

## **MASTERS IN MANAGEMENT (MIM)**

## **MASTERS FINAL WORK**

INTERNSHIP REPORT

FACTORS DETERMINING CONSUMERS' GREEN BRANDS PURCHASING BEHAVIOUR – THE CASE OF GALP

PEDRO MIGUEL SANTANA DA COSTA

October - 2023



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PEDRO MIGUEL SANTANA DA COSTA

SUPERVISOR: PROF. DR. JOANNA KATARZYNA KRYWALSKA DA SILVEIRA SANTIAGO

MENTOR: MANAGER DANIELA PEREIRA

JURY: PRESIDENT: PROF. DR. MARIA EDUARDA MARIANO AGOSTINHO SOARES RAPPORTEUR: PROF. DR. MÁRCIA MAURER HERTER SUPERVISOR: PROF. DR. JOANNA KATARZYNA KRYWALSKA DA SILVEIRA SANTIAGO

**O**CTOBER - 2023

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#### RESUMO

Nos dias de hoje, os consumidores estão mais conscientes das implicações ambientais e sociais ligadas às suas decisões de compra. Os problemas ambientais são cada vez mais uma problemática atual, o que faz com que haja uma urgência na procura de novas soluções para mitigar os impactos ambientais das empresas. Um aspeto importante reside na sensibilização das pessoas para a necessidade de mudança dos seus hábitos de compra, de modo que, gradualmente, seja possível eliminar o consumo de produtos e serviços prejudiciais para o ambiente. Perante este cenário, é necessário que as empresas adotem várias estratégias económicas, que se coloquem numa posição competitiva e apliquem estratégias de marketing para, não só promoverem os seus bens e serviços, mas também captar a atenção dos seus consumidores, para os sensibilizar a escolher a marca/empresa e criar uma relação de compromisso, confiança e transparência. Por este motivo, o presente estudo pretende apurar os fatores que antecedem o comportamento de compras dos consumidores, no que diz respeito a produtos eco-friendly, do setor energético.

Este estudo aborda os conceitos de Responsabilidade Social das Empresas, Associação Ambiental, Qualidade Ambiental Percebida, Valor Ambiental Percebido, Confiança Ambiental, Intenções de compra em relação ao Ambiente e Comportamento de compra de marcas ecológicas. O presente estudo tem como objetivo avaliar e analisar o modo como estas variáveis influenciam o comportamento de compra dos consumidores, no que diz respeito a produtos e serviços de marcas eco-friendly. Para tal, este assenta numa metodologia quantitativa, conduzida através de um questionário focado em consumidores que têm experiência na compra de produtos de marcas ecológicas no sector da energia em Portugal (realizado na plataforma Qualtrics), e que foi divulgado através do recurso à Internet. Deste questionário resultaram 106 respostas válidas.

Com a ajuda do programa SmartPLS, os resultados obtidos através de método de modelagem de equações estruturais de mínimos quadrados (PLS-SEM) evidenciam que as únicas variáveis que tem influência no conceito de green trust são a green association e a green perceived quality. Por sua vez, foi também possível concluir que a variável purchase intention influencia positivamente a variável purchase behaviour, querendo isto dizer que a compra de produtos pelos consumidores aumenta à medida que as suas intenções aumentam.

A nível académico, o presente estudo permitiu obter e aprofundar conhecimento sobre os vários conceitos, fatores e estratégias de marketing referidos, explorando assim relações que ainda não tinham sido estabelecidas ou que ainda não tinham sido analisadas em conjunto.

**Palavras-chave:** Associação Ambiental, Comportamento do consumidor de marcas ecológicas, Confiança Ambiental, Qualidade Ambiental Percebida, Responsabilidade Social das Empresas, Valor Ambiental Percebido.

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#### ABSTRACT

Nowadays, consumers are increasingly aware of the environmental and social implications of their purchasing decisions. Environmental problems are becoming a major problem, which means there is an urgent need to find new solutions to mitigate companies' environmental impacts. An important aspect of this is raising people's awareness of the need to change their purchasing habits, so that it's gradually possible to eliminate the consumption of products and services that are harmful to the environment. In this scenario, companies need to adopt various economic strategies, put themselves in a competitive position and apply marketing strategies to not only promote their goods and services, but also capture the attention of their consumers, make them aware of their choice of brand/company and create a relationship of commitment, trust, and transparency. For this reason, this study aims to determine the factors that precede consumer purchasing behaviour with regard to eco-friendly products in the energy sector.

This study addresses the concepts of Corporate Social Responsibility, Green Association, Green Perceived Quality, Green Perceived Value, Green Trust, Purchase Intentions Towards Green and Purchase Behaviour of Green Brands. The aim of this study was to assess and analyze how these variables influence consumers' purchasing behaviour with regard to products and services from eco-friendly brands. To this end, it's based on a quantitative methodology, conducted through a questionnaire focused on consumers who have experience of buying products from eco-friendly brands in the energy sector in Portugal (carried out on the Qualtrics platform), which was distributed via the Internet. This questionnaire resulted in 106 valid responses.

With the help of the SmartPLS program, the results obtained through the least squares structural equation modeling method (PLS-SEM) show that the only variables that influence the concept of green trust are green association and green perceived quality. In addition, it was also possible to conclude that the purchase intention variable positively influences the purchase behaviour variable, meaning that consumers' purchasing behaviour increases as their intentions increase.

On an academic level, this study has made it possible to gain more knowledge about the various marketing concepts, factors and strategies mentioned, thus exploring relationships that had not yet been established or analyzed together.

**Keywords:** Consumer Behaviour of green brands, Corporate Social Responsability, Green Association, Green Perceived Quality, Green Perceived Value, Green Trust.

#### **ABBREVIATIONS**

**B2B:** Business to Business

**B2C:** Business to Consumer

CIDLA: Combustíveis Industriais e Domésticos

COO: Chief Operating Officer

CRGE: Companhias Reunidas de Gás e Eletricidade

CSR: Corporate Social Responsibility

EDP: Energias de Portugal

ESG: Environmental, Social, and Governance

FPM: Finance and Process Management

GA: Green Association

GDP: Gás de Portugal

GE: Galp Energia

**GMI:** Galp Marketing International

GPQ: Green Perceived Quality

GPV: Green Perceived Value

GT: Green Trust

HSE: Health, Safety, and Environment

**LPG:** Liquefied Petroleum Gas

**PBGB:** Purchase Behaviour of Green Brands

Petrogal S.A.: Petróleos de Portugal

PITG: Purchase Intentions Towards Green

SONAP: Sociedade Nacional de Petróleos Anónima de Combustíveis e Óleos Refinados

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#### **CHAPTER 1 - INTRODUCTION**

In order to conclude the Master's Degree in Management with a Major in Marketing, the candidate has chosen to follow the Internship path, in where he could use the knowledge acquired during the academic studies, especially the curricular part of the Master Degree, in a way that he could deepen his practical experience and put in practice all the concepts and financial terms while contributing to the growth of a company operating in an international market. The internship was attended in the Financial and Process Management (FPM) of Galp Marketing International (GMI), a Portuguese Department of Galp that operate in both in Portugal and in other five geographies in Africa, like Angola, Cape Verde, Eswatini, Guinea Bissau and Mozambique.

The Financial and Process Management (FPM) is a vital element inside GMI's organizational structure in Portugal. The FPM supports GMI in the execution of strategic analysis of the organization, hence facilitating the process of decision-making and ensuring compliance with corporate protocols and regulations, not only in Portugal, but also in Africa.

The main objective of this report is to provide a comprehensive perspective of the internship performed and its impact on the company. Additionally, it aims to clarify the correlation between the company's success and its attempts to the transition into a low carbon energy organization. This is achieved through the implementation of significant marketing strategies aimed at preserving the company's reputation and the quality of its offerings. Simultaneously, the company takes crucial measures to mitigate pollution within the sector, thereby establishing a competitive advantage and enhancing its brand positioning and trustworthiness.

This report attempts to demonstrate the influence of topics like corporate social responsibility, green association, green perceived quality and value, and green trust on a company's visibility and success. Through an extensive literature review, it aims to explore how these factors can impact consumer purchase intentions and behaviour. Furthermore, the internship is explained by clarifying the specific tasks undertaken and their overall impact on the organization's strategic objectives. Finally, in the concluding part of this report, the methodologies used will be explained, the primary discoveries will be examined, and some conclusions and limitations related to the subjects under investigation will be provided.

Considering the main objective and the research problem, it is intended to answer the following questions:

- 1. What factors influence consumers' purchasing intentions towards green?
- 2. What impact consumer purchase intentions have on actual purchase behaviour of green brands?

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#### **CHAPTER 2 – LITERATURE REVIEW**

This section present the contextual and theoretical framework for the principle's concepts discussed in this report. In a world driven by ongoing technological advancements and innovations, numerous companies are adapting their marketing tactics to keep up with emerging client trends and needs, and also focusing on the environment, by adapting their core business to the world urge to reduce excess of footprint. This approach enables them to sustain their operations, maintain their market position, and preserve their respected reputation.

#### 2.1 Corporate Social Responsibility

Corporate Social Responsibility (CSR) is a strategic approach adopted by corporations to achieve a competitive advantage and distinguish themselves in the market by integrating academic and commercial objectives (Ali & Kaur, 2021; Shafique et al., 2021). Due to its inherent advantages, CSR serves as a strategic platform for marketing within the business context. Corporate Social Responsibility is a strategic focus area for businesses, which plays a crucial role in fostering favorable consumer perceptions and enhancing brand reputation. The significance of brand image in the marketing strategic approach is well acknowledged. When effectively executed, it has the potential to foster consumer loyalty, booster purchase intent, and contribute to overall business success (Kataria et al., 2021).

At the moment, corporate entities and government organizations perceive corporate social responsibility (CSR) as the primary remedy for addressing societal issues. The significance of CSR and the role of corporations in societal advancement cannot be overemphasized. Corporate Social Responsibility, however, plays a crucial role not only in addressing global concerns but also in augmenting organizational achievements. Organizations have demonstrated a longstanding recognition of CSR, a paramount and indispensable business activity that is vital for achieving success in the contemporary turbulent and demanding market environment (Foroudi, 2019). Kim and Lee (2019) argue that CSR can be an effective promotional strategy that enhances the reputation of businesses and influences consumer behaviour within the marketing context. Additionally, the benefits of CSR extend beyond just sales. Its initiatives exert a substantial impact on the expectations of consumers and stakeholders, leading to enhanced corporate success.

In recent years, there has been a growing consensus among scholars and practitioners on the perception of CSR as a strategic implementation and branding management tool (Ali & Kaur, 2021). Khan et al. (2021) argue that decision-makers endorse the integration of environmentally company procedures as a means to enhance the company's reputation within the marketplace.

In addition, the progression of digital technology has enhanced connectivity, enabling consumers to access expedited and more efficient information regarding concerns related to global warming, natural resource depletion, unethical practices by companies, or fraudulent business activities. Consequently, this has led consumers to consider the CSR reputation of both the company and its brand when making decisions (Shafique et al., 2021). The ecosystem received little attention from industrialists, environmental authorities, teachers, and entrepreneurs due to their perception that the products produced by their own enterprises had no harmful effects on the environment. The worldwide degradation of earth's natural resources has emerged as a pressing concern in recent years (Hristov et al., 2021). Companies are compelled to prioritize both environmental concerns and tasks related to the preservation of natural environments due to the implementation of diverse measures to preserve the environment.

Companies are aiming to cultivate long-lasting relationships with clients as a means to secure their sustained prosperity. The escalating global apprehension among individuals, policy experts, states, and institutions revolves around the mounting environmental impacts resulting from human conduct. In recent times, government organizations have adopted corrective measures aimed at alleviating or addressing the aforementioned environmental deteriorations (Asiaei et al., 2021). According to Islam et al. (2021), brand names are anticipated to employ various strategies to engage clients and mitigate the challenges involved with buying decisions. The process of establishing, preserving, and adjusting a strong brand equity is inherently challenging, costly in terms of resources and expensive to do so. Previous studies in brand marketing research have placed significant emphasis on the notion that successful organizations exhibit consistent information sharing, differentiate their goods, and fulfill their promises. There exists a strong correlation between corporate innovation and both environmental sustainability and the adoption of green practices. Organizations that proactively embrace green innovation initiatives at an early stage may potentially attain and maintain a competitive edge. Therefore, the implementation of efficient green innovation performance helps businesses in enhancing operational effectiveness and developing and reinforcing their fundamental capabilities.

