

MARKETING MIX MODELS USED IN THE LIBERALIZED HOUSEHOLD ELECTRICITY MARKET

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Abstract: *The retail electricity market in Romania has been liberalized for household consumers since 2013, allowing households to switch electricity suppliers based on price or any other preferences. The implementation of legislation and institutions compatible with those set up throughout the European Union has provided support for the development of a liberalized market. However, available data suggests that consumers only started switching in 2017, with approximately 2.5% of households having done so by the end of 2018 – a relatively rapid growth compared to other European states. This promising trend in Romania has encouraged electricity suppliers to develop a more consumer-friendly array of service offerings, with various pricing options, as well as other bundling benefits. Their marketing strategy has also involved developing promotional campaigns along with networks of customer contact points across the country. The current paper explores, classifies and compares the marketing strategies of the household electricity suppliers in Romania, based on the examples of electricity suppliers active in other countries. The aim of the paper is to show to what extent the marketing strategies observed in other countries have been successfully replicated in Romania and whether significant adaptation is required in order to meet the expectations and satisfy the needs of the local household consumer segment.*

Keywords: *electricity suppliers, retail electricity market, Romania, household consumers, marketing mix*

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INTRODUCTION

The current rules by which the household electricity market in Romania functions are significantly different from those observed in the country in the first part of the 1990s. As a result of Romania's integration in the European Union, institutional and market reforms needed to be implemented. The emerging view in Europe toward the end of the 20th century was that energy markets would serve consumers better if competition through free-market reforms would be introduced. This meant, on the one hand, that the largely state owned and vertically integrated monopolies in the areas of natural gas and especially electricity would need to be broken up. On the other hand, the energy supply markets would need to be opened up to private investors, leading to an increase in competition. The desired end result was to reduce the inefficiencies inherent to state owned monopolies and to reduce prices paid by energy consumers.

The legislative and institutional reforms were adapted and implemented in Romania starting as early as 1996, and culminating with a complete separation of the four energy value chain links (generation, transmission, distribution and supply), as well as significant private investments in the areas of generation and supply. The relatively rapid changes that took place in the traditionally conservative energy sector has taken most household consumers by surprise. In spite of the legal framework for switching electricity suppliers being put into place since 2013, the first consumers to actually take this step did it in 2017. In fact, our previous research showed that most household consumers were not aware of this possibility in 2014 (Maxim, 2015). Most of them found it difficult to disconnect the distribution (physical infrastructure ownership) from the supply activities (sellers/intermediaries), believing that only the local distribution companies could be sellers within their assigned territory – a convenient situation for the incumbent/default suppliers.

However, as the National Energy Regulatory Authority (ANRE), founded in 1998, took an increasingly active and public role in promoting the newly established liberalized market, the mass media and the general public became more aware of the existing regulatory framework. As a result, the latest figures from ANRE suggest that around 200.000 household consumers (approximately 2.5% of the total number of such entities) had switched their electricity supplier by the end of 2018 (ANRE, 2019). Assuming a linear progression of this number, it is possible that close to half a million households have been actively involved in choosing a new electricity supplier by mid-2020.

The trend presented above creates both a problem and an opportunity for the default suppliers. The problem is that their typically stable residential customer base is now being targeted by other companies. The opportunity is that they can now leverage their existing infrastructure (personnel, experience, financial and material resources etc.) in order to increase their customer base beyond their assigned geographical market.

The current paper is the third in a series of works that seek to provide a preliminary assessment of the evolution that the Romanian electricity market has gone through, with a focus on household consumers. The first of the previous two papers provides an analysis of the structural changes that took place along the various links in the electricity value chain, as well as the high-level implications for consumers (in terms of service quality and price) (Maxim & Roman, 2019). The second includes a comprehensive review of marketing practices used by European electricity suppliers, achieved through an extensive literature review (Maxim, 2020). Information from both of these works has been used in the development of the second section of this manuscript.

Completing the first stage of this research endeavor, this third paper in the series aims to provide a snapshot of the actions taken by suppliers in the household electricity market of Romania. This is achieved through a qualitative assessment of the marketing strategies employed by these companies. They are compared to the approaches used by similar companies across Europe, as described by existing literature. We were able to provide a comprehensive, albeit high-level, assessment of the marketing mix developed by the 15 largest suppliers in the Romanian electricity household market. Our study was able to identify some components in the marketing strategies of electricity suppliers that were not observed or discussed in the existing literature.

To the best of our knowledge, the current paper provides the first publicly available academic assessment of marketing strategies used by electricity suppliers in the emerging and dynamic household energy market of Romania.

Beyond the current introduction, the paper includes four other sections. Section 2 provides an overview of the legislative and structural changes that took place on the European and in the Romanian energy markets over the last two decades, as well as an overview of the marketing strategies employed by European electricity suppliers. Section 3 outlines the methodological approach and the limitations of the study. Section 4 presents the results of our assessment of marketing strategies used in the Romanian electricity retail market. Section 5 provides some concluding remarks.

THE LIBERALIZED ELECTRICITY MARKETS

The current section provides the context that has shaped the research design. It is constructed based primarily on the two previous papers in what is a three paper series on the topic of marketing strategies employed by electricity suppliers in Romania (Maxim & Roman, 2019; Maxim, 2020). We first describe the evolution that has taken place at the European level, mainly from a legislative standpoint. We then present how these changes were translated at the Romanian market level. Finally, we point out the main findings that resulted from our review of the marketing strategies used by electricity suppliers in Europe.

