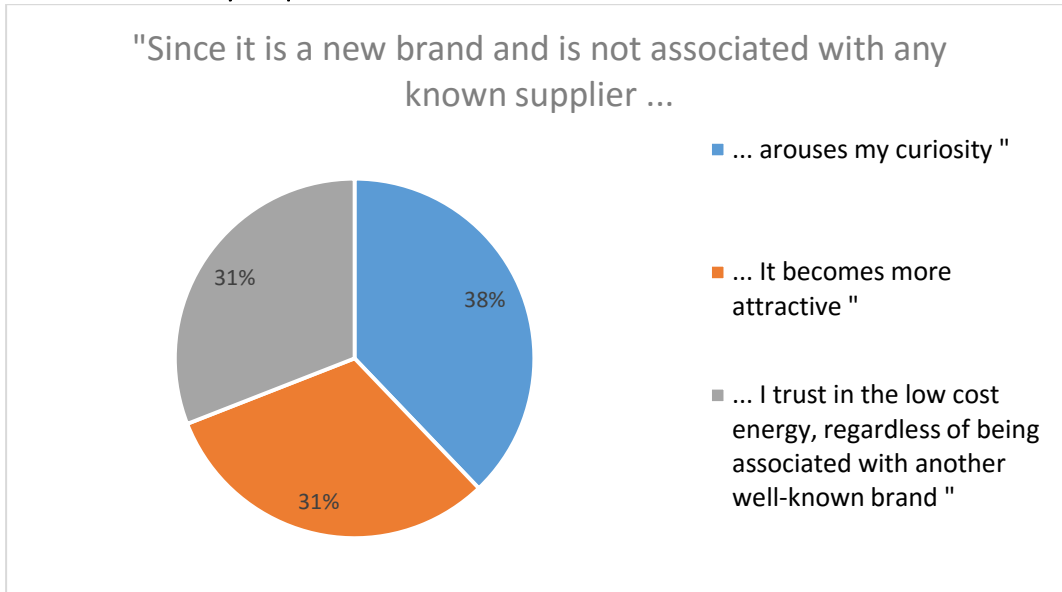
Source: results from a survey conducted by the case writer

Exhibit 31 - Survey responses to Question 16



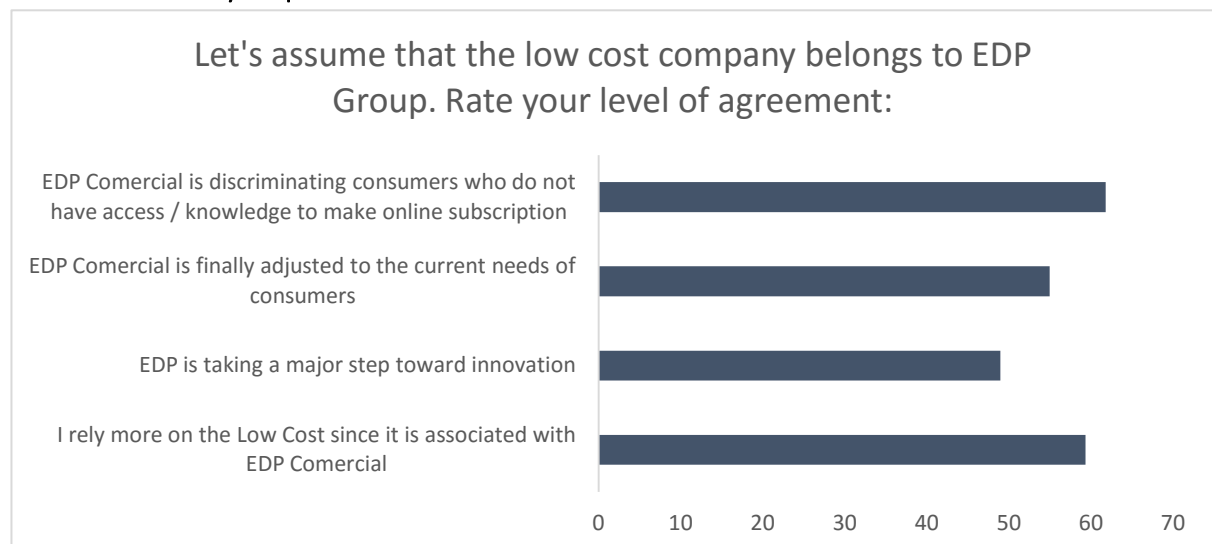
Source: results from a survey conducted by the case writer