In order to establish a comprehensive understanding of loyalty, it is necessary to differentiate between the act of repeatedly purchasing a product or service with the aim of sustaining such purchases, and the concept of customer loyalty. Repeat purchasing behaviour refers to the act of repurchasing a particular brand. The significance of repurchasing behaviour remains relevant independently of the consumer's degree of devotion to the brand or brand trust (Zhou et al., 2021). In contrast, brand loyalty encompasses not just the act of repurchasing, but also the factors that precede and influence such behaviour. Many inexperienced individuals struggle to differentiate between repetitive purchasing behaviour and true brand identification, as well as between unfounded and genuine brand devotion.

The field of Corporate Social Responsibility has witnessed several methodologies and perspectives over time, however a detailed consensus has not been reached. One of its perspectives pertains to the interconnections among corporations, sectors, cultures, and nations.

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Consequently, the present study examines the effects of CSR within the energy sectors. The framework incorporated several characteristics, such as green association, green perceived quality and value, and brand trust, that have the potential to influence sustainability in purchasing intention.

The business landscape has undergone fast transformations on a global scale, primarily driven by a highly competitive environment (Zittis et al., 2021). In order to get a competitive advantage and produce a profit, it is imperative to not only meet the minimum requirements but also assume responsibility for the environmental repercussions (Duque-Grisales & Aguilera-Caracuel, 2021).

The alteration of climate necessitates the implementation of pragmatic strategies aimed at rectifying the climate and mitigating the exacerbation of global warming's consequences.

#### 2.2 Green Association

The Green Association (GA) plays a crucial role in fostering favorable perceptions of companies and influencing consumers' purchasing choices (Akturan, 2018). These factors are fundamental to the concept of brand equity, as established by Aaker (1991), Keller (1993), Buil et al. (2013), and Ishaq (2020) in the context of both general brand equity and specifically green brand equity. According to Ranfagni et al. (2014), brand associations refer to the subjective interpretations that individuals assign to a brand, ultimately shaping the company's overall image.

Brand associations refer to the attributes linked to a brand, including its distinctiveness, potency, and desirability, which can originate from diverse origins (Aaker, 1991). Chen and Chang (2016) provided a definition of green brand associations within the framework of environmental sustainability. They conceptualized green brand associations as incorporating consumers' knowledge, attitudes, and evaluations towards green brands. The concept of brand association pertains to the cognitive representation of a brand in the minds of customers, combining both favorable and unfavorable information that is preserved in their memory (Sasmita & Mohd Suki, 2015).

Associations are employed by marketers as a means to cultivate favorable opinions of organizations and provide advantageous indicators for consumers' purchasing decisions. On the other hand, people utilize associations to structure and retrieve relevant information (Low & Lamb, 2000). Brand connections are highly valuable as they establish foundations that possess the potential to impact consumers' purchasing choices through the establishment of a robust reputation and credibility for the brand (Chen & Chang, 2016).

#### 2.3 Green Perceived Quality

The influence of perceived quality on consumer purchase decisions has been extensively studied by researchers such as Gutman and Reynolds (1979) and Zeithaml (1988). The act of making judgments in this context is often characterized by a significant level of conceptualization and is typically done inside a particular consuming context (Zeithaml, 1988). The distinction between perceived quality and "objective quality" has been established in previous literature (Hjorth-Andersen, 1984; Monroe & Krishnan, 1985). Objective quality refers to the technical superiority or excellence of a product, whereas perceived quality refers to the subjective evaluation of the overall quality of a good.

According to the notion of perceived risk, consumers tend to prioritize the decrease of perceived risk rather than maximizing their predicted positive outcome (Sheth & Venkatesan, 1968). According to the idea of perceived risk, it is suggested that the presence of perceived quality might alleviate perceived risk by reducing ambiguity in the process of customer purchasing (Aaker, 1991). According to Chang and Chen (2014), the concept of perceived quality plays a significant role in indicating product performance. They assert that organizations should communicate effectively to enhance customer perceptions of quality, hence mitigating consumer perceived risk. The effectiveness of a company's marketing activities in certain markets is heavily influenced by the messages they convey. By prioritizing consumer perceptions of quality, marketers can attain success (Aaker, 1991), and lead the company to be a trustworthy brand.

The growing global focus on sustainability has led academics to place greater importance on consumers' evaluation of a brand or product's environmental performance, which is commonly referred to as green perceived quality (Chen & Chang, 2013b).

Like Zeithaml (1988), and Chang & Chen (2014) describes the concept of green-perceived quality as the evaluation made by customers on the overall environmental quality or superiority of a company's goods or services. The enhancement of perceived quality contributes to the value of a product for consumers, as it provides them with a compelling reason to make a purchase and sets a brand apart from other brands (Zeithaml, 1988; Chang & Chen, 2014; Nguyen-Viet, 2022).

In addition, the concept of perceived quality serves as a determining factor for clients in selecting a certain brand and product, as highlighted by Aaker (1991). Consumers frequently engage in the acquisition of high-quality brands, as the perception of quality is widely recognized as a significant factor influencing the emotional connection that motivates consumer purchasing behaviour (Atulkar, 2020). Perceived green quality has been identified as a precursor to behavioral intention, as evidenced by studies conducted by Gil and Jacob (2018) and Nguyen-Viet (2022).

As also said by Baalbaki & Guzm (2016), the concept of perceived quality refers to the evaluations made by consumers regarding a brand's quality, consistency, performance, reliability,

functionality, and service. Perceived quality symbolizes the subjective evaluation made by consumers on the general quality of a product (Zeithaml, 1988). The views of customers are expected to be influenced by their own experiences with products or services, as well as their unique requirements and the specific conditions in which they consume them (Maanda et al., 2020). Perceived quality is primarily determined by personal product experiences, unique requests, and consumption scenarios (Yoo et al., 2000).

Previous research has demonstrated a connection between perceived quality and brand trust, as evidenced by studies conducted by Konuk (2021) and Madadi et al. (2021). These studies have shown that perceived quality serves as a precursor to the development of brand trust. It is probable that customers have prior exposure to multiple brands and tend to make inferences about the trustworthiness of a chosen brand based on its quality rating (Chaudhuri & Holbrook, 2001). The theory is supported by the research conducted by Madadi et al. (2021) and Konuk (2021), which indicates that the perception of quality significantly impacts trust among consumers when they acquire important knowledge about competing brands. According to Konuk (2021), there is a potential correlation between heightened perceived quality and elevated levels of customer trust. In the context of the environment, it is probable that elevated levels of perceived green quality will augment trust in green brands.

#### 2.4 Green Perceived Value

The assessment of a brand's value is commonly recognized as a significant resource that marketers must actively strive to establish a robust brand. The concept of perceived value is of utmost importance in both establishing lasting relationships with clients and shaping consumers' intents to make purchases (Zeithaml, 1988). The concept of perceived value has been characterized and interpreted in many manners within academic literature. Perceived value, as defined by Zeithaml (1988), refers to the comprehensive evaluation made by consumers regarding the usefulness of a specific service or good. This evaluation is based on their impressions of the benefits received in relation to the costs incurred, often referred to as the quality-price trade-off (Cravens et al., 1988; Sweeney et al., 1997; Zeithaml, 1988). The notion of value has additionally been examined in the context of perceived risk. As exemplified by Mitchell (1999), the concept of risk in conventional decision theory primarily pertains to the variability observed in the potential outcomes, their respective probabilities, and their subjective values. Furthermore, Arrow (1965) asserts that within the realm of perceived risk theory, it is often assumed that decision makers exhibit a preference for lesser risks over bigger ones, all else being equal (e.g., holding expected value constant).

Drawing from the aforementioned arguments, this study suggests that there is a correlation between green perceived value and green trust. Green perceived value refers to a consumer's holistic evaluation of the net advantages of a product or service, taking into account their environmental aspirations, sustainable expectations, and green requirements (Chen & Chang, 2012, p. 510). When individuals develop a positive perception of the value associated with environmentally friendly products or services, it is likely that their perception of brand trust, will result in a positive outcome and repercussions of choosing such brand, items or services, enhancing the consumers purchase intention towards green brands.

#### 2.5 Green Trust

This study incorporates the concept of green brand trust as is a psychological concept that refers to the inclination to place confidence in a business entity with whom one interacts in transactions (Moorman et al., 1992). Within the realm of environmental considerations, the concept of green trust pertains to the inclination to place confidence in a certain product, service, or brand. This inclination is rooted in a belief or anticipation regarding the environmental performance of such entity, which is derived from its perceived credibility, kindness, and capabilities (Chen, 2010). The extent to which individuals are willing to place trust in a business partner is based upon the level of environmental performance, as stated by Martinez (2015). The assessment of quality by customers is influenced by emotional indicators provided by firms, therefore highlighting the significance of emotional aspects in establishing trust (Martinez, 2015).

The findings of this study indicate that the level of trust towards environmentally friendly practices was positively affected by the association with green brands and the perceived quality of their environmentally friendly products. Therefore, it is recommended that corporations establish an association with environmental consciousness in the minds of consumers, through for example, some corporate social responsibility initiatives. Emphasizing the perceived quality of environmentally friendly products, will raise the level of trust consumers have in the company's commitment to sustainability. By doing so, firms may gain substantial competitive and economic benefits. A requisite approach involves adopting a promise-oriented strategy that presents the green brand as a manifestation of a defined set of anticipations, delivering a specific quality and quantity of value. The consistent provision of value is of utmost importance in cultivating robust connections with environmentally conscious customers, as it transmits an understanding of the symbiotic relationship between the green brand and its customers, hence implying the company's commitment to perpetuating the delivery of this value.

According to Chaudhuri and Holbrook (2001), the consumer experience plays a significant role in fostering brand confidence. According to Kang and Hur (2012), the primary determinant

of green trust is the consumption experience, since it creates connections with a green brand that the consumer has personally witnessed and holds a strong belief in. Moreover, the perception of quality plays a crucial role in the formation of emotional attachment and the establishment of brand trust (Atulkar, 2020; Madadi et al., 2021). Consequently, elevated levels of green brand association have the potential to enhance trust in green brands.

According to Chen (2010), the level of confidence in the efficacy of a green product in addressing environmental concerns is a significant driving force. The establishment of customer trust plays a crucial role in shaping the long-standing trends of consumer behaviour (Chen & Chang, 2012). Customers who have a positive and trusting experience with the seller are more likely to have a greater intention to buy. As described by Atulkar (2020), brand trust refers to the inclination of consumers to place their reliance on a brand and its commitments. It is widely recognized as a significant precursor to the intention of making environmentally friendly purchases (Chen & Chang, 2012; Nguyen-Viet, 2022). The following hypothesis was developed based on the concepts gathered from the literature:

H1a: CSR has a positive impact on Green trust.
H2a: Green Association has a positive impact on Green trust.
H3a: Green Perceived Quality has a positive impact on Green trust.
H4a: Green Perceived Value has a positive impact on Green trust.

#### 2.6 Purchase Intentions Towards Green

Several factors that have been examined in relation to their influence on green purchase intentions include altruism (Paladino & Ng, 2013), attitude (Chan, 2001; Lai & Cheng, 2016; Paladino & Ng, 2013; Tanner & Wölfing Kast, 2003), branding (Paladino & Ng, 2013), collectivism (Chan, 2001), eco-concerns (Hartmann & Apaolaza-Ibáñez, 2012; Paladino & Ng, 2013), image (Wu, Wu, Lee, & Lee, 2015), knowledge (Chan, 2001; Kanchanapibul, Lacka, Wang, & Chan, 2014; Paladino & Ng, 2013; Tanner & Wölfing Kast, 2003), and risk (Wu et al., 2015). Several studies have examined the purchasing intentions of customers towards various environmentally friendly products, such as cars (Hahnel, Gölz, & Spada, 2014), and electric vehicles (Wu et al., 2015).