Legislative and structural market changes across Europe

In the 1990s, the European energy market was controlled by large, vertically integrated, state owned monopolies, whose activity was heavily regulated. The easing of regulation, coupled with liberalization, as well as the breakup and privatization of the above mentioned monopolies, became the long term vision of the European Union (EU) member states in the last decade of the 20th century. The long term goal is to create a sustainable and liberalized single European energy market that can provide sufficient amounts of affordable energy for all EU member states (solving issues related to energy security and energy poverty that currently affect numerous European countries). The prevailing consensus is that liberalization, privatization and deregulation are the paths toward increasing innovation and generating consumer welfare, thus achieving the goals of the single European energy market project.

We can identify three primary pieces of legislation that have served as stepping stones in the implementation of the proposed reform at the European level. These were Directive 96/92/EC in 1996, followed by Directive 2003/54/EC and Directive 2009/72/EC. These were adapted and incorporated into the national legislation of the EU member states, who currently have similar institutions and market mechanisms in place, insuring the needed compatibility for the success of future steps in energy market reform. With the exception of Malta (which has a special status due to its isolated energy grid), all EU member states have achieved varying degrees of energy market liberalization.

The energy sector has four main links in its value chain: generation, transmission, distribution and supply. An additional link can be included in the pre-generation stage, covering the sourcing of energy fuel, such as coal, uranium and oil. However, this is commonly not included in the market analyses, as demonstrated by market reports, internal documents of energy companies, as well as publications by national regulatory institutions.

Focusing on the specifics of the electricity market, the ‘production’ or ‘generation’ stage involves the conversion of chemical, kinetic, solar and other types of energy into electrical energy, achieved through various types of equipment, such as turbines, photovoltaic panels, engines or fuel cells (usually requiring a generator). The ‘transmission’ stage involves the transportation of large volumes of electricity from production facilities to regional distribution grids, using high voltage transmission lines. The ‘distribution’ stage connects the transmission system with the end users (residential, industrial or commercial), using medium and low voltage power lines. The ‘supply’ stage refers to the sale of electricity to end users by intermediaries who subsequently cover the transmission and distribution costs, as well as the cost of acquiring electricity from the producers. There are some exceptions to this approach that generally do not apply to most household consumers. For example, large industrial consumers will often seek to purchase electricity directly from a producer, while some consumers (including households) can also act as electricity producers (a process referred to as ‘distributed generation’), using equipment such as solar panels or small wind turbines.

A significant step in the EU wide energy market reform process was the unbundling of the supply and distribution components of the value chain. This means that consumers no longer need to purchase electricity from the company that manages the grid infrastructure to which they are connected. Suppliers can now sell electricity without needing to own any physical infrastructure. This measure led to an increased level of competition in the supply sector, such that incumbent utility companies faced both the threat of losing default customers and the opportunity of acquiring new customers in other markets. Müller et al. (2008) is one of the first to comprehensively present the measures taken by energy companies in Germany in the new market context, most of which will be listed in Section 2.3.

The energy market reforms have had some effects that are not beneficial for consumers, such as increased prices (compared to state owned companies) (Fiorio and Florio, 2013), reduced innovation (Marino et al., 2019) and, in several cases, the emergence of oligopolies, market alliances and lower than expected market competition (Boroumand, 2015; Haas, 2019; Ghazvini et al., 2019; Mulder & Willems, 2019). The crucial factor that contributes to the establishment of a liberalized market is the supplier switching behavior (the process through which customers opt to change their electricity supplier – the initial step is a movement away from the default semi-regulated tariff offered by their incumbent supplier). Several studies show that consumers have been slow to embrace the possibility of becoming active players on the market, while others show that a significant portion of contract switching is internal (choosing a deregulated/competitive tariff from the incumbent supplier) (Maxim, 2020).

In order to increase market activity from the side of consumers, there is a crucial need to understand customer preferences, as well as the key factors that influence their switching behavior. This is the cornerstone of building a successful marketing strategy and it is one of the future avenues of research in the current endeavor focused on Romania.

Structural changes in the Romanian electricity market

After the political transition that took place at the end of 1989, the Romanian energy market was controlled by a single state-owned monopoly, covering all four links in the value chain (Autonomous Administration for Electricity – RENEL). As part of the EU inspired reforms, this entity was broken up, in several stages, starting with 1998 and continuing in 2000 and 2001. The end result was a set of state owned enterprises that now each activated within a specific part of the value chain, some acting as competitors (e.g. in the area of ‘generation’) and some being granted the status of natural monopoly (e.g. branches split along non-overlapping regions for ‘distribution’ and ‘supply’). In 2005, the distribution and supply entities (formerly under the state owned company “Electrica”) were privatized, with foreign investors CEZ, EON and ENEL purchasing controlling stakes in five of the eight regional branches of Electrica, resulting in a total of five distinct non-competing distribution and supply companies at the national level.

A further necessary step in the reform process was the separation of ‘distribution’ and ‘supply’, in accordance with the EU directives in the field of energy. This step was achieved in 2007, the year in which Romania joined the European block. Finally, the market was opened up to private investors, who could establish new entities in ‘generation’ and ‘supply’. The ‘transmission’ component of the value chain remains under the control of a single company, “Transelectrica” (state owned), as is the case in several other European states. The special status of ‘default supplier’ was given to the initial five supply companies, in order to protect vulnerable consumers (i.e. any consumer who would not be served by a supplier, would have to be served by the default supplier in the corresponding geographical region).

The default suppliers continued to control 100% of the household retail market until the end of 2016. This was partly due to the fact that consumers did not see a distinction between supply and distribution (the ‘sister’ companies that resulted from the 2007 split had very similar names). Consumers assumed that they could only purchase electricity from the company that owned the physical infrastructure connected to their home (as is the case in the telecoms sector in Romania). Since the distribution companies were natural monopolies, customers did not consider that they could switch away from the corresponding default supplier (Maxim, 2015).