Exhibit 32 - Survey responses to Question 17



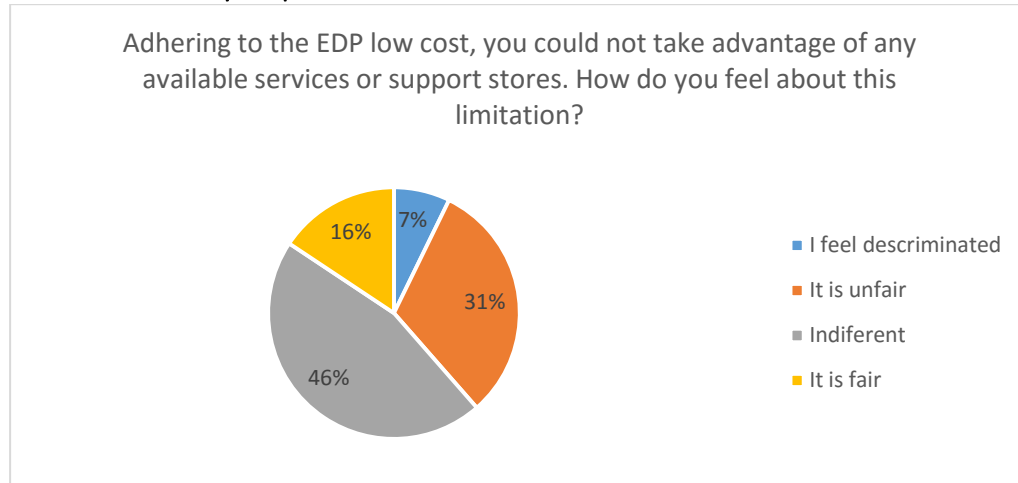
Source: results from a survey conducted by the case writer

Exhibit 33 - Survey responses to Question 18



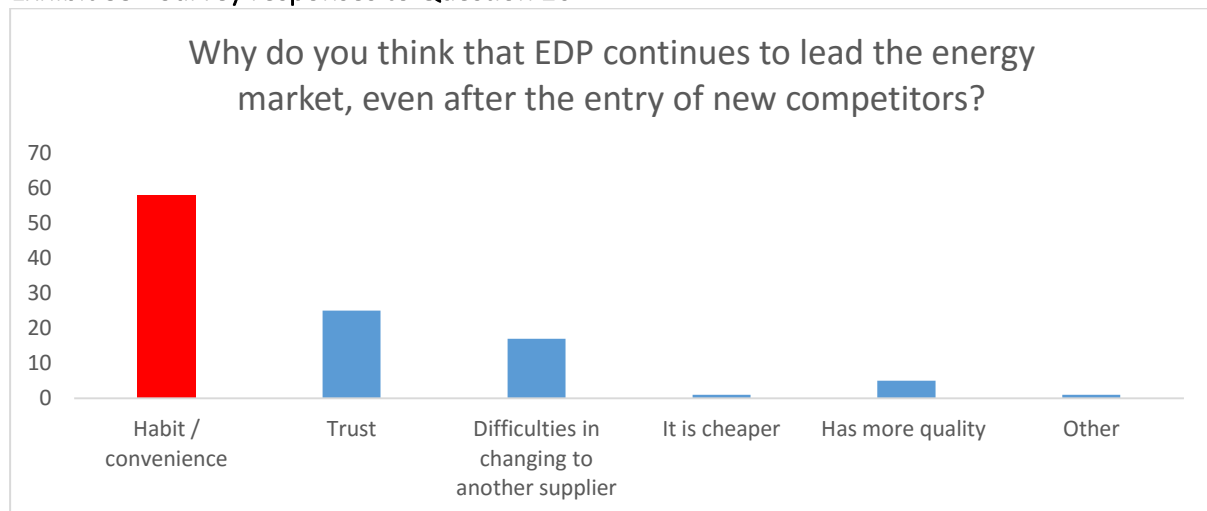
Source: results from a survey conducted by the case writer

Exhibit 34- Survey responses to Question 19



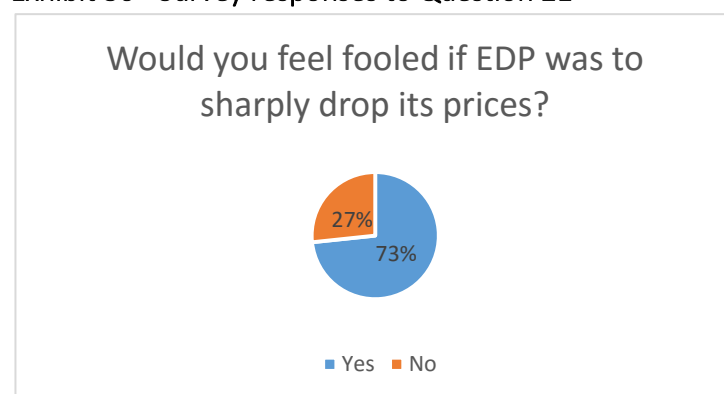
Source: results from a survey conducted by the case writer