The concepts of "green purchasing", "green acquisition", and "environmentally responsible purchasing" are employed in scholarly literature to investigate the behaviour of consumers when it comes to making environmentally conscious purchase decisions (Zaremohzzabieh et al., 2021). Green purchasing behaviour is commonly recognized as a socially responsible conduct that distinguishes itself from other consumer behaviours, offering instantaneous personal benefits and satisfaction (Liu et al., 2020). The act of engaging in green shopping is oriented towards the future

and has wide-ranging advantages for society (Author et al., 2001). According to Chan (2001), green purchasing refers to the acquisition of services and things that result in minimal environmental harm. The predominant manifestation of this phenomenon is often observed in the form of green purchasing intention, which pertains to a consumer's inclination to acquire and financially support environmentally friendly products (Zaremohzzabieh et al., 2021). These products are widely recognized for their reduced detrimental impact on the natural ecosystem, encompassing the air, water, and land (Liu et al., 2020). The definition provided bases itself around the comprehensive production process as opposed to the resultant product. The predicting of customer behaviour is contingent upon the important factor of purchase intention (Newberry et al., 2003).

The field of green brand studies encompasses various aspects of consumer behaviour, such as the evaluation of green brand equity (Chen, 2010), the examination of green brand association and perceptions (Montoro-Rios et al., 2008; Parker et al., 2010; Wang & Horng, 2016), and the investigation of green brand purchase intention (Hartmann & Apaolaza-Ibáñez, 2012). Hartmann and Apaolaza-Ibáñez (2012) conducted a study with the aim of examining the factors that influence consumers' inclination to purchase green energy brands. The authors put in three separate segments of behavioral advantages that could potentially improve customer attitudes towards green energy brands and lead to an increase in purchase intentions. These categories include nature experience, self-expressive benefits, and warm glow.

Previous research has primarily focused on investigating consumer purchase intention or behaviour within the realm of environmentally friendly products, rather than considering the broader scope of green brands. Prior research has failed to adequately address the issue of consumer buying behaviour in relation to green brands, particularly in terms of consumers' perceived confusion regarding the environmental claims made by these brands.

The characteristics that have an influence on both perceived risk and purchase intention include perceived quality, perceived value, and information costs (Baek & King, 2011). Researchers have engaged in discussions regarding the interrelationships among these constructs in recent years, but in this present study, we will only analyze the concepts of perceived quality and perceived value, in correlation with purchase intention towards green brands.

There exists a divergence in data regarding the impact of perceived quality on purchase intentions. Several studies have demonstrated that the perception of quality has an immediate and beneficial effect on purchase intentions (Baek & King, 2011; Baek et al., 2010; Boulding et al., 1993; Carman, 1990; Tsiotsou, 2006; Zeithaml et al., 1996). However, it is important to note that there are also studies that have found no significant connection between perceived quality and purchase intentions (Hu et al., 2009). Furthermore, a number of research have documented an indirect relationship between perceived quality and purchase intentions by satisfaction (Joseph Cronin & Taylor, 1992; Sweeney et al., 1999). However, there remains a lack of consensus about

the presence of an interaction impact between perceived quality and satisfaction on purchase intentions. Certain scholars have proposed that there exists no relationship effect (Bou-Llusar et al., 2001), whereas alternative studies have documented a connection impact between the two dimensions in relation to purchase intentions (Taylor & Baker, 1994).

The impact of perceived value on purchase intentions has been well recognized as a crucial component (Zeithaml, 1988). In recent studies, it has been discovered by researchers that the perception of green perceived value has a favorable influence on the intentions of consumers to make green purchases (Chen & Chang, 2012). The following hypothesis was developed based on the concepts gathered from the literature:

#### H1b: CSR has a positive impact on Purchase Intentions Towards Green.

H2b: Green Association has a positive impact on Purchase Intentions Towards Green.
H3b: Green Perceived Quality has a positive impact on Purchase Intentions Towards Green.
H4b: Green Perceived Value has a positive impact on Purchase Intentions Towards Green.
H5: Green Trust has a positive impact on Purchase Intentions Towards Green.

#### 2.7 Purchase Behaviour of Green Brands

Previous research has not only examined the factors that contribute to individuals' intentions to become involved in green purchasing but has also investigated the factors that influence actual green purchasing behaviour (Chan & Lau, 2000; Dagher, 2015; Kim & Choi, 2005; Lai & Cheng, 2016). One of these factors include purchase intention, in which we are focusing on in this study, in order to understand the relation between the intention of the consumer to make a purchase to the actual behaviour to do so.

A green brand can be defined as a brand that provides a substantial ecological advantage compared to existing brands, hence attracting individuals who prioritize environmental sustainability (Grant, 2008). In contemporary business practices, there is a growing trend among firms to cultivate their brand identities as environmentally conscious entities. This strategic approach serves the purpose of both distinguishing themselves from competitors and responding to the preferences of environmentally conscious consumers. However, it has been observed by a few researchers that not all brands receive recognition or benefits for their efforts in adopting environmentally friendly practices (Nyilasy et al., 2014).

Regarding to Interbrand's recent publication of the "Best Global Green firms" list (Interbrand, 2014), the issue of trust crisis resulting from greenwashing practices employed by environmentally conscious firms has come to the spotlight (Greenpeace, 2016). The term "greenwashing" encompasses the convergence of two corporate practices: low environmental

performance and the propagation of favorable messaging on environmental performance (Delmas & Burbano, 2011). According to Nyilasy et al. (2014), certain scholars have observed that the increasing use of environmentally conscious messaging by brands does not consistently result in positive consumer perceptions of the company. In recent years, there has been a growing sense of skepticism among consumers regarding the environmental statements put forward by certain groups (Pomering & Johnson, 2009). If consumers experience persistent confusion and uncertainty over the purchase of environmentally friendly items, there is a risk that they may ultimately discontinue their efforts, leading to the potential loss of the market for ethical businesses due to the prevalence of greenwashing.

Prior research has demonstrated the significance of buying intention. Marketing experts have shown an intense interest in the concept of purchase intention due to its significant association with consumer buying behaviour (Tsiotsou, 2006). Numerous academic investigations have documented a favorable association between individuals' intentions to make a purchase and their subsequent actual buy behaviour (e.g., Morwitz & Schmittlein, 1992). Within the realm of environmental consciousness, scholars have proposed that there exists a notable disparity between the concerns expressed by consumers and their actual behaviour in terms of purchasing environmentally friendly products (Mendleson & Polonsky, 1995; Young et al., 2010). However, recent research has revealed a substantial and positive correlation between the intention to purchase and the actual behaviour of purchasing green products (Chan, 2001; Lai & Cheng, 2016; Moser, 2015). The results of this study provide support for the established theory that intention is the most significant and direct predictor of behavior, as proposed by Ajzen and Fishbein (1980). This study proposes that there is a favorable correlation between customers' buying intentions and their actual purchase behaviour towards green goods. The present study posits the subsequent hypothesis:

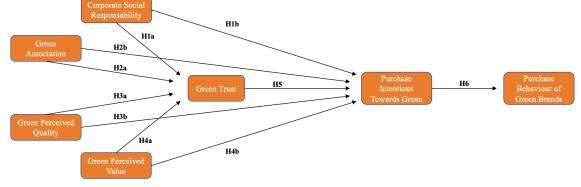
H6: Purchase Intentions Towards Green has a positive impact on Purchase Behaviour of Green Brands.

#### **CHAPTER 3 – FRAME OF REFERENCE**

The conceptual framework and the table of reference (Figure I and Table I) on which the current report is constructed are an adaptation of the models of Huo et al. (2022), Wang (2017) and Dinh et al. (2023). The first model, by Huo et al. (2022), studied the impact of Corporate Social Responsibility (CSR) on green innovation performance and sustainable (eco-frindly) purchase intentions. In this study, concepts like Brand Loyalty and Brand Trust are very important to understand the relationships between these variables (CSR, sustainable purchase intentions and green innovation performance). The second model, by Wang (2017), examines the relation between the external factors that influence the consumers purchase intentions towards green and the actual behaviour of making a purchase. These external factors include the consumers perspective of the value and quality that they attribute on the green products and services. Thus, good value and quality have a positive impact in the consumer's purchase intentions towards green brands and can actually influencing them to make a purchase. The third model, by Dinh et al. (2023), explain the relationship between different factors of green brand equity and provides a better understanding of how consumer's react to green advertising. These results are very important for companies (in this case, sustainable companies) in order to promote the consumer's awareness of social and environmental topics, in a way that can translate into an increase in the company green brand equity.



Figure I - Conceptual Framework



Source: Own elaboration based on the models of Huo et al. (2022), Wang (2017), and Dinh et al. (2023)

Dimensions	Descriptions	References
Corporate Social	Business uses CSR as a strategic tool to attain	Huo et al., 2022;
Responsability	competitive advantage and differentiation, by	Hristov et al., 2021;
(CSR)	mixing the market and social objectives to	Kataria et al., 2021;
	construct a business strategy platform for	Shafique et al., 2021
	marketing uses. With the advance of digital	
	marketing in today's world, CSR perform a	
	crucial part on solidify a brand reputation and	
	on influencing consumer's decisions. CSR is	
	inherently associated to environmental	
	sustainability and green practices.	
Green Association	Green Association are positive relations	Aaker, 1991;
(GA)	between brands and consumers that also	Akturan, 2018; Buil
	contribute to promising attitudes and buying	et al., 2013; Chen &
	decisions. These relations form an important	Chang, 2016; Ishaq,
	element of brand equity and green brand equity,	2020; Keller, 1993
	that impact the consumer knowledge, feelings,	
	choices, and perceptions of green brands.	A 1 100( C1
Green Perceived	Based on consumers evaluation of a product's	Aaker, 1996; Chang & Chen, 2014;
Quality (GPQ)	or brands overall environmental quality and	& Chen, 2014; Keller, 1993
	position. This dimension increase the value of a	Keller, 1995
	brand by encouraging purchases and separate themselves from their competitors, which has a	
	positive influence on consumer's choices and	
	emotional attachment to a brand or product.	
Green Perceived	Based on the relation between a product or	Chen & Chang, 2012;
Value (QPV)	service and the costumer's green objectives,	Zeithaml, 1988
	needs and expectations, that results in a	2011111111, 1900
	consumer's comprehensive evaluation of the	
	ratio among of what is received and what is	
	given, helping to improve the chances of the	
	intention's on making a purchase.	
Green Trust (GT)	Consumer's emotional connection to a brand,	Chen, 2010;
	based on their willfulness to trust and their	Martínez, 2015
	assurance and certainty in a brand's green	
	performance and quality. This type of	
	relationship impact the costumer's preferences	
	and their intention's on making a purchase.	
Purchase Intentions	Related to all of the concepts above, the	Chan, 2001; Liu et
Towards Green	purchase intentions towards green brands	al., 2020
(PITG)	means the willingness to acquire and pay for	
	eco products that contribute to a sustainable	
Purchase Behaviour	world.	Chap 2001. La: 9-
	Mainly influenced by the consumer's PITG,	Chan, 2001; Lai &
of Green Brands	meaning that based on various researches, there	Cheng, 2016; Moser, 2015
(PBGB)	is a positive correlation between the consumer's intentions and their actual purchasing	2013
	intentions and their actual purchasing behaviours.	
L	UCHAVIUUIS.	

Source: Own elaboration

#### **CHAPTER 4 – COMPANY OVERVIEW**

#### 4.1 Presentation of the Company

Galp Energia (GE) was established on April 22<sup>nd</sup> 1999, as a consequence of the restructure of the energy industry in Portugal, operating under the official name "Galp - Petróleos e Gás de Portugal SGPS, S.A.". The Galp Energia Group is composed by Galp Energia and Subsidiaries, in which Petrogal S.A. ("Petróleos de Portugal"), GDP ("Gás de Portugal", the company responsible for the import, transport and distribution of natural gas), "Galp Power", "Galp Services" and other subsidiaries are present (Our-roots. Galp, n.d.).