Table 1. Evolution of the distribution vs default suppliers in the Romanian electricity value chain (2013 vs. 2019)

Distribution	Supply (default supplier)
2013	
CEZ Distributie	CEZ Vanzare
ENEL Distributie Banat	ENEL Energie
ENEL Distributie Dobrogea	
ENEL Distributie Muntenia	ENEL Energie Muntenia
E.ON Moldova Distributie	E.ON Energie Romania
FDEE Electrica Distributie Muntenia Nord	Electrica Furnizare
FDEE Electrica Distributie Transilvania Sud	
FDEE Electrica Distributie Transilvania Nord	
2019	
Distributie Energie Oltenia	CEZ Vanzare
E-Distributie Banat	ENEL Energie

E-Distributie Dobrogea	
E-Distributie Muntenia	ENEL Energie Muntenia
Delgaz Grid	E.ON Energie Romania
SDEE Muntenia Nord	Electrica Furnizare
SDEE Transilvania Sud	
SDEE Transilvania Nord	

Source: adapted from Maxim (2019) and ANRE (2020b)

As seen in Table 1, the names of these ‘sister’ companies evolved, with a clearer disconnect between the two components of the value chain. The current distinction may help alleviate the consumers’ perception problem discussed above.

Over the last decade, a clear correlation between liberalization and price evolution could not be established. In fact, prices seem to have remained mostly constant, with a period of increase corresponding to the inclusion of green certificates in the final bill paid by consumers. With regard to service quality, existing data suggests that liberalization and privatization can be correlated with a lower incidence and duration of disruptions in the provision of electricity to end users (Maxim, 2020).

Recent developments on the market include an increased rate of supplier switching, attempts by a telecoms company to enter the monopolistic distribution component of the electricity value chain, as well as the employment of non-ethical tactics by companies partnered with the default suppliers in order to encourage switching. A higher level of interest by the public in the electricity market has been sustained by increased coverage of the liberalization process by mass media. The ANRE has also taken an active role in the market by introducing a price comparison tool on its website – an instrument that has proven effective in other European countries, as one of the main obstacles in the path of supplier switching is the concern of paying a higher price (Maxim, 2019).

Marketing strategies of European electricity suppliers

Based on an extensive review of academic literature (Maxim, 2020), we can provide a brief summary of the marketing strategies employed by European electricity suppliers in the household retail market. The assessment is structured based on the traditional 4P marketing mix model of marketing strategies: product, price, promotion and place.

The ‘product’ component refers to product design, features, range/line and support elements, such as branding, packaging, labeling, customer support and warranty. Some of the observed avenues in product strategy have been to include ‘green energy’ offerings – a guaranteed proportion (usually above the expected average) of the supplied electricity comes from renewable sources. This approach can help differentiate the offering and attract specific market segments, which are likely to remain loyal to the supplier. The product can also be differentiated from that of the competition through the use of dual fuel contracts (the provision of both electricity and natural gas by the same supplier), the implementation of smart meters (that allow customers to choose a tariff with lower costs during off-peak consumption, such as during the evening) and energy saving programs (rewarding customers who reach an agreed target for a reduction of their electricity consumption).

The product support elements that have been described in existing literature are environmental labeling for renewable energy offerings (observed only in specific

countries), reduced call waiting times during the customer support process and the employment of transparent and timely communication regarding tariff changes.

During our assessment of the marketing practices used by Romanian suppliers of electricity, some product innovations were identified beyond those discussed in the existing literature. Thus, we observed frequent use of offerings that combine electricity supply with technical assistance, payment plans for large energy intensive appliances (such as air conditioning) and even insurance for electronic goods that were damaged by voltage fluctuations. In addition, many of the larger suppliers also have a mobile application through which customers can interact directly with the company (to submit meter readings, pay bills, report outages etc.).

The 'price' component of the marketing mix, although not as complex, is the most frequently discussed in the existing literature – price has been identified as the most influential factor in the electricity consumer's decision making process. This component refers both to the actual level of price, as well as the approach through which the various offerings are assigned a monetary value. The most frequently used pricing approach is that of fixed price contracts for a set period of time (1 to 3 years), which have also proven to be the most popular among consumers. Alternatively, a variable tariff can be used, updated periodically with revised figures from the retail market. Finally, a 'smart time of use' tariff can be utilized if customers are willing to shift some of their consumption during off-peak hours (such as night time), when the cost of electricity is lower. However, this approach requires the use of smart meters.

Aside from the above mentioned tariff plans, the price per unit of electricity sold can vary within the same company based primarily on two factors: the incorporation of green energy in the offering (high proportion of renewable energy in the mix is usually priced at a premium level) and discrimination based on volumes (households that use more energy pay a lower per unit price).

With regard to 'promotion', the literature review has helped us identify several advertising and communication practices employed throughout Europe, while our assessment of the Romanian suppliers has pointed out one additional aspect that we considered relevant. One of the key requirements for successfully promoting electricity offerings on the household market is to have a promotional message that focuses on product/price innovation (differentiation) and/or on educating the public (pointing out the advantages of green energy and, as seen in the case of Romanian suppliers, summarizing the necessary steps for switching suppliers). Researchers also recommend the use of segmented messaging, as clear differences in preference have been identified among consumers with different educational and socio-demographic traits. The use of online advertising has also been observed in Europe, as well as the use of loyalty programs. In the case of the Romanian suppliers, we identified and sought to include the existence of a social media presence by the supplier as a relevant component of the promotion component of the marketing strategy.

