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# ESG Standards in Portugal - PSI Companies Case Study

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Master's in Management

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# Abstract

Corporate Social Responsibility has been growing to record significance in the XXI century. Investing patterns around the globe are suffering a deep shift towards the prioritization of conscious practices. Once the exclusive domain of impact investors and sustainable development funds, today ESG (Environmental, Social and Governance) considerations are being mainstreamed by the world's largest asset managers, insurers, banks and pension funds. According to the Forum for Sustainable and Responsible Investing (USSIF) (2021), there are now more than US$30 trillion of assets globally under management with an explicit ESG mandate, an increase of over 50% in just three years. In the same period, the number of companies disclosing ESG information in line with internationally recognized standards has more than doubled. The business case for ESG is now well established. A growing body of evidence shows that companies with strong ESG practices outperform their peers on a range of financial measures, including share price performance, earnings growth, return on equity and credit ratings.

Through the investigation of selected organizations