In 1976, Petrogal was created, due to the junction of four large oil Companies: SONAP ("Sociedade Nacional de Petróleos", founded in 1933, and focused on the distribution of oil products); SACOR ("Sociedade Anónima de Combustíveis e Óleos Refinados", founded in 1938, and focused on the refining process); CIDLA ("Combustíveis Industriais e Domésticos", founded in 1940) and Petrosul in 1972 (Our-roots. Galp, n.d.).

As far as the refining sector in Portugal is concerned, the investigation and exploration of crude oil and natural gas, Petrogal is the only company responsible for acting in these sectors. It especially dominates the distribution of refined oil products through the Galp brand, and is the entity responsible for the transportation, importation, and distribution of natural gas in Continental Portugal.

Speaking of other companies belonging to the Galp Energia Group (Appendix A), the CRGE Group ("Companhias Reunidas de Gás e Eletricidade") emerged from the merger of "Companhia de Iluminação a Gás" (founded in 1848) and "Companhia Gás de Lisboa" (founded in 1887). The "Companhia de Iluminação a Gás" appeared mainly at a time of change in which there was a shift from a public lighting system using olive oil (predominant in Portugal since, roughly, 1780) to a gas lighting system. The "Companhia Gás de Lisboa" appears mainly as a direct competitor, due to the sustained increase in demand and domestic consumption (Our-roots. Galp, n.d.).

Still on CRGE, this company was responsible for the implementation of natural gas as the main energy source in Portugal, much due to the visible improvements in the urban lighting sector. Finally, it is also important to note that GDP, as previously mentioned, is responsible for the importation of natural gas in Portugal, through the "Transgás Company", which it wholly owns, and is also responsible for the distribution of natural gas through about six local distributors (Ourroots. Galp, n.d.).

#### 4.2 Business Sector and Competitors

In addition to the energy sector, Galp is also a company dedicated to the development of sustainable and profitable businesses. Due to the rapid changes not only in technology, but also in people's needs, it is expected that in the coming years, more specifically in the next decade, a major change will occur. It is already possible to see some signs of this change through the constant regulatory taxes on the most polluting industries and production factors, making room for processes with low carbon levels and, consequently, lower costs. The main goal and focus is to move towards a cleaner future, and as such, Galp wants, as one of the leading companies in the energy market, to follow this path and monitor changes, adapting to them.

In order to achieve this goal, Galp redefined a new project for its Company: "Let's regenerate the Future Together" (Galp Integrated Management Report, 2022). This new idea governs (not in the literal sense of the word) the company's portfolio, in order to encourage people to move towards this cleaner and more sustainable future.

The events of recent times, marked by geopolitical developments and their consequent macroeconomic impacts, have intensified the need to develop an economy associated with low carbon levels. However, this acceleration in processes and investments is always based on two very important focuses: energy security and a fair energy transition.

Although it is not possible to predict the future of the energy sector, Galp's strategy focuses not only on the company's long-term vision, but also on a set of cross-company conjectures, which direct the energy sector's future towards green: growing regulatory and social concerns about sustainability; energy security and accessibility; the concept of "global electrification", which consists of the need to invest in renewable energies as they are essential in the production of clean energy (e.g. solar and wind parks); decentralized generation, which promotes new value chains (electric vehicles and batteries); and a commitment to hydrogen, as it is an efficient solution to apply in sectors and industries with more complicated decarbonization processes.

Galp's commitment in 2021, to put 50% of its capital into products with low levels of pollution and carbon emissions by 2025, was reformulated and reinforced in the 2022 Management Report, in which the new focus will be allocating more than 70% of Galp's net investment during the 2023-25 period Galp Integrated Management Report, 2022). In this way, the company is able to accelerate the transformation of its portfolio, guaranteeing a focus on return on investment.

In order to promote long-term growth and the creation of new opportunities in the energy sector, Galp intends that by 2030, its overall portfolio will be much more electrified, varied, and decarbonized, thus offering good future guarantees to its shareholders. As such, Galp has made it clear that these forecasts are based on well-founded strategies, with clear indications regarding

the allocation of capital, with well thought out and planned investment plans, and also with a very competitive shareholder return, sustained by a demanding financial discipline.

In 2030, Galp expects to present a 40% reduction in the absolute emissions from its operations; a reduction in its carbon intensity by 40% in production and 20% in downstream sales. By 2050, it is expected to become a zero net emissions company (Galp Integrated Management Report, 2022).

Galp's business is both focused on B2C and B2B, and is divided into three major activities, with presence in several countries: Extraction & Production (present in Angola, Brazil, Timor Leste, Portugal, Libya, Venezuela, and Mozambique), Refining & Distribution (present in Portugal, Angola, Mozambique, Cabo Verde, Guinea-Bissau, Spain), and Gas & Power (present in Portugal, Spain, and in international pipelines with minority participation of Spain).

At the base of its business are 4 pillars, created with the objective of continuous and lasting growth during this period of change in the energy sector. These 4 pillars are then the segments "Upstream", "Industrial & Energy Management", "Commercial and Renewables & New Energies" (table II).

Galp Strategy		
Upstream <ul> <li>It consists of developing projects with high quality and a</li> </ul>	Industrial & Midstream  • Change Sines refinery in order to speeding up the rate of	
<ul> <li>long service life, but with reduced costs and less carbon intensity.</li> <li>Located in offshore areas, Galp has a total of 20 upstream projects in the exploration and/or prodution stages.</li> <li>Investments focused on existing exploration areas.</li> </ul>	<ul> <li>decarbonization of its operations, focusing on more efficient oil conversion and boosting production of sustainable fuels (e.g. hydrogen).</li> <li>Switch out the use of gray hydrogen in Galp's refining operations with sustainable hydrogen over the next decade.</li> <li>Midstream is crucial for guaranteeing a consistent and competitive supply of raw materials and other energy-related products, as well as optimizing the value gained in their transaction.</li> </ul>	
Renewables & New Business	Commercial	
<ul> <li>It plays an active and important role in the process of electrifying the economy.</li> <li>Galp intends to expand its renewables portfolio as part of its decarbonization levels by strengthening its presence in key geographies where it has a stronger historical presence.</li> <li>The conversion of lithium is the first step in a larger value chain in which Galp is looking into several possibilities, including battery recycling.</li> </ul>	<ul> <li>To stay up with developments in the market trends, the commercial offer is continually expanding, especially in terms of decarbonization.</li> <li>Anticipate the development of consumers' requirements and expectations.</li> <li>Modernizing Galp's service station network with new hub designs that combine multi-energy supply while paying attention on a better customer convenience.</li> <li>Improve Galp's electricity sales while retaining its dominance in gas sales.</li> </ul>	

Table II - Galp Strategy

Source: Adapted from Galp Integrated Management Report, 2022

Thus, it is important to emphasize that Galp is taking very important steps in the right direction, without ever leaving its prestigious position among one of the best companies in ESG metrics. In addition to its ambitious motivations for 2030 (regarding to carbon reductions), Galp publicly announced that it would commit to becoming a company with zero net CO2 emissions by 2050, thus consolidating its motivation and commitment to "regenerate the future". As such, Galp has

defined a "Sustainability Roadmap", based on five foundations, each of which has been adapted into the ambitions for 2030 (Appendix B and C).

This transition not only includes climate ambitions and portfolio expansion, but also includes the intention to keep the company transparent, faithful to its commitments and above all fair, where it promotes social inclusion and environmental protection.

The sustainability approach is one of the basic factors behind this transition, being part of the investment analysis and short- and medium-term decision-making, through ESG performance indicators. This approach is a responsibility that must be shared since these environmental challenges should not be tackled by one company alone.

#### 4.2.1 Galp Sustainable Development Goals (SDGs)

In the United Nations Agenda of 2030's, the 17 Sustainable Development Goals (SDGs) are a framework for global sustainable development to which Galp has committed to contribute. Galp assessed how its strategy and business actions contribute to the achievement of those SDGs. The company structured the SDG's on which they have the most potential to make an impact (Figure II), according to each foundation identified in the Sustainability Roadmap 2030, as well as the primary establish goals that will contribute to each goal. In this matter, Galp divided them into three categories to highlight their importance in their work: material SDG's, direct SDG's, and indirect SDG's (Galp, n.d.)

The material SDG's (numbers 7-9, 12, 13, 17) are the ones that match to Galp's materiality evaluation and offers the most interest to the stakeholders. The direct SDG's (numbers 3, 6, 11, 14-16) directly affects the company, and as a result, Galp monitor and act on these metrics, continually striving to improve their performance. The indirect SDG's (numbers 1, 2, 4, 5, 10) are defined as indirect despite of the fact that they serve as a foundation for many other, they can impact indirectly by their activities, ensuring that they are not overlooked (Galp, n.d.).



Figure II - Galp Sustainable Development Goals (SDGs)

Source: Galp Integrated Management Report 2022

#### 4.3 Products and Services

Galp has a very varied portfolio of products and services to meet the needs of most of its customers. Without ever forgetting its main goal, all products and services that Galp provides take into account safety and sustainability issues.

For households, Galp provides products such as gas bottles (which have undergone several changes over time in relation to safety and sustainability). About these products, Galp has a noticeable marketing. Everyone can recognize the classic orange gas bottles, and because of its popularity, Galp launch is newer and innovated bottle: the new Pluma (Appendix D). This new digital bottle is the first one in the market, and it can tell (through the Galp's app) the level of gas that is still available. It's a remarkable innovation because it shows the intention of the company not only to avoid wastes and safety problems, but also to improve its quality, reduced height and to make them more user friendly. Other significant products are: indoor heaters; piped propane gas; central heating through boilers (which replaces the conventional water heater and heats water for all domestic uses); towel rails and radiators; water pipes and solar panels. (Galp, n.d.).

Outside the home, Galp is present in almost 1500 service stations, of which approximately 87% are in Iberia (leader in Portugal). In these stations, Galp provide not only oil products (gasoline, diesel, and LPG) but also stations for charging electric vehicles, convenience areas (Tangerina store), and car washes in some of their service station (Galp, n.d.).

In order to combine the five types of energies that belong to Galp's portfolio (fuel, LPG, Electric mobility, electricity, and natural gas), the Company launch in November 2020, four offers (Appendix E) that organizes all these energies for all types of consumers, in a way that can fulfill every need and help saving money in the process. These offers are: "Home & Road", "Galp & Continente", "Home & e-Mobility" and "Flexible tariff Home & Road" (Galp, n.d.).

Regarding to services, Galp provides a wide range of services and assistance options, from repairs of household appliances, both electric and natural gas; "360 family" service that allows access to Multicare insurance with a discount on the bill; assistance whenever necessary for questions and problems with natural gas and electricity; periodic inspections and ensuring energy certifications, through a team of technicians qualified and recognized by ADENE (the Energy Agency).

4.4. Factors determing consumers green brands purchase behaviour – the

#### case of Galp

As referred before in the literature review, Corporate Social Responsibility (CSR) enables the attainment of a competitive edge by shifting focus towards non-economic elements. CSR is a key strategic priority for organizations, as it plays a critical role in cultivating positive customer views and boosting brand image. The importance of brand image within the marketing strategy approach is well recognized. When implemented with efficiency, it has the capacity to cultivate customer loyalty, increase buying intention, and contribute to the overall prosperity of the firm (Kataria et al., 2021).

Within this matter, Galp, a prominent company in the energy sector, prioritizes CSR as a crucial aspect of its management approach. It demonstrates a commitment to upholding and adhering to these principles across its entire value chain and in its interactions with stakeholders, regardless of the various contexts and geographic locations in which it conducts its operations. The implementation of CSR programs has a significant influence on the expectations of customers and stakeholders, resulting in improved business performance (Galp, n.d.).

Galp is committed to implementing the most effective operational and governance strategies to facilitate the incorporation of essential concepts and topics related to CSR in the economic, environmental, ethical, and social domains. Therefore, Galp is dedicated to: promote ethical behaviour that is grounded on the principles of honesty, openness, and integrity, demonstrating a consistent commitment to the well-being of the economy, individuals, and environment; uphold and advance the concepts of respect for the promotion of human rights; support the advancement of environmental consciousness, based on the quality and safety of its goods and services and promote the use of innovating strategies aimed at enhancing eco-efficiency and sustainable mobility across the whole value chain, resulting in the advancement of a low carbon economy (Galp, n.d.).