The last element of the 4P model is 'place' (the process through which the customer receives the offering), which has seen the fewest mentions in existing literature. The infrequent discussion of place is likely due to the immaterial nature of electricity: it does not require any investments in physical infrastructure for transportation, as that is the concern of the transmission and distribution companies. The only two issues related to price that we were able to identify in the literature have been: local production (suppliers

emphasizing that the electricity sold by them is produced locally or nationally) and the place of origin (suppliers pointing out that they are a locally or nationally based company). Both approaches seek to attract customers who wish to support the local economy and/or who prefer to avoid companies that are backed by foreign investors. In the case of Romania, we have identified an additional aspect of place – the establishment of local physical offices/points of contact. This is an approach used increasingly by larger electricity suppliers in Romania, who seek to attract more conservative customers outside of their base regional markets by providing them with a brick-and-mortar point of contact with a company representative present at the location for support, information and sales.

METHODOLOGICAL APPROACH AND LIMITATIONS

For our assessment of the marketing strategies employed by Romanian electricity suppliers we used a mixed method approach, combining simple quantitative analyses based on secondary data regarding tariffs and offerings, with a qualitative assessment of the 4P marketing mix of each supplier, based on a content analysis of their website, advertising and other information available through secondary sources.

The first step in our research design has been to identify which suppliers would be assessed. The decision was made to focus on the largest companies that are actively present on the household retail market. An annual report by ANRE provided a breakdown of the retail market by company market share, showing the largest 17 suppliers (with a market share above 1%). Out of these, 2 companies were not active on the household retail market and thus were excluded from the analysis. One note that we can make is that Complexul Energetic Oltenia does provide an offer for household consumers on their website, which has been posted in 2020. However, the market monitoring report by ANRE for 2019 does not list the company as being active on this segment. The full list of entities along with their market shares is presented in Table 2.

Table 2. The largest electricity suppliers in Romania by retail market share in 2019

No.	Company	Market share (overall retail market)	Market share (competitive retail market)	Website (detailed in the References section)
1	Electrica Furnizare	18,69%	10,94%	
2	Enel Energie Muntenia	10,56%	9,98%	Enel Energie Muntenia (2020)
3	E.On Energie Romania	9,79%	8,68%	E.On Energie Romania (2020)
4	Enel Energie	9,09%	9,08%	Enel Energie (2020)
5	CEZ Vanzare	7,49%	6,53%	CEZ Vânzare (2020)
6	Met Romania Energy	5,86%	7,24%	Met Romania Energy (2020)
7	Getica 95 COM	4,84%	5,97%	Getica 95 (2020)
8	Tinmar Energy	4,41%	5,44%	Tinmar Energy (2020)
9	Alro	4,14%	5,11%	Alro (2020)
10	Engie Romania	3,29%	4,06%	Engie Romania (2020)
11	OMV Petrom	3,08%	3,80%	OMV Petrom (2020)
12	EFT Furnizare	2,19%	2,70%	EFT Furnizare (2020)
13	Renovatio Trading	2,12%	2,62%	Renovatio Trading (2020)
14	Alpha Wind*	1,70%	2,10%	-
15	Complexul Energetic Oltenia*	1,51%	1,86%	Complexul Energetic Oltenia (2020)

16	Electrificare CFR	1,39%	1,71%	Electrificare CFR (2020)
17	Hidroelectrica	1,20%	1,49%	Hidroelectrica (2020)
* company not listed by ANRE as being active on the household retail market – excluded from analysis				

Source: own representation based on data from ANRE (2020b)

Table 2 shows the top 15 supply companies by retail market share, with the top 5 being the default suppliers. The last column to the right shows the market share that these entities have on the competitive (fully deregulated) retail market, which encompasses only customers who have switched suppliers at some point, exiting the regulated tariff market. The market shares in this column are smaller for the default suppliers, as the customers are more spread out toward the non-default suppliers on the liberalized market.

One additional observation regarding Table 2 is that Enel Energie and Enel Energie Muntenia are companies that share the same brand, the same website and largely the same marketing strategy. Aside from a slightly different mix of electricity generation sources, the only relevant difference that we have identified is that the first one is a default supplier in the west and southeast of Romania, while the second is the default supplier in the central southern region (around the capital Bucharest). These differences stem from the 2005 privatization of the territorial branches of the state-owned supply & distribution company Electrica, discussed in Section 2.2, followed by the mandated breakup of the supply and distribution components of the value chain, resulting in ‘sister’ companies. Thus our analysis truly focuses on 14 different companies if we consider Enel Energie and Enel Energie Muntenia as having largely similar marketing strategies.

Our quantitative assessment is based on data from the ANRE price comparison tool (ANRE, 2020a) and it is primarily useful in describing the price component of the marketing mix, but also covers specific aspects of the product component. We have created a database that includes all of the available electricity offerings for a typical Romanian household located in the two largest territorial units in the country – Bucharest (the capital city, located in the south) and Iași county (located in the north-east). The parameters for the household have been an electricity consumption of 2000 kWh/year, at low voltage – a slightly higher than average household consumption, according to ANRE (2019). The data collected covers all available product offerings for a typical customer in each of the two locations, with four types of contracts:

- Fixed price, uniform pricing across the period
- Variable price, uniform pricing across the period
- Fixed price, ‘smart time of use’ pricing with a split of 50% peak and 50% off-peak
- Variable price, ‘smart time of use’ pricing with a split of 50% peak and 50% off-peak

The entire set of offerings is spread across 49 suppliers in Bucharest and 42 suppliers in Iași, of which 9 suppliers present in Bucharest are not available in Iași and 2 suppliers present in Iași are not available in Bucharest. This results in a total of 51 suppliers, representing 89% of the 57 suppliers that are present on the retail electricity market nationally.