Exhibit 35 - Survey responses to Question 20



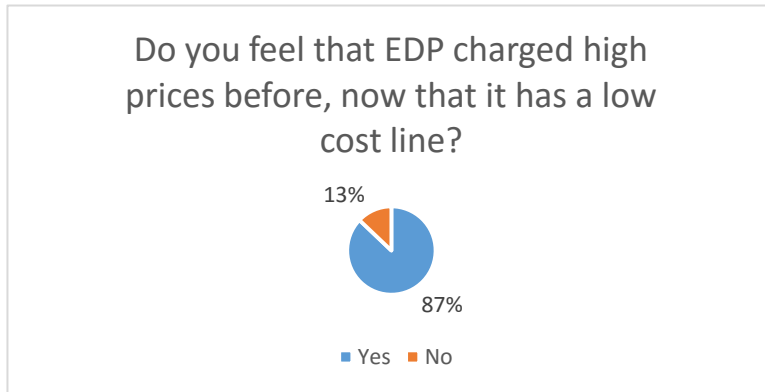
Source: results from a survey conducted by the case writer

Exhibit 36 - Survey responses to Question 21



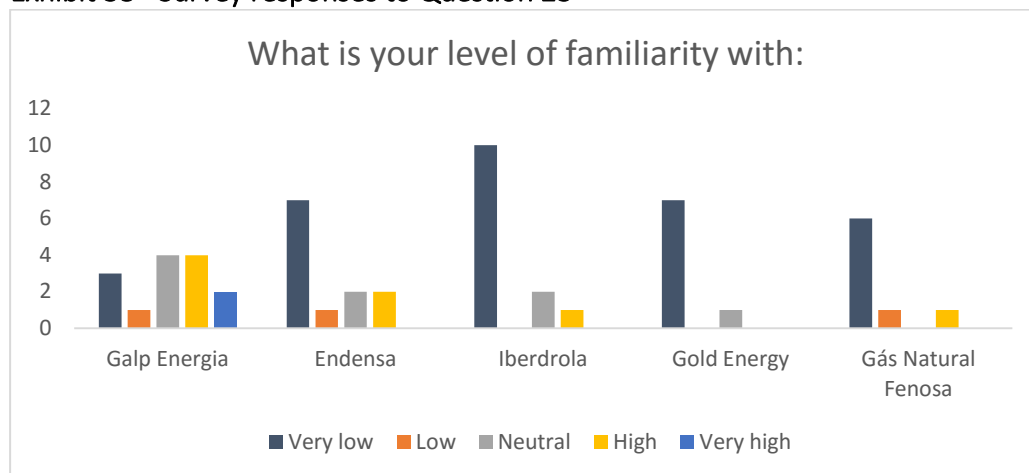
Source: results from a survey conducted by the case writer

Exhibit 37 - Survey responses to Question 22



Source: results from a survey conducted by the case writer

Exhibit 38 - Survey responses to Question 23



Source: results from a survey conducted by the case writer

Exhibit 39 - Survey responses to Question 24

	<i>Galp Energia</i>	<i>Endesa</i>	<i>Iberdrola</i>	<i>Gold Energy</i>	<i>Gas Natural Fenosa</i>
<i>Trusted Brand</i>	64,22	32,5	26,77	30,38	32,38
<i>It has fair prices</i>	52,35	33,5	33,08	30,25	28,56
<i>Innovative</i>	40,36	31,42	29,38	27,13	31,56
<i>Adapts to all customers</i>	49	34,42	36,15	25,38	30,56
<i>Transparent</i>	40,29	28,25	30,77	22,25	33,53
<i>Accessible to the entire population</i>	44,14	32	35,38	28,25	34,13

Source: results from a survey conducted by the case writer

Appendix 2: Invoice calculation

I – Between Competitors

Given the data available in the case study (**p. 14 and 15 of the case study**), students can start with the amount spent per year in electricity for the average family.