Regarding the concept of Brand associations, as defined by Ranfagni et al. (2014), it refer to the subjective interpretations that people attribute to a brand, hence influencing the overall perception of the firm. In early 2022, Galp established its primary strategic objectives as the (re)engagement with the communities it operates in within a post-pandemic environment, and enhancing the perception of the company as a leader in the energy transition, renewable energy, and the exploration of new opportunities to generate value for its diverse customer base, covering both private individuals and corporate entities. Galp's offer is becoming more cohesive and environmentally conscious, shown by its inclusion of enterprises like Galp Solar and its dedication to promoting electric transportation (Galp, n.d.).

When looking to the concept of perceived quality, it refers to the review conducted by customers on the overall excellence or superiority of a product when compared to other available alternatives (Zeithaml, 1988). By prioritize the evaluation of quality from the perspective of consumers, marketers may achieve favorable outcomes (Aaker, 1991), therefore establishing the firm as a trustworthy brand. The rapid rate at which the energy transition is occurring, requires that Galp swiftly adjusts and expands its range of offerings in order to proactively address the changing demands and expectations of customers. This includes an expansion of its portfolio of low-carbon goods (Galp, n.d.).

Galp is now undertaking a transformative initiative to revamp its service station network by implementing new hub ideas. These concepts include the integration of several energy sources and a heightened focus on improving customer convenience. This modification will lead to an increased contribution from the convenience and low-carbon sales sector, as well as the growth of our charging infrastructure network in the Iberian Peninsula to over 10,000 stations by the year 2025 (Galp, n.d.).

Alongside its network of hubs, Galp is actively engaged in the development of competitive and distinctive offerings. These include a range of solutions, including electric mobility options for homes and fleets, as well as decentralized generation solutions. This strategic approach serves to grow Galp Solar's portfolio and foster the establishment of local energy communities. Galp anticipates a growth in its power sales within the gas and electricity sector, while simultaneously maintaining its prominent market standing in gas sales (Galp, n.d.).

However, it is important to note that other elements, such as marketing communication and sponsorship, also have a role in shaping perceived quality (Mao & Zhang, 2013). The utilization of a brand partnership strategy can serve as an indicator of hidden product quality, whereas sponsorship has the potential to influence customers' opinions of perceived quality (Mao & Zhang, 2013). Therefore, the implementation of green sponsorship initiatives (e.g. Rock in Rio, Web Summit and World Cup) has the potential to enhance the sense of greater quality. Hence, the provision of green perceived quality has a beneficial impact on the level of trust that consumers place in green companies.

The formation of brand connections has significant value as it lays the groundwork for influencing customers' buying decisions by building a strong reputation and trust for the brand (Chen & Chang, 2016). Thus, a strong connection with the general public enhance the organization's reputation for being forward-thinking and capable of driving significant change.

#### 4.5. Internship Scope and Main Activities

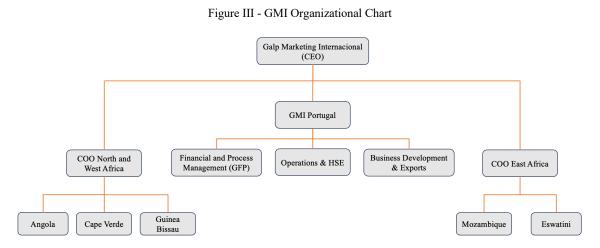
In this chapter, a description of the internship is done, in where, in the first place, the company structure and the role of each department will be avowed. Secondly, the Financial and Process Management (FPM), and the main accomplishments performed during the internship are enlightened. I joined GMI (Galp Marketing Internacional) as a Corporate Finance Intern in its financial. The internship lasted from October 17<sup>th</sup>, 2022 until March 15<sup>th</sup>, 2023.

#### 4.5.1. Company Structure

In all of the Galp spectrum, GMI employs more than 600 people that are directly involved in the business and operations, not only in Portugal (2%) but also in Angola (24%), Mozambique (15%), Cape Verde (39%), Guinea-Bissau (17%) and Eswatini (4%).

FPM is GMI's financial area in the central structure in Portugal and supports Galp's companies in Africa. In addition, supports GMI's management in the strategic analysis of the business to assist decision-making and also in compliance with corporate processes and regulations, promoting alignment between the African companies of Galp and the Group.

As it possible to notice in the organizational chart (Figure III), the company covers three main areas: GMI Portugal (composed by FPM, Business Development & Exports, and Operations & HSE), COO North and West Africa (composed by the geographies Angola, Cape Verde, and Guinea Bissau) and COO East Africa (composed by the geographies Mozambique and Eswatini).



Source: Adapted from Galp's internal Report in March 2023

Each area is managed by one functional Manager, and the more crowded area is based in Cape Verde. Despite the fact that GMI Portugal has the lowest headcount proportion, it is realistically an equal important area since all matters (investments, disinvestments, and others) have to go through the head office (based in Portugal) to be discussed, analyzed, and approved (or not), as showed in Table III.

Area	<b>Headcount Proportion*</b>
GMI Portugal (FPM + Business Development & Exports +	2%
Operations & HSE)	
East Africa (Mozambique + Eswatini)	19%
North and west Africa (Guinea Bissau)	17%
North and west Africa (Angola)	24%
North and west Africa (Cape Verde)	39%

Note: \* = Approximated values

Source: Adapted from Galp's internal Report in March 2023

FPM are responsible for managing the financial process of all the geographies, by analyzing all cash flows, including debts to creditors and debtholders; performance reports; investment and maintenance processes both in new stations and in existing stations with different types of management. Business Development & Exports are responsible for topics like branding, marketing, initiatives, and export base oils and bitumens, not only for African countries, but also to more than fifty country's all over the world. The Operations & HSE Department aims to promote safety-based commitment and leadership. Nowadays, the topic of safety is still undervalued, but Galp, as a company located in a dangerous industry (in terms of the technical processes and raw materials used), is committed to becoming the safest company to work for.

Regarding the African geographies, they are present in the following market segments: retail; B2B; marine; re-export; aviation; lubricants; and LPG. Cape Verde and Guinea Bissau are present in all these markets, while Angola and Eswatini are not present in the aviation and marine segments. Mozambique is only left out of the aviation market.

#### 4.5.2. Internship Scope

#### 4.5.2.1. Financial and Process Management

The FPM is a crucial component of GMI's organizational structure in Portugal, providing financial assistance to Galp's subsidiary firms operating in Africa. This collaboration fosters alignment between Galp's African subsidiaries and the broader Group. The support section serves as an intermediary between Galp Corporate and African enterprises, providing assistance in financial and process-related issues. Its primary goal is to help and motivate these regions in

achieving the set objectives, while also ensuring consistency among the companies involved. This consistency is maintained by adhering to Galp's principles, rules, and standards. FPM encompasses various key responsibilities in financial and process management, including the evaluation, deliberation, and endorsement of present and future investments. This role extends across the headquarters in Portugal and all five African regions, thereby assuming a significant and comprehensive function in organizational administration.<sup>1</sup>

In order to optimize performance and achieve the desired outcomes, including non-financial goals, it is essential to establish a positive environment characterized by effective dynamics, robust communication, collaborative assistance, and active engagement with multidisciplinary teams.

It is noteworthy to acknowledge that this department has the responsibility of examining and overseeing significant key performance metrics. Key performance indicators (KPIs) related to FPM play a critical role in monitoring and evaluating the success and efficiency of Galp's operations in Portugal and Africa (Table IV).

KPI	Unit	Description
EBITDA	Value (in €m)	EBITDA monitoring for all GMI operations;
Volumes	Value (in ktons)	Volume follow-up for all GMI operations;
CAPEX Execution	Percentage	Monthly follow-up of CAPEX execution progress;
Credit Management – OD/TD	Percentage	Debt management (overview debt / total debt). Follow-up of debt repayment progress;
Credit Management – DSO Days	Days	Average debt collection period;
HSE – Visits/Checklist	Number	Station inspections and safety checklists;
OPAs	Number	Reporting potential risks;
Internal Audit Recommendations Execution	Percentage	Percentage of implementation of the number of recommendations that were open and still remain open at the end;
Gains and Losses Variance	Percentage	Annual variation in fuel losses and leftovers.

#### Table IV - FPM Key Performance Indicators

Source: Adapted from Galp's internal Report in March 2023

#### 4.5.2.2. Main Activities and Objective Key Results

During my internship, I was working in Corporate Finance, in which was possible to acquire financial knowledge about the transversal management of companies, with an active participation in the analysis of investments and in a variety of reporting activities (some already existing and

<sup>&</sup>lt;sup>1</sup> Source: Adapted from Galp's internal Report. Retrieved March 10, 2023

develop new ones). It also made possibly to develop skills of interaction with multidisciplinary teams in Portugal and in various African geographies.

As a Corporate Finance Representative, the activities performed focused on a set of reports and follow-up activities, with the purpose of keeping daily and weekly records of topics such as sales volume and cash position, in order to promote organization of the main source of inflows and outflows (Table V). The performed financial and results activities (Table VI) were related to the company's investment side, such as analysis of current investments of compliance, maintenance and/or purchase in order to assess their possible positive return to the company. To do this, it was very important for us to be in constant contact with all of our geographies so that we were on top of the events and didn't miss out any business opportunities. For a better overall result, updating the files where all the analysis and results records are kept was also important to promote team organization and efficiency.

Task	Recurrence	Tool
Report daily volumes	Daily	E-mail/Excel
Report on cash position	Daily	E-mail/Excel
Internal audit	Weekly	Powerpoint/E-mail/Video call (Teams)/Excel
Follow-up losses and leftovers	Weekly	E-mail/Excel
Monthly presentation	Monthly	Powerpoint/E-mail/Video call/Excel
Report on exchange rate developments	Monthly	E-mail/Excel

Source: Adapted from Galp's internal Report in March 2023

Table VI - Finance and Results Activities Breakdown

Task	Recurrence	Tool
Investment analysis (compliance, maintenance, purchases)	Daily/Weekly	E-mail/Video call (Teams)/Excel
Files improvement	Montly	Excel
Contacted the geographis to follow-up the status of investments	Daily/Weekly	E-mail/Video call (Teams)/Excel
Comunicated team results (GFP)	Weekly	E-mail/Video call (Teams)/Excel
Prepared weekly GFP meetings	Weekly	E-mail/Video call (Teams)

Source: Adapted from Galp's internal Report in March 2023

#### CHAPTER 5 – RESEARCH METHODOLOGY AND DATA ANALYSIS

#### 5.1 Methodological Approach

This chapter provides an overview of the research design, including details on the target population and sample selection, as well as the tools and techniques used for data collection.

#### 5.1.1 Type of Study

The present research adopts a quantitative approach, since it aims to investigate the associations among the variables under examination (Saunders et al., 2019). The goal of this study is to demonstrate the causality of the relationship between these variables, with the primary objective being explanatory (Saunders et al., 2019). The used research methodology included the implementation of a survey, using a questionnaire as the primary instrument for data collection, designed and implemented using the Qualtrics platform. The survey was distributed through online applications, like e-mail and Whatsaap.

The investigation was conducted within a certain timeframe due to limitations in time, resulting in a cross-sectional temporal horizon for the research (Saunders et al., 2019).

#### 5.1.2 Sample Selection

The research population consists of customers who use energy brands, encompassing the ones who use at least one of these brands. Due to the inevitable impracticability of obtaining data from the complete population, a representative group, referred to as a sample, was used for the purposes of this study (Saunders et al., 2019).

The sample methodology used in this study was non-probability convenience sampling. This approach was chosen by the researcher based on the respondents' availability of access and willingness to participate. Additionally, this strategy was chosen due to its efficiency in terms of time and cost limitations (Nunan et al., 2020). Nevertheless, it is important to acknowledge that due to its non-probability nature, statistical projections and generalizations about the population cannot be made (Nunan et al., 2020; Saunders et al., 2019). Additionally, the odds of a convenience sample accurately representing the population is considerably low (Nunan et al., 2020; Saunders et al., 2019). Furthermore, the respondents who were originally chosen were requested to distribute the research questionnaire throughout their network of contacts, so using the non-probability snowball sampling approach (Nunan et al., 2020; Saunders et al., 2019).