The qualitative assessment of the marketing mix is based on a content analysis of the company website, its online presence on social media, online advertising, video advertising and content, as well as any other secondary data source available online. The goal of the mixed qualitative and quantitative approach was to identify which aspects of

the various marketing mix designs presented in Section 2.3 are employed by the 15 largest retail electricity suppliers in Romania.

Table 3 provides a summary of each of the 24 marketing strategy practices outlined in Section 2.3 are implemented by each supplier. They have been grouped around the 4P marketing mix model components. Specific details regarding how each company was rated as applying or not applying each specific tactic as part of its marketing strategy are presented in the corresponding Sections 4.1-4.4.

Table 3. Marketing strategy practices evaluated in the study

Product	Price
Green energy offerings	Fixed price
Dual fuel contracts	Variable price
Energy saving programs	Smart time of use price
Product branding	Price premium for green energy
Environmental labeling	Price discrimination (based on volume)
Call waiting times	
Additional bundled services	Promotion
Mobile application	Online advertising (Google ads, Facebook ads)
Smart meters	Social media presence (Facebook, YouTube)
Transparent and timely communication	Message focus: product/price innovation
Place	Message focus: education (switching, green energy)
Local production	Loyalty programs
Locally based company	Segmented messaging
Local physical presence	

Before continuing with the analysis, it is relevant to point out some of the limitations of the current study. Given that our assessment is based solely on secondary sources and not direct contact with each company or its customers, we may not be able to provide a complete assessment of each supplier’s marketing mix. For example, the identification of online advertising practices has been tested through rigorous and repeated searches for relevant keywords using various IP address locations throughout the country and the world (via the use of Virtual Private Networks), so as to generate the presence of advertising through the Google Ads and Facebook Ads platforms. Some companies may indeed have online advertising campaigns that are either temporarily inactive or that use different targeting criteria that we were unable to meet.

Furthermore, companies such as Electricitare CFR, which have a very limited online presence, may not have been assessed adequately, especially from the perspective of the ‘promotion’ and ‘place’ components, although every effort was made in order to reduce the risk of significant errors.

Finally, as with any qualitative assessment, the content analysis method can produce slightly biased results. We have sought to compensate this by using a simple ‘present/absent’ scale for measuring whether each practice is used by the electricity suppliers.

MARKETING STRATEGIES USED IN THE ROMANIAN HOUSEHOLD ELECTRICITY MARKET

The current section presents the results of the qualitative and quantitative assessment of the marketing strategies employed by the Romanian electricity suppliers, using the approach detailed in Section 3. The results are structured along the four components of the traditional marketing mix model.

Product

The product component has proven to be the most complex and difficult to assess. We used multiple data sources in order to construct a relatively complete overview across the 10 distinct practices and the 15 suppliers. The results of our study are summarized in Table 4.

Table 4. Assessment of the ‘product’ component of the marketing mix of suppliers

	<i>Green energy</i>	<i>Dual fuel</i>	<i>Product branding</i>	<i>Enviro. labeling</i>	<i>Add. bundled services</i>	<i>Mobile app.</i>	<i>Smart meters</i>	<i>Call waiting times</i>	<i>Transparent and timely comms.</i>	<i>Energy saving progr.</i>
Electrica Furnizare	-	x	x	-	x	x	likely	unknown	unknown	-
Enel Energie Muntenia	-	x	x	x	x	x	unknown			
E.On Energie Romania	x	x	x	x	x	x	unknown			
Enel Energie	-	x	x	x	x	x	unknown			
CEZ Vanzare	x	-	x	x	x	x	likely			
Met Romania Energy	x	-	-	-	-	-	-			
Getica 95 COM	x	-	-	-	-	-	-			
Tinmar Energy	x	x	x	x	x	x	-	x	unknown	-
Alro	-	-	-	-	-	-	-	unknown	unknown	-
Engie Romania	-	x	x	-	x	x	-			
OMV Petrom	-	-	-	-	-	-	-			
EFT Furnizare	-	-	-	-	x	-	-			
Renovatio Trading	-	-	-	x	-	-	-			
Electricitare CFR	x	-	-	-	-	-	-			
Hidroelectrica	x	-	x	x	-	-	-			
Legend:	“x” – marketing practice is used; “-” – marketing practice is not used									

As can be seen in Table 4, the five default suppliers, along with Tinmar Energy and, to some extent, Engie Romania have all implemented many of the 10 practices observed among European suppliers. Only 7 of the 15 suppliers are able to offer contracts in which ANRE could confirm the inclusion of renewable energy. It is worth noting that we have not found evidence to suggest that ‘non-green’ offers exclude the use of renewable energy - in fact, over a third of all electricity typically sold in Romania comes from renewable sources. But, if the ANRE price comparison tool does not explicitly state that a specific offer includes a specific amount of renewable energy in the mix, we have not classified it as ‘green’.

Table 5. Prevalence of ‘green energy’ offerings on the household retail market

<i>Region</i>	<i>Indicator</i>	<i>Fixed price</i>	<i>Variable price</i>
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Bucharest	Max. % of green in an offer	100.00%	44.00%
	No. of green offers/total offers	26/76	4/13
Iași	Max. % of green in an offer	100.00%	44.00%
	No. of green offers/total offers	20/64	2/11

Table 5 provides an overview of the prevalence of ‘green energy’ offerings in the various contracts made available to household consumers in Bucharest and in Iași County. According to ANRE, close to one third of fixed price contracts include a certain amount of renewable energy in the mix. There are some suppliers who offer 100% renewable energy fixed price contracts, such as CEZ, E.On and Hidroelectrica. However, the maximum percentage of renewable energy in the variable price contracts is only 44%.