Table 1 – Available retailer’s offers regarding electricity

	<i>Fixed Term (€/day)</i>	<i>“Electricity” (€/kWh)</i>
<i>EDP Casa Click</i>	0,2873	0,1539
<i>Endesa Tarifa Luz</i>	0,2827	0,1617
<i>Galp Plano Energia</i>	0,1827	0,1592
<i>Iberdrola Casa Conecta</i>	0,2962	0,1533
<i>YELCE</i>	0,2468	0,1471

Source: Case writer base on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Since the Portuguese family consumes on average 4500 kWh per year, so the following calculation should be done:

- Total Amount spent/year in € = Fixed Term × 360 days + Amount electricity consumed × “Electricity”

This results in the following table:

Table 6 – Amount spent per year for an average family regarding electricity

	<i>Amount spent/year)</i>
<i>EDP Casa Click</i>	€796
<i>Endesa Tarifa Luz</i>	€829
<i>Galp Plano Energia</i>	€782
<i>Iberdrola Casa Conecta</i>	€796
<i>YELCE</i>	€751

Source: Case writer, based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Regarding gas as a separate offer:

Table 2 – Available retailer’s offers regarding gas

	<i>Fixed Term (€/day)</i>	<i>“Gas” (€/kWh)</i>
<i>EDP Casa Click</i>	<i>0,102</i>	<i>0,0674</i>
<i>Galp Plano Energia</i>	<i>0,0491</i>	<i>0,0687</i>
<i>Gold Energy</i>	<i>0,0898</i>	<i>0,0689</i>

Source: Case writer based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Similar to electricity, since the Portuguese family consumes on average 320m3 per year, the following calculation should be done:

- Total Amount spent/year in € = Fixed Term × 360 days + Amount electricity consumed × “Gas”

Table 7 – Amount spent per year for an average family regarding gas

	<i>Amount spent/year)</i>
<i>EDP Casa Click</i>	<i>€264</i>
<i>Galp Plano Energia</i>	<i>€249</i>
<i>Gold Energy</i>	<i>€265</i>

Source: Case writer based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

Once students get the total amount spent per year for an average family in electricity and gas separately, (without being a joint offer), they should proceed to the sum of the amount spent per year in each one:

- Amount spent/year Electricity + Amount spent/year Gas

Resulting in the following table:

Table 8 – Amount spent per year for an average family regarding gas and electricity (separate offers)

		<i>Gas</i>		
		<u>EDP Casa Click</u>	<u>Galp Plano Energia</u>	<u>Gold Energy</u>
<i>Electricity</i>	<u>EDP Casa Click</u>	€ 1 060	€ 1 045	€ 1 061
	<u>Endensa Tarifa Luz</u>	€ 1 093	€ 1 079	€ 1 094
	<u>Galp Plano Energia</u>	€ 1 046	€ 1 031	€ 1 047
	<u>Iberdrola Casa Conecta</u>	€ 1 060	€ 1 046	€ 1 061
	<u>YELCE</u>	€ 1 015	€ 1 000	€ 1 015

Source: Case writer based on Data from www.erse.pt, "Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental"

This table represents the amount spent/year for an average family who decides to choose different energy retailers, with the exception of EDP and Galp. However, students must also determine this, with the same method as before, for those retailers who have a dual pack, offering gas and electricity at the same time, which can differ from the amount previously calculated:

Table 3 – Available retailers' offers regarding dual pack (gas and electricity in the same offer)

	<i>Fixed Term</i> (€/day) Elect.	<i>"Electricity"</i> (€/kWh)	<i>Fixed Term (€/day)</i> Gas	<i>"Gas"</i> (€/kWh)
EDP Casa Click	0,2873	0,1539	0,0989	0,0654
Galp P. Energia	0,1827	0,1592	0,0491	0,0687
Gold Energy	0,2370	0,1587	0,0308	0,0689

Source: Case writer based on Data from www.erse.pt, "Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental"

The same calculation process should be followed:

- Total Amount spent/year in € = Fixed Term Elect × 360 days + Amount of electricity consumed × "Electricity" + Fixed Term Gas × 360 days + Amount of electricity consumed × "Gas"

Resulting in:

Table 9 – Amount spent per year for an average family regarding dual pack (gas and electricity in the same offer)

<i>Amount spent/year</i> (Gas and Electricity)	
<i>EDP Casa Click</i>	€1 052
<i>Galp Plano Energia</i>	€1 031
<i>Gold Energy</i>	€1 043

Source: Case writer based on Data from www.erse.pt, “Preços de Referência no mercado Liberalizado de Energia eléctrica e gás natural em Portugal Continental”

II- Low Cost Company

Table 4 – Low Cost offer regarding dual pack (gas and electricity in the same offer)

	<i>Fixed Term</i> (€/day) Elect.	<i>“Electricity”</i> (€/kWh)	<i>Fixed Term (€/day)</i> Gas	<i>“Gas”</i> (€/kWh)
<i>Low Cost company</i>	<i>0,2369</i>	<i>0,1412</i>	<i>0,0392</i>	<i>0,0608</i>