#### 5.1.3 Data Collection Methods

The present study utilizes secondary data acquired from bibliographic databases, as well as primary data collected using a quantitative research approach. The primary method used for gathering data was a survey that was designed and implemented using the Qualtrics platform (Appendix F). The survey was distributed through online platforms, specifically through WhatsApp and e-mail. There was a total of 106 valid responses.

The questionnaire is comprised in three sections. The initial section consisted of filter questions designed to assess the level of support among respondents towards the proposed topic. The subsequent section focused on the core concepts of the research. Lastly, the final section addressed the demographic information of the participants.

In order to establish the credibility and consistency of the scales employed, the questionnaire items used as components in our model were predominantly derived from previous research (Table VII). The items received a meticulous evaluation and revision process to ensure content validity and clarity of language prior to their distribution. The questionnaire items were initially developed in English, but afterwards translated into Portuguese to enhance the comprehension of the respondents.

The questionnaire items were measured using a Likert-type 7-point response scale, which extended from "not at all" (1) to "very strongly" (7). This research paper introduces a set of seven constructs, namely corporate social responsibility, green association, green perceived quality, green perceived value, green trust, purchase intentions towards green brands, and purchase behaviour towards green brands. The definitions and measurements of these constructs were derived by referencing previous studies in the field.

Dimensions	References	
Corporate Social Responsability	Huo et al., 2022	
Green Association	Dinh et al., 2023	
Green Perceived Quality	Wang, 2017 and Dinh et al., 2023	
Green Perceived Value	Wang, 2017	
Green Trust	Dinh et al., 2023	
Purchase Intentions Towards Green	Wang, 2017 and Dinh et al., 2023	
Purchase Behavior of Green Brands	Wang, 2017	

Table VII - Dimensions used in the survey

Source: Own Elaboration

#### 5.2 Data Analysis

#### 5.2.1 Characterization of the sample

The sample for this research comprises 106 persons who actively engage with green energy companies. Among them, about 62,2% represent the female population, while 36,8% correspond to the male population. The age group of > 55 represents the highest proportion of participants, accounting for 30,2% of the total respondents. This is followed by the age group of 35 to 54, which contains 27,4% of the respondents, and the age group of 18 to 24, which accounts for 26,4% of the respondents. In terms of educational background, it is seen that about 64,2% of the participants own a bachelor's degree, 24,5% have a master's degree and 8,5% have completed their secondary education up to the 12th grade. The majority of participants in the sample consist of employed adults, comprising 86,8% of the total. Additionally, around 10,4% of the sample population are students. Lisbon and "Vale do Tejo" is the geographical region that exhibits the highest number of respondents. Regarding the financial circumstances of the household income of the participants, around 33% gain more than 50 000€ per year, followed by 20 000 to 29 999€ and 30 000 to 39 999€, with 17% and 16% respectively.

To get a comprehensive characterization of the sample, an investigation was conducted to determine if the respondents own any hybrid or electric car, what's their opinion about the current charging stations in Portugal, and which energy company they use more often. The results of our study indicate that 65% of the respondents to not have any hybrid or electric car, while only 20,8% have one. Regarding their opinion about the current state of the charging stations in Portugal, 15% said that they like despite of the fact that there isn't enough offers, while 5,7% said that they don't like it because there isn't many charging stations available. Finally, the most frequent energy company used by the respondents is EDP (52,8%), followed by Galp with 24,5%. The comprehensive characterization of the sample is included in Appendix G and H.

#### 5.2.2 Verification of the conceptual model

The present investigation used the partial least squares structural equation modeling (PLS-SEM) technique, using the SmartPLS 3.3.3 software. PLS-SEM is a statistical technique that employs a causality approach. Its primary objective is to optimize the explained variance of the dependent constructs (Hair et al., 2011). Partial Least Squares (PLS) analysis is not just depending on predetermined associations between constructs, but also considers the associations between constructs and their corresponding measurement items (Hair et al., 2021). This approach enables researchers to gather crucial insights into the magnitude and statistical significance of the relationships within the proposed model (Sarstedt et al., 2021). One of the notable benefits of this

approach, which has seen a growing use in the realms of marketing and other business-related fields (Hair et al., 2011), is its applicability to intricate models including several constructs and indicators, even in cases when the sample size is limited (Sarstedt et al., 2021).

#### 5.2.3 Evaluation of the measurement model

When using a reflective model, it is important to evaluate the reliability of the indicators, including internal consistency reliability, as well as the convergent and discriminant validity (Sarstedt et al., 2021).

To provide good reliability of the indicators, it is necessary for the constructs to account for more than 50% of the variance of the indicator. Consequently, the loading indicator must exceed a value of 0.708, as stated by Sarstedt et al. (2021). Nevertheless, it is often seen in practical applications that indicators may possess loadings that fall below the acceptable value of 0.7. In such cases, it is recommended to exclude indicators with values below 0.4 or 0.5 (Hulland, 1999). As a result, the research model excluded components PI3, PI5 and PI7 due to their respective loadings of -0.576, 0.491, 0.406. Table VIII displays the loadings of the objects that have been retained and are included in the structural model.

Cronbach's alpha is used to evaluate the internal consistency reliability, on the assumption that all indicators possess equal reliability (Henseler et al., 2009). Nevertheless, within the framework of Partial Least Squares (PLS), the indicators are given priority based on their reliability. Therefore, it could be more suitable to use Composite Reliability (CR) as a means to evaluate the internal consistency reliability, as suggested by Henseler et al. (2009). Still, it is important to note that the Composite Reliability (CR) measure may overstate the true value of reliability. Consequently, researchers have introduced the Rho\_A reliability coefficient as an alternative method for assessing reliability (Dijkstra & Henseler, 2015). Despite the method used to evaluate the reliability of the analyzed data, it is considered acceptable if the values exceed 0.7 during the initial phases of the research and exceed 0.8 or 0.9 during the later stages (Nunnally & Bernstein, 1994, as cited by Henseler et al., 2009).

Convergent validity, as assessed by the average variance extracted (AVE), is used to determine whether a group of indicators accurately represents a common underlying concept (Henseler et al., 2009). According to the structural model of the research, all the constructs demonstrate values over 0.5 (refer to table VIII), which is the limit for an acceptable Average variation Extracted (AVE). This suggests that each construct, on average, accounts for over 50% of the variation in its respective items (Sarstedt et al., 2021).

Constructs	Items	Loadings	AVE	CR	Rho_A	Cronbach's alpha
Corporate Social	CSR1	0,874	0,782	0.947	0,937	0,930
Responsability	CSR2	0,931				
	CSR3	0,798				
	CSR4	0,925				
	CSR5	0,886				
Green	GA1	0,850	0,790	0.949	0,945	0,933
Association	GA2	0,777				
	GA3	0,925				
	GA4	0,933				
	GA5	0,948				
Green Perceived	GPQ1	0,927	0,773	0.953	0,944	0,941
Quality	GPQ2	0,926				
	GPQ3	0,865				
	GPQ4	0,838				
	GPQ5	0,896				
	GPQ6	0,814				
Green Perceived	GPV1	0,966	0,933	0.965	0,928	0,928
Value	GPV2	0,965				
Green Trust	GT1	0,942	0,900	0.978	0,973	0,972
	GT2	0,973				
	GT3	0,962				
	GT4	0,919				
	GT5	0,946				
Purchase	PI1	0,830	0,668	0,805	0,812	0,745
Intentions	PI2	0,801				
	PI3	-0,576				
	PI4	0,554				
	PI5	0,491				
	PI6	0,649				
	PI7	0,406				
Purchase	PB1	0,880	0,643	0,779	0,647	0,668
Behavior	PB2	0,721	-	-	-	

Table VIII - Measurement Model

Source: SmartPLS

In relation to the concept of discriminant validity, Henseler et al. (2009) propose that it may be assessed through the use of the Fornell-Larcker criteria and outer-loadings. The Fornell-Larcker criteria, as outlined in Appendix I, serves to validate that the square root of the average variance extracted (AVE) for each construct exceeds the correlation between that construct and any other construct (Henseler et al., 2015). The phenomenon of outer-loading, as shown in appendix J, reveals that the indicators exhibit a stronger association with their corresponding concept (Henseler et al., 2009). Therefore, all of the assessment techniques validate the presence of discriminant validity.

It is evident from the data shown in Table IX that there are no issues of collinearity, as indicated by the internal variance inflation factor (VIF) values being below 5, in accordance with the findings of Hair et al. (2021). Furthermore, the highest external VIF value seen is 4.954, corresponding to the variable GT4.

Collinearity statistics – Outer VIF							
CSR1	3.735	GPV1	3.973				
CSR2	4.665	GPV2	3.973				
CSR3	2.485	GT1	4.138				
CSR4	4.060	GT2	4.620				
CSR5	4.614	GT3	4.305				
GA1	2.706	GT4	4.954				
GA2	2.070	GT5	4.613				
GA3	4.589	PB1	1.103				
GA4	4.257	PB2	1.103				
GA5	4.272	PI1	4.223				
GPQ1	4.299	PI2	4.355				
GPQ2	4.280	PI4	1.961				
GPQ3	3.427	PI5	2.407				
GPQ4	2.989	PI6	2.171				
GPQ5	3.610						
GPQ6	2.581						

Table IX - Collinearity Statistics (Outer VIF)

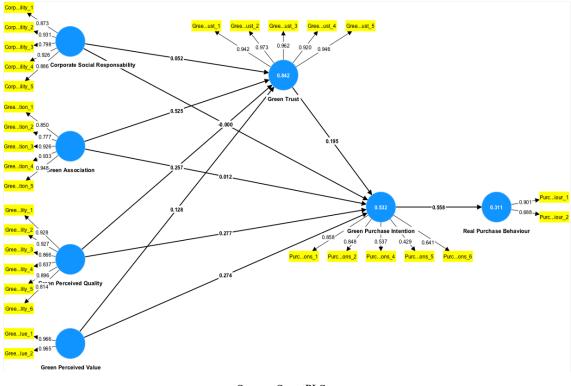
Source: SmartPLS

### 5.2.4 Assessment of the structural model

In order to assess the structural model, it is essential to examine the coefficient of determination (R2) as well as the magnitude and statistical significance of the path coefficients (Hair et al., 2011), as seen in Figure IV. Subsequently, Table X presents an assessment of the model's appropriateness.

According to Chin (2010), the R2 coefficient quantifies the proportion of variation in a certain construct that is accounted for by the model. Typically, constructs are considered significant, moderate, or weak when their values are 0.75, 0.50, or 0.25, respectively. However, it is important to note that these values may differ across different study domains (Hair et al., 2011). Furthermore, Hair et al. (2021) suggest that the coefficient of determination (R2) is reliant upon the quantity of predictors associated with the construct, in which an increase in the number of predictors leads to a corresponding increase in the R2 value. The assessment of the significance of the path coefficients may be conducted by the use of a bootstrapping approach, as outlined by Hair et al. (2011) and elaborated upon in section 5.3.5.

Figure IV - Structural Model



#### Source: SmartPLS

The appropriateness of the model may be assessed by using the SRMR (standardized root mean square residual), a measure that quantifies the Euclidean distance between the model's implicit matrices and the empirical correlation matrices (Henseler et al., 2016). According to Schermelleh-Engel et al. (2003), when the standardized root mean square residual (SRMR) is below 0.10, as shown in Table X, the model is deemed to be satisfactory.