Dual fuel contracts (electricity and natural gas in the same offer) are only available from companies that sell both types of energy. CEZ Vanzare, for example, does not supply natural gas, while Renovatio Trading does supply it, but does not offer dual fuel contracts to customers. Product branding was observed in the case of several suppliers. We have considered an offer to be branded if it bore a distinctive name (e.g. other than “Electrical energy” or “Standard offer for household consumers”). Notable examples include (names have been translated into English where necessary): “Engie One” and “Electrica 3 in 1” (dual fuel contracts that are bundled with additional services), “Simply green”, “CEZ Green” and “E.On Green Home” by Hidroelectrica, CEZ and E.On respectively, and “Tinmar Standard/Silver/Gold” by Tinmar. Even though there is no official ‘environmental label’ for electricity, as seen in the case of Sweden (Kaberger, 2003), we did consider some companies to have self-labeled their offerings as environmentally friendly if they either offered a branded green energy contract, or if their website or advertising provides explicit information regarding the use of renewable energy in their offerings. We did not include those companies that only provided a standardized “energy mix label” (as required by regulations) that explains their typical energy mix.

One of the original findings of our research was the high prevalence of supply contracts that are bundled with additional services. The most frequent additions have been standard and emergency technical support/repairs, as well as insurance for electronic goods damaged by voltage fluctuations. More complex offerings include technical interventions for plumbing, payment plans for the purchase and installation of air conditioning units, as well as locksmith services.

Another original finding regarding product practices has been the use of mobile applications. From the perspective of marketing theory, we can classify these as being part of the product support system that typically includes packaging, branding and support services. We have found that 7 of the 15 suppliers use mobile applications, through which customers can send their meter readings, pay their bills, receive promotional offers and contact support.

With regard to smart meters, we have not been able to explicitly identify which companies include the installation of smart meters as part of their offerings. It is most likely that smart meters are being implemented gradually by the distribution companies. However, we hypothesize that it is very likely that this type of infrastructure is in place in the geographical regions served by Electrica Furnizare and CEZ Vanzare, as these are the only suppliers that offer ‘smart time of use’ tariffs.

Variations in call waiting times have not been overtly discussed in any of the sources used in our analysis. Tinmar Energy has been the only company to explicitly state that they focus on providing short call waiting times. Other sources such as online reviews have not provided sufficient information so as to adequately provide a comparison or assessment of any other supplier.

We have not identified any type of energy saving program, such as those discussed in Section 2.3, as being offered by any of the 15 suppliers. Additionally, we have not found sufficient information that would allow us to confirm whether transparent and timely communication regarding tariff changes exists between suppliers and customers. This can be compensated through an assessment of how transparently/easily the existing tariffs are communicated to customers via the supplier website. For example, E.On provides a simulator that calculates the estimated monthly bill for each of its tariffs based on customer input. However, we felt that such an approach would not be the equivalent of assessing the “transparent and timely communication” marketing practice discussed in Section 2.3.

Price

The existing literature agrees that price is the most important factor by which customers evaluate electricity supply offerings. The findings at the European level discussed in Section 2.3 are largely valid in the case of Romanian suppliers as well.

Table 6. Assessment of the ‘price’ component of the marketing mix of suppliers

	<i>Fixed price</i>	<i>Variable price</i>	<i>Smart time of use price</i>	<i>Price premium for green energy</i>	<i>Price discrimination (based on volume)</i>
Electrica Furnizare	x	x	x	-	x
Enel Energie Muntenia	x	x	-	-	-
E.On Energie Romania	x	x	-	-	daily subscription plan to penalize low, but daily consumption
Enel Energie	x	x	-	-	-
CEZ Vanzare	x	x	x	x	daily subscription plan to penalize low, but daily consumption
Met Romania Energy	x	-	-	-	-
Getica 95 COM	x	-	-	-	-
Tinmar Energy	x	x	-	-	-
Alro	x	-	-	-	-
Engie Romania	x	-	-	-	-
OMV Petrom	x	-	-	-	x
EFT Furnizare	x	-	-	-	-
Renovatio Trading	x	-	-	-	x
Electricare CFR	x	-	-	-	-
Hidroelectrica	x	-	-	-	-
Legend:	“x” – marketing practice is used; “-” – marketing practice is not used				

Fixed prices are the most frequent type of tariff used in the retail electricity market in Romania. All of the 15 suppliers offer this type of contract. This is likely explained by the prevalent consumer preference for predictability with regard to their monthly electricity bill. This type of customer need has been observed throughout Europe (Maxim, 2020). Variable price

contracts are much less frequent. In fact, ANRE confirms the existence of 84 different fixed price offers for household consumers in Bucharest and only 15 with a variable price. A similar ratio applies to Iași County: 71 offers with a fixed price and 12 with a variable price.

One surprising finding was the low incidence of ‘smart time of use’ contracts. Only two of the 15 suppliers provide such an option. Electrica Furnizare is the largest default supplier and originally covered three of the eight national distribution territories, while CEZ Vanzare is the only default supplier that only offers electricity and not natural gas. We can assume that at least half of the national territory can benefit from this type of tariff (those living in the four territories in which the two companies have been the default supplier since 2005), but other territories may also be able to opt for smart tariffs, according to ANRE data (ANRE, 2020a).