- Total Amount spent/year in € = Fixed Term Elect × 360 days + Amount of electricity consumed × “Electricity” + Fixed Term Gas × 360 days + Amount of electricity consumed × “Gas”

Resulting in:

Table 10 – Amount spent per year for an average family with the Low Cost Company

<i>Amount spent/year</i> (Gas and Electricity)	
<i>Low Cost Company</i>	€940

Appendix 3: Best option calculation

Information available to calculate what should be the best option:

- 4,187 millions of electricity customers in liberalized market (**p.10 on the case study**)
- 0,924 millions of gas customers in liberalized market (**p.10 on the case study**)
- EDP holds 80,5% of the domestic consumers on electricity and 40 % on gas (**p. 13 on the case study**)
- EDP energy bill for an average family = 1052 €/year (**answer 3**)
- Low Cost Energy bill for an average family = 940 €/year (**answer 4**)
- **Exhibit 29**
- **Exhibit 31**

Loss in revenues through cannibalization:

- Number of EDP customers:
 Electricity customers: $80,5\% \times 4,187 \text{ M} = 3,37053 \text{ M}$
 Gas customers: $40\% \times 0,924 \text{ M} = 0,3696 \text{ M}$
 Both: $3,37053 + 0,3696 = 3,74013 \text{ M}$

- **Exhibit 29**

	<i>Interested</i>	<i>Not Interested</i>
<i>All respondents</i>	61%	39%
<i>EDP respondents</i>	54%	46%
<i>Other respondents</i>	61%	39%

- **Exhibit 31**

	<i>EDP Low Cost</i>	<i>Unknown Low Cost</i>
<i>All respondents</i>	59%	41%
<i>EDP respondents</i>	65%	35%
<i>Other respondents</i>	52%	48%

- Through the exhibits above, it is possible to calculate the number of EDP Customers who prefer:
 EDP Low Cost: $3,74013\text{M} \times 0,54\% \times 0,65\% = 1,31278 \text{ M}$
 Unknown Low Cost: $3,74013\text{M} \times 0,54\% \times 0,35\% = 0,70686 \text{ M}$

- Cannibalized revenues:

$$\text{EDP Low Cost: } 1,31278 \times (1052\text{€} - 940\text{€}) = 147,03 \text{ M/€}$$

$$\text{Unknown Low Cost: } 0,70686 \times (1052\text{€} - 940\text{€}) = 79,168 \text{ M/€}$$

It is clear that the cannibalized revenues in launching a EDP low Cost are much higher, however students should also calculate the increase in revenues by acquiring customers from other retailers:

Increase in revenues by acquiring other customers:

- Number of customers from other retailers:

If there are 5,111 customers (4,187M + 0,924M) in the liberalized market, on both electricity and gas, and EDP retains 3,74013 M (77%) customers, it means that other retailers retain $5,111 - 3,74013 = 1,37087$

- Increase in revenues by acquiring customers from other retailers

Number of customers, from other retailers besides EDP, who would change to:

$$\text{EDP Low Cost: } 1,37997 \times 61\% \times 52\% = 0,437726 \text{ M}$$

$$\text{Unknown Low Cost: } 1,37997 \times 61\% \times 48\% = 0,404055 \text{ M}$$

Increase in revenues:

$$\text{EDP Low Cost: } 0,488137 \text{ M} \times 940 \text{ €} = 411,462 \text{ M/€}$$

$$\text{Unknown Low Cost: } 0,353548 \text{ M} \times 940 \text{ €} = 379,81 \text{ M/€}$$

Increase in revenues, including the cannibalization revenues

$$\text{Launching the EDP Low Cost: } -147,03 \text{ M/€} + 411,462 \text{ M/€} = 264,432 \text{ M/€}$$

$$\text{Launching an independent Low Cost: } -79,168 \text{ M/€} + 379,81 = 300,642 \text{ M/€}$$

Appendix 4 – Interviews

The case writer, in order to better understand the energy market, as well as to receive feedback and different opinions about the dilemma conducted two interviews.

- Prof. Emilio Távora Vilar – designer, and book author of *Design et al.* Marketing professor at Belas Artes University and University of Lisbon. This Interview aimed to discuss how energy retailers are competing, and what might influence customers' choices based on their marketing advertising.
- Prof. Jorge Vasconcelos - first President of the Regulatory Authority for Energy Services, co-founder and first President of the Council of European Energy Regulators. The veracity of the emergence of the low cost was deliberated and the values for the low cost company were delimited.