	R Square	R Square Adjusted
Green Trust	0,842	0,836
Green Purchase Intention	0,532	0,509
Green Purchase Behavior	0,311	0,304
SRMR	0,120	0,091
d_ULS	6,663	6,775
d_G	2,361	2,384
Chi-square	1217,927	1227,374
NFI	0,727	0,725

Source: SmartPLS

### 5.2.5 Hypotheses test - Bootstrapping

The utilization of the non-parametric bootstrapping procedure enables the evaluation of the statistical significance of individual path coefficients (Hair et al., 2011). In cases where the path

coefficients are found to be insignificant or exhibit a direction contrary to the proposed hypotheses, it indicates a lack of support for the hypotheses. On the other hand, if the path coefficients are found to be significant and align with the proposed direction, it provides empirical support for the hypotheses (Hair et al., 2011). The process of bootstrapping involves treating the sample as a representative portion of the population, as discussed by Henseler et al. (2009). This research used a bootstrapping approach, with a resampling of 5000 interactions, to get t-values for evaluating the impact of the correlations proposed in the hypotheses. Based on the assumption of a significance level of 5%, it is necessary for the t-value to exceed 1.96, as stated by Hair et al. (2021). Therefore, if the t-value > 1.96 and the p-value < 0.5, the hypothesis is deemed to possess appropriate statistical significance.

Table XI presents a brief description of the hypothesis test. The presented table displays the path coefficients, t-values, and p-values, which have facilitated the validation of 3 out of the 10 hypotheses presented. Additionally, a column is included in the data presentation that indicates the determination of whether the hypotheses were verified or not.

Hypothesis	Relation	Path Coefficient	t-value	p-value	Decision
Hla	Corporate Social Responsability -> Green Trust	0,052	0,404	0,686	Not supported
H1b	Corporate Social Responsability -> Green Purchase Intention	-0,000	0,002	0,999	Not supported
H2a	Green Association -> Green Trust	0,525	4,413	0,000	Supported
H2b	Green Association -> Green Purchase Intention	0,012	0,056	0,956	Not supported
H3a	Green Perceived Quality -> Green Trust	0,257	2,227	0,026	Supported
H3b	Green Perceived Quality -> Green Purchase Intention	0,277	1,131	0,258	Not supported
H4a	Green Perceived Value -> Green Trust	0,128	0,846	0,397	Not supported
H4b	Green Perceived Value -> Green Purchase Intention	0,274	1,091	0,275	Not supported
Н5	Green Trust -> Green Purchase Intention	0,195	1,007	0,314	Not supported
H6	Green Purchase Intention -> Real Purchase Behavior	0,558	6,425	0,000	Supported

#### Table XI - Hypothesis Test Summary

Source: SmartPLS

#### 5.3 Discussion of the Main Results

Regarding the behaviour of consumers in relation to the concept of green brand trustworthiness, it was only proven that there is a relationship between Green association and Brand Trust (H2a)

and Green Perceived Quality and Brand Trust (H3a), with the following values respectively: path coefficient = 0.525, t-value > 1.96, p-value < 0.5; path coefficient = 0.257, t-value > 1.96, p-value < 0.5. Thus, the results of this study are in line with the study of Dinh et al., 2023. However, and unlike the results obtained in the studies of Huo et al., 2022 and Dinh et al., 2023, the hypotheses H1a (path coefficient = 0.052, t-value < 1.96, p-value > 0.5) and H4a (path coefficient = 0.128, t-value < 1.96, p-value < 0.5) were not supported, so there is no significant relationship between Corporate Social Responsibility and Green Trust, neither between Green Perceived Value nor Green Trust.

With regard to the relationship with the concept of Green Purchase Intentions in this study, the hypotheses H1b (path coefficient = -0.000, t-value < 1.96, p-value > 0.5), H2b (path coefficient = 0.012, t-value < 1.96, p-value > 0.5), H3b (path coefficient = 0.277, t-value < 1.96, p-value < 0.5), H4b (path coefficient = 0.274, t-value < 1.96, p-value < 0.5) and H5 (path coefficient = 0.195, t-value < 1.96, p-value < 0.5) were not supported, in contrast to the results obtained in the studies of Huo et al., 2022, Wang, 2017 and Dinh et al., 2023, in which the results indicate that there is a significant relationship between Corporate Social Responsibility, Green Association, Green Perceived Quality, Green Perceived Value and Green Trust with Green Purchase Intentions (individually).

Finally, regarding the hypothesis tested between the possible existence of a significant relationship between Green Purchase Intentions and Green/Real Purchase Behaviour (H6), it showed the values of path coefficient = 0.558, t-value > 1.96 and p-value < 0.5, which means that the test of this hypothesis was supported and therefore confirms the existence of a significant relationship between these two variables, as concluded in the results obtained in the studies of Wang, 2017.

## CHAPTER 6 – CONCLUSIONS, LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

### 6.1 Conclusions

The present research examined the factors that precede customers' intentions to make a purchase and the subsequent influence of these intentions on their actual buying behaviour.

The results obtained in this study show that none of the variables studied had a positive and significant relationship with the Green Purchase Intention variable, contrary to the results obtained in the studies by Huo et al., 2022, Wang, 2017 and Dinh et al., 2023. This may not mean that these variables do not in fact influence consumers' purchase intention for ecological products and brands, but it may mean that, given the sample collected, and due to this very implication, the study carried out was unable to find significant evidence between the variables CSR, GA, GPQ, GPV, and GT on PI (looking at each of the hypotheses individually). Comparing to the other

studies, Huo et al., 2022, the variable CSR had a positive impact on PI, while the remain ones (GA, GPQ, GPV and GT) was also supported in the studies by Wang, 2017 and Dinh et al., 2023.

Also, it was possible to confirm that there is an impact between consumers' purchase intention and their purchasing behaviour, as demonstrated by Wang in 2017. This means that the hypothesis was supported, since purchase intention shows an interest in a certain brand, products, or services from the start and for this reason, consumers have a greater tendency to purchase a product, compared to consumers who are not interested in making a purchase in the first place.

In view of these conclusions, this study also makes some theoretical and managerial contributions.

## 6.1.1. Theoretical implications

This study makes significant contributions to the existing literature. This study represents an initial endeavor to propose a research framework that incorporates CSR, GA, GPQ, GPV, GT, and PI, in order to identify key factors influencing consumer purchase behaviour towards environmentally friendly brands. The prior research have not examined the combined influence of these variables on customer buying behaviour towards green companies. Furthermore, this study makes a valuable contribution to the existing body of research on consumer behaviour in relation to green brands.

### 6.1.2. Managerial implications

This research provides practical insights by analyzing the determinants that impact consumer purchasing behaviour towards environmentally friendly companies. The results of this study have the potential to assist professionals in the field of green branding in enhancing their tactics to effectively influence customers' intents and behaviours towards purchasing green goods. Additionally, these findings could be helpful in the development of suitable initiation methods for promoting green businesses.

The first concern for practitioners in the green brand industry should be the identification and understanding of the many aspects that have an impact on customers' intents to make a purchase. Practitioners of environmentally conscious brands may find it advantageous to invest in a robust strategy including green associations. The use of GA methods may provide advantages for a green brand by enhancing customers' affiliation with the brand, enhancing their desire to buy and engage in behaviours related to the brand, and building trust among consumers towards a particular brand, product, or service. The progression of Internet technology has facilitated the utilization of corporate websites and social media platforms by green brands as means of engaging in communication with customers. Furthermore, the findings of this research indicate that individuals who engage in green brand practices should prioritize the enhancement of the ecological attributes of their goods or services in order to enhance consumers' intention to make a purchase. The companies may emphasize the ways in which their brand's goods or services may have beneficial effects on the environment and fulfill customers' expectations for sustainability in their claims of being environmentally friendly. This might lead consumers to think that the prices they pay are justified by the value they get.

## 6.2 Limitations of the study

Although its significant contributions, this research was exposed to many limitations. Initially, the study primarily focuses on energy consumers within a single country (Portugal). The unique attributes associated with diverse economic environments might have had an impact on the outcomes. Hence, it is recommended that future investigations include additional circumstances in order to enhance the diversity of results within this particular study topic. Furthermore, the limited number of 106 survey answers raises concerns about the generalizability of the results to the whole population of green brand customers in Portugal. In order to provide adequate verification and enhance the validity of future research, it is essential to include a greater number of respondents. Additionally, it should be noted that the data used in this research are based on self-reporting. While self-reports often provide quite accurate estimations of real behaviours (Ajzen & Fishbein, 1980), they are not without limits. Further investigation is required to explore the possible ramifications of these impacts on individuals' reactions, as well as to include an unbiased evaluation of customers' actual purchasing behaviour.

## 6.3 Suggestions for Future Research

Future research projects should try to gather empirical data during real-life purchasing transactions. For instance, future studies endeavors may gather data from customers at the physical locations where transactions take place, such as retail establishments or certain petrol stations. By adopting this approach, it becomes possible to gather data that is more objective in nature, including the quantification of monetary expenditures on items associated with environmentally friendly branding, as well as the determination of the quantity of such products acquired by customers. Furthermore, this research investigates the predominant attitudinal components that have been widely used in consumer behaviour studies to elucidate the purchasing behaviour associated with environmentally conscious firms. The research suggests that other variables may have an influence on such behaviour and need further investigation. Future studies may expand upon this topic by including other cultures than Portugal. Potential areas of investigation in future research might include exploring the potential impact of various variables on consumers' intentions and behaviours towards purchasing green products across diverse sectors. Significant disparities may provide comprehensive understanding on the factors influencing consumer behaviour in relation to the purchasing of environmentally friendly brands.

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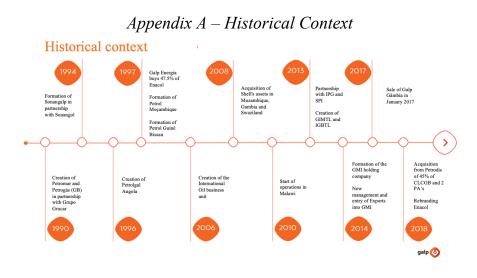
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## APPENDIX



Appendix B – Galp's Sustainability Roadmap for 2030



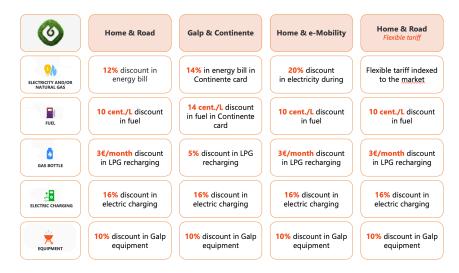
# Appendix C – Key aspects Chart



## Appendix D – New Pluma



# Appendix E – Galp's current offers



# Appendix F - Survey



Cara/o participante,

O presente inquérito foi elaborado no âmbito do Trabalho Final de Mestrado em Gestão (MiM) do ISEG - Universidade de Lisboa, e tem como objetivo avaliar o grau de adesão dos consumidores à aquisição de produtos e serviços "eco-friendly" nomeadamente disponibilizados pela marca Galp.

A sua participação no inquérito é totalmente voluntária, sendo o mesmo anónimo e confidencial. Todos os dados obtidos serão utilizados apenas para fins académicos.

O tempo previsto para a sua realização é de cerca de 5-10 minutos.

Antecipadamente grato pelo seu tempo e ajuda!

Q1: Possui algum automóvel híbrido ou elétrico?

- O Sim
- O Não
- O Sim, mas não estou muito satisfeito/a
- O Não, mas estou a pensar adquirir um no futuro

Q2: Qual a sua opinião sobre os postos de carregamento de automóveis híbridos/elétricos em Portugal?

O Gosto bastante, são simples e práticos

O Gosto, apesar de não haver muita oferta/postos disponíveis

- O Não gosto, pois não há muita opção de escolha nem postos disponíveis
- O Não gosto, pois não são muito práticos e demoram muito tempo
- O Não tenho opinião
- O Não possuo nenhum automóvel híbrido/elétrico

Q3: Tendo em conta o setor energético (eletricidade + gás natural), qual é a empresa que usa mais regularmente para satisfazer as suas necessidades (em casa e na estrada)?

- O Galp
- O EDP
- O Repsol
- O Outra/s

Q5: Numa escala de 1 (não concordo de todo) a 7 (concordo totalmente), como se identifica com as seguintes afirmações?