The practice of applying higher prices to renewable energy supply contracts seems to be used by Romanian suppliers as well. The only direct comparison that we were able to make was in the case of CEZ Vanzare, who provide two similar types of fixed price contract with one having a 100% renewable energy mix. The data in Table 7 shows that there is a marginal difference in price, with a ~3% higher tariff in the case of the ‘green offer’.

Table 7. Comparison of CEZ Vanzare ‘green’ vs. ‘non-green’ offers by the same electricity supplier

<i>Region</i>	<i>Green offer</i>	<i>Non-green offer</i>	<i>% difference</i>
Bucharest	130.35	125.95	+3.5%
Iași	137.32	133.61	+2.8%

The practice of premium prices for green energy seems to hold true for the overall retail market as well. Even though we are unable to provide comparisons such as that shown in Table 7 for any other suppliers, we have calculated average figures for the entire market.

Table 8. Assessment of prices across the four main contract types with or without ‘green energy’

<i>Region</i>	<i>Indicator</i>	<i>Fixed price</i>	<i>Variable price</i>	<i>Fixed price (50% off-peak)</i>	<i>Variable price (50% off-peak)</i>
Bucharest	Max. price	183.37	155.58	127.30	155.58
	Min. price	96.59	96.59	117.69	129.68
	Avg. price for non-green	126.97	120.75	122.14	142.63
	Avg. price for green offers	130.24 (+2.6%)	124.61 (+3.2%)	-	-
Iași	Max. price	190.34	160.57	134.27	136.65
	Min. price	101.34	101.34	124.66	136.65
	Avg. price for non-green	133.15	120.37	128.42	136.65
	Avg. price for green offers	139.23 (+4.6%)	134.86 (+12%)	-	-

As seen in Table 8, the average price for contracts that are labeled by ANRE as including renewable energy are 3-4% higher than the non-green alternatives. The differences are partly explained by the fact that the average non-green price includes varying proportions of semi-regulated tariffs (default supplier tariffs), which were significantly lower in the case of variable price contracts when compared to the variable

price tariffs on the competitive market. In fact, the entire 12% difference in the case of Iași can be explained away by this distinction between default and competitive tariffs.

Table 8 also shows that there are some variations in prices between geographical regions, which are likely explained by the differences in the tariff by the suppliers to each distribution company present in each region.

Finally, we found that there is only a limited use of price discrimination based on volume of consumption. Three of the fifteen companies have implemented this tactic. Two other suppliers have introduced tariffs that require a ‘subscription’ payment for each day during which a household is supplied with electricity. The price for each unit of electricity consumed is lower compared to the standard tariff. Thus, a customer who uses higher than average amounts of electricity (suppliers recommend a consumption above 150 kWh/month) will see lower overall monthly bills compared to using the standard tariff. This approach mainly seeks to differentiate between full-time consumer locations and temporary/intermittent locations (such as holiday homes).

Promotion

As discussed in Maxim (2020), promotional activities have a limited impact on attracting customers and need to be carefully designed in order to be effective. Table 9 provides a summary of our findings in this area.

Table 9. Assessment of the ‘promotion’ component of the marketing mix of suppliers

	<i>Online advertising (Google ads, Facebook ads)</i>	<i>Social media presence (Facebook, YouTube)</i>	<i>Message focus: product/price innovation</i>	<i>Message focus: education (switching, green energy)</i>	<i>Segmented messaging</i>	<i>Loyalty programs</i>
Electrica Furnizare	X	X	X	X	X	
Enel Energie Muntenia	X	X	X	X	X	
E.On Energie Romania	-	X	X	X	X	
Enel Energie	X	X	X	X	X	
CEZ Vanzare	X	X	X	X	X	
Met Romania Energy	-	X	-	X	-	
Getica 95 COM	-	X	-	-	-	
Tinmar Energy	X	X	X	X	X	
Alro	-	-	X	-	-	
Engie Romania	-	X	X	X	X	
OMV Petrom	-	X	X	-	-	
EFT Furnizare	-	-	X	-	-	
Renovatio Trading	-	X	X	X	-	
Electrificare CFR	-	-	-	-	-	
Hidroelectricia	-	X	X	-	-	
Legend:	“X” – marketing practice is used; “-” – marketing practice is not used					

Many of the ‘promotion’ practices mentioned in Section 2.3 have been implemented by the Romanian suppliers. In addition, our research identified the “Social

media presence” as an additional practice that has not been identified in the reviewed literature. In fact, “social media presence” is used by nearly all suppliers, the notable exceptions being Electricitate CFR and Alro (both are state owned companies which stem from metallurgy and rail transportation that primarily conduct business-to-business transactions), as well as EFT Furnizare.

The use of online advertising has been tested from the household consumer perspective by repeatedly performing searches using typical relevant keywords on the three most likely platforms for business-to-consumer advertising: Google.com, Facebook, and YouTube. Through the use of virtual private networks, we simulated searches from several locations in Romania, as well as abroad, in order to circumvent possible location filters set in place for the delivery of the ads. After repeated attempts, we concluded that only 5 of the 15 suppliers use online advertising through Google, Facebook and YouTube. Other companies, such as E.ON Energie Romania, OMV Petrom and Engie Romania rely significantly on advertising delivered through television. Some of the ads used in the TV campaigns are available on their YouTube channels.

Messages that describe the innovation/design of the product or price (i.e. the various practices identified in Tables 4 and 5) are used by nearly all suppliers in their promotional campaigns. Messages focused on educating consumers regarding the societal benefits of renewable energy, as well as regarding the procedure of switching suppliers are employed by fewer companies, although most of them do provide this information in various locations on their website.

The need for segmented messaging in the case of suppliers that want to attract household consumers has been discussed in several other studies. However, only seven of the 15 companies have created custom messages for different household consumer segments. Examples of good practices are advertisements that illustrate families/couples/single young people, each with their specific energy and service needs, as well as advertisements that point out the differentiating factors of the offering, such as the benefits of having all energy services in a single bundled contract, the use of 100% renewable electricity, or easy interactions through the mobile application.

None of the suppliers explicitly mention any type of loyalty program. This is the only promotional practice observed in some European countries that does not seem to be currently implemented in Romania. We can hypothesize that this is due to the relatively low proportion of consumers who switch suppliers. As customers become more active in the market, electricity companies may seek to develop and introduce various types of programs that focus on increasing loyalty.

Place

Previous studies confirm that the ‘place’ component of the marketing mix is the least relevant when approaching the residential electricity market. There are few differentiating factors that can be leveraged in order to create a unique value proposition that is of interest for potential customers. The location in which the supplied energy is generated, as well as the location of the headquarters of the electricity company have been used in order to attract customers who wish to support the local or national economy through their purchases. Our study has identified an additional differentiating factor that is

more relevant for the conservative consumer base of Romania – the establishment of a widely spread physical presence (i.e. creating sales/support offices in locations across the country). Table 10 provides a summary of our findings.

Table 10. Assessment of the ‘place’ component of the marketing mix of suppliers

	<i>Local production</i>	<i>Local supplier</i>	<i>Local physical presence</i>
Electrica Furnizare	not explicit	x	x
Enel Energie Muntenia		-	x
E.On Energie Romania		-	x
Enel Energie		-	x
CEZ Vanzare	x	-	limited
Met Romania Energy	not explicit	-	-
Getica 95 COM		x	-
Tinmar Energy		x	-
Alro		x	-
Engie Romania		-	x
OMV Petrom	x	x	x
EFT Furnizare	not explicit	-	-
Renovatio Trading	x	-	-
Electrificare CFR	not explicit	x	-
Hidroelectrica		x	-
Legend:	“x” – marketing practice is used; “-” – marketing practice is not used		

Depending on the year of analysis, Romania produces the equivalent of 100% - 120% of the energy that it consumes annually. Considering that part of the production is exported to neighboring countries, imports of electricity have reached between 5-9% of annual consumption over the last few years (ANRE 2018, 2020). Under these circumstances, it is reasonable to assume that a significant majority of the energy supplied to households is produced nationally. However, only three out of the 15 companies have explicitly mentioned this in the sources that were included in the assessment. Thus, even though we expect that all of the suppliers can make this statement regarding their products, they do not consider this a significant argument that can be used to attract consumers and thus it is not part of their marketing mix practices.

The location of the company’s headquarters is, however, explicitly mentioned by all Romanian based suppliers. Thus, 7 of the 15 companies state that they have a local origin or that they are owned by Romanian entrepreneurs.

With regard to the local presence, we have found that seven suppliers have established a local presence with physical points of contact with the customers in various areas of the country. This is relevant given that the Romanian retail market is not mature and customers are hesitant about establishing a utility contract with a company exclusively through online contact. In the case of CEZ Vanzare, we have added the “limited” label, as their network extends only throughout their default supplier region and two major cities located in opposite sides of the country. Some companies have addressed this issue by partnering with local companies that act as sales agents for the supplier. However, as

mentioned in Section 2.2, some of these intermediaries have been found to employ unethical sales tactics that negatively impact the brand image of the electricity company.

CONCLUSION

Considering our findings, we can conclude that most of the typical marketing practices observed throughout the national retail markets of other European countries have been adapted and implemented by electricity suppliers in Romania. This could be explained by the fact that a majority of them are subsidiaries or branches of European based utility companies or other international investment groups.

Out of the 15 largest companies on the market, we can state that the five default suppliers (Electrica Furnizare, Enel Energie Muntenia, E.On Energie Romania, Enel Energie and CEZ Vanzare), along with Tinmar Energy and, to a lesser extent, Engie Romania have shown an explicit interest in designing complex and well-targeted marketing strategies aimed at households. Renovatio Trading, while providing a pleasant interface and clear information through its website, has not developed its offerings and overall marketing mix as much as the other suppliers listed above.

Other companies seem to be more focused on attracting business customers on the retail market and thus do not employ the typical marketing practices used in the household segment of the market. This seems to be the case for Met Romania Energy, Getica 95 COM, Alro, OMV Petrom, EFT Furnizare and Electrificare CFR.

Hidroelectrica is a special case. Silimilarly to the CEZ group of companies, Hidroelectrica is involved both in supply and generation. Thus, they are able to provide customers with 100% renewable energy offerings consisting of nationally produced electricity. If the company would develop a truly dedicated interface aimed at connecting with household consumer, they have the potential of attracting a significant portion of the ecologically minded customers on the market, especially when considering that their current tariffs are also highly competitive.

One of the original findings of our study is that Romanian suppliers have employed marketing practices that have not been identified in existing literature. These include: the bundling of standard and emergency technical support, sale of large appliances and insurance of appliances in the electricity contract, the use of mobile applications to connect with customers, the development of a social media presence and the development of networks of physical customer contact points throughout the country.

Future developments of this study will focus on providing a more complete assessment of these marketing strategies through the collection of primary data via interviews with company representatives. In addition, a positioning and segmentation study of the household retail market would help in order to better understand the expectations of different consumer groups, as well as helping measure the effectiveness of the marketing strategies employed by the electricity suppliers.

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