	1	2	3	4	5	6	7
A Galp oferece uma elevada qualidade no que diz respeito às preocupações ambientais.	0	0	0	0	0	0	0
A Galp oferece um profissionalismo de qualidade no que diz respeito à sua reputação ambiental.	0	0	0	0	0	0	0
No que diz respeito à imagem ambiental da marca, a Galp apresenta uma boa qualidade.	0	0	0	0	0	0	0
A Galp é uma empresa de qualidade consistente.	0	0	0	0	0	0	0
A Galp oferece alternativas eco- friendly a um preço razoável.	0	0	0	0	0	0	0
A Galp comercializa produtos fiáveis.	0	0	0	0	0	0	0
No geral, a Galp oferece-lhe um bom valor ecológico.	0	0	0	0	0	0	0
O desempenho ambiental da Galp corresponde às suas expetativas.	0	0	0	0	0	0	0

Q4: Numa escala de 1 (não concordo de todo) a 7 (concordo totalmente), como se identifica com as seguintes afirmações?

	1	2	3	4	5	6	7
A Galp está muito preocupada com a proteção do ambiente.	0	0	0	0	0	0	0
A Galp preocupa-se muito com a comunidade local.	0	0	0	0	0	0	0
A Galp oferece produtos de fabrico local.	0	0	0	0	0	0	0
A Galp é justa para com os outros.	0	0	0	0	0	0	0
A Galp preocupa-se com os direitos dos clientes.	0	0	0	0	0	0	0

Q6: Numa escala de 1 (não concordo de todo) a 7 (concordo totalmente), como se identifica com as seguintes afirmações?

	1	2	3	4	5	6	7
A Galp pode ser reconhecida entre outras marcas concorrentes devido aos seus compromissos ambientais.	0	0	0	0	0	0	0
Conheço a Galp devido à sua reputação ambiental.	0	0	0	0	0	0	0
Quando pondero investir em marcas/produtos eco- fiendly, as características ambientais da Galp sobressaem-se.	0	0	0	0	0	0	0
A imagem da Galp é facilmente reconhecida como uma empresa preocupada com o ambiente.	0	0	0	0	0	0	0
Quando penso em produtos e serviços ecológicos, sinto-me orgulhoso por comprar	0	0	0	0	0	0	0

na Galp.

Q7: Numa escala de 1 (não concordo de todo) a 7 (concordo totalmente), como se identifica com as seguintes afirmações?

Q8: Numa escala de 1 (não concordo de todo) a 7 (concordo totalmente), como se identifica com as seguintes afirmações?

	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Considero que os compromissos ambientais da Galp são geralmente fiáveis.	0	0	0	0	0	0	0	Considero a hipótese de comprar na Galp. Se tiver oportunidade	0	0	0	0	0	0	0
Considero que o								de o fazer, gostaria de comprar na Galp.	0	0	0	0	0	0	0
desempenho ambiental da Galp é geralmente fiável.	0	0	0	0	0	0	0	Nunca compraria na Galp.	0	0	0	0	0	0	0
Considero que a opinião da Galp sobre o ambiente é geralmente fiável.	0	0	0	0	0	0	0	No futuro, planeio comprar produtos eco- friendly.	0	0	0	0	0	0	0
A preocupação ambiental da Galp vai ao encontro das suas expetativas.	0	0	0	0	0	0	0	Estou disposto a escolher mais produtos ecológicos durante as minhas compras.	0	0	0	0	0	0	0
A Galp cumpre as suas promessas e compromissos sobre a	0	0	0	0	0	0	0	A partir de agora, tenciono comprar produtos eco-friendly.	0	0	0	0	0	0	0
proteção do ambiente.								Estou disposto a pagar mais por produtos	0	0	0	0	0	0	0
Q9: Numa escala de 1			todo) a 7	(concordo	o totalmer	nte), como	) se	ecológicos.							
identifica com as segu	untes afir	mações?						Q10: Indique o se	eu género	)	Q11	l: Indique	a sua ida	de:	
	1	2	3	4	5	6	7	O Masculino			0	< 18			
Compro								O Feminino				18 - 24			
frequentemente um produto ou serviço da	0	0	0	0	0	0	0	O Prefiro não di	vulgar			25 - 34			
Galp que é amigo do											0				
ambiente.												35 - 54 55 >			
Quando tenho a								Q12: Indique as suas	habilitaçõ	ões literária	0	55 >	a sua situa	ıção profiss	sional:
								Q12: Indique as suas	habilitaço	ões literária	0 us: Q1	55 >		ıção profiss	sional:
Quando tenho a possibilidade de escolher entre duas marcas, compro	0	0	0	0	0	0	0		habilitaçi	ões literária	us: Q1:	55 > 3: Indique Estudante		ução profiss nta de outrén	
Quando tenho a possibilidade de escolher entre duas	0	0	0	0	0	0	0	O < 3° ciclo	habilitaçi	ões literária	us: Q1	55 > 3: Indique Estudante	or/a por co	nta de outrén	
Quando tenho a possibilidade de escolher entre duas marcas, compro frequentemente a que é menos prejudicial para as outras pessoas	0	0	0	0	0	0	0	<ul><li>&lt; 3° ciclo</li><li>9° ano</li></ul>	habilitaçı	ões literária	us: Q1: C C C	<ul> <li>55 &gt;</li> <li>3: Indique</li> <li>Estudante</li> <li>Trabalhad</li> <li>Trabalhad</li> <li>Trabalhad</li> </ul>	lor/a por con lor/a por con lor/a do serv	nta de outrén nta própria riço doméstio	n
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🔘 Não tenho opinião

# Appendix G – Constructs used in the survey

Dimensions	Constructs	References
Corporate Social Responsability (CSR) Green	Five-item scale: "Galp is very concerned with environment protection" "Galp is very concerned with the local community" "Galp offers locally manufactured products" "Galp is fair with others" "Galp cares about clients' rights" Five-item scale:	C. Huo et al., 2022 (based on Akbari et al., 2021) K. C. Dinh et al.,
Association (GA)	<ul> <li>"You can recognize Galp among other competing brands because of its environmental commitments"</li> <li>"You are aware of Galp because of its environmental reputation"</li> <li>"Some environmental characteristics of Galp come to the top of-mind in your consideration set quickly"</li> <li>"You can quickly recall the green image of Galp"</li> <li>"When I think of green products, I feel proud to buy from Galp"</li> </ul>	2023 (based on Akturan, 2018)
Green Perceived Quality (GPQ)	<ul> <li>Six-item scale:</li> <li>"The quality of Galp is high with respect to environmental concerns"</li> <li>"The quality of Galp is professional with respect to environmental reputation"</li> <li>"The quality of Galp is good with respect to environmental image"</li> <li>"Galp has consistent quality"</li> <li>"Galp offers eco-friendly features in reasonable price"</li> <li>"Galp has reliable product(s)"</li> </ul>	HJ. Wang, 2017 and K. C. Dinh et al., 2023 (based on Baek et al., 2010; Baek & King, 2011; Chen & Chang, 2013b; and Ishaq et al., 2020)
Green Perceived Value (QPV)	<ul> <li>Two-item scale:</li> <li>"Overall, Galp provides good green value for you"</li> <li>"The environmental performance of Galp meets your expectations"</li> </ul>	HJ. Wang, 2017 (based on Chen and Chang, 2012)
Green Trust (GT)	Five-item scale: "You feel that Galp's environmental commitments are generally reliable" "You feel that Galp's environmental performance is generally dependable" "You feel that Galp's environmental argument is generally trustworthy" "Galp's environmental concern meets your expectations" "Galp keeps promises and commitments for environmental protection"	K. C. Dinh et al., 2023 (based on Chen, 2010)
Purchase Intentions Towards Green (PITG)	<ul> <li>Seven-item scale:</li> <li>"If you have a chance to do so, you would like to purchase from Galp"</li> <li>"You would never purchase from Galp"</li> <li>"You would consider purchasing from Galp"</li> <li>"You plan to purchase eco-labeled products in the future"</li> <li>"You are willing to purchase more eco-labeled products"</li> <li>"From now on, you plan to purchase eco-labeled products"</li> </ul>	HJ. Wang, 2017 and K. C. Dinh et al., 2023 (based on Kazmi & Rahman, 2021 and Nguyen-Viet, 2022)
Purchase Behavior of Green Brands (PBGB)	<ul> <li>Two-item scale:</li> <li>"I often buy a product or service of Galp that is environmentally friendly"</li> <li>"When I have a choice between two brands, I often purchase the one less harmful to other people and the environment"</li> </ul>	HJ. Wang, 2017

# Appendix H – Statistics of Filter questions

Indicator	Answer options	Absolute frequency	Relative frequency (%)
Hybrid or Electric	Yes	22	20,75
vehicle	No	69	65,09
	Yes, but I'm not very satisfied	1	0,94
	No, but I'm thinking of getting one in the future	14	13,21
Charging Stations	I really like them, they're simple and practical	4	3,77
	I like it, although there's not much on offer	16	15,09
	I don't like it because there's not much choice or available posts	6	5,66
	I don't like them because they're not very practical and they take a lot of time	2	1,89
	I don't have an opinion	17	16,04
	I don't own a hybrid/electric car	61	57,55
Energy Companies	Galp	26	24,53
	EDP	56	52,83
	Repsol	3	2,83
	Others	21	19,81

Indicator	Answer options	Absolute	Relative
		frequency	frequency (%)
Gender	Male	39	36,79
	Female	66	62,24
	I'd rather not disclose	1	0,94
Age	< 18	0	0,00
	18 - 24	28	26,42
	25 - 34	16	15,09
	35 - 54	29	27,36
	55 >	32	30,19
Education	Basic education	1	0,94
	Ninth grade	0	0,00
	High School	9	8,49
	Bachelor	68	64,15
	Master	26	24,53
	PhD	1	0,94
	Other	1	0,94
Professional Status	Student	11	10,38
	Employee	82	77,36
	Self-employed	3	2,83
	Domestic worker	0	0,00
	Student worker	7	6,60
	Unemployed	1	0,94
	Retired	2	1,89
	Other	0	0,00
Gross annual household	<10 000€	11	10,38
income	10 000€ - 19 999€	9	8,49
	20 000€ - 29 999€	18	16,98
	30 000€ - 39 999€	17	16,04
	40 000€ - 49 999€	16	15,09
	> 50 000€	35	33,02
Residence area	North	4	3,77
	Center	2	1,89
	Lisbon and "Vale do Tejo"	98	92,45
	Alentejo	1	0,94
	Algarve	0	0,00
	Azores	0	0,00
	Madeira	1	0,94
Shopping	Online	11	10,38
	Offline (Conventional	29	27,36
	shopping)		·
	Both	66	62,24
Corporate Social	Yes	70	66,04
Responsability image	No	7	6,60
	No opinion	29	27,36

# Appendix I - Characterization of the sample

# Appendix J – Fornell-Larcker Criterion

	Corporate Social Responsability	Green Association	Green Perceived	Green Perceived	Green Purchase	Green Trust	Real Purchase Behavior
Comonsta Conial			Quality	Value	Intentions		
Corporate Social	0.004						
Responsability	0.984						
Green Association	0.834	0.989					
Green Perceived							
Quality	0.915	0.831	0.979				
Green Perceived							
Value	0.901	0.845	0.940	0.966			
Green Purchase							
Intentions	0.674	0.647	0.712	0.712	0.684		
Green Trust	0.840	0.890	0.861	0.860	0.680	0.949	
Real Purchase							
Behavior	0.395	0.511	0.451	0.473	0.558	0.465	0.802

# Appendix K – Outer-loading

	Corporate Social Responsability	Green Association	Green Perceived	Green Perceived	Green Trust	Purchase Behavior	Purchase Intention
CSR1	0.874		Quality	Value			
CSR2	0.931						
CSR3	0.798						
CSR4	0.925						
CSR5	0.886						
GA1		0.850					
GA2		0.777					
GA3		0.925					
GA4		0.933					
GA5		0.948					
GPQ1			0.927				
GPQ2			0.926				
GPQ3			0.865				
GPQ4			0.838				
GPQ5			0.896				
GPQ6			0.814				
GPV1				0.966			
GPV2				0.965			
GT1						0.942	
GT2						0.973	
GT3						0.962	
GT4						0.919	
GT5						0.946	
PB1							0.880
PB2							0.721
PI1					0.830		
PI2					0.801		
PI3					-0.579		
PI4					0.554		
PI5					0.491		
PI6					0.649		
PI7					0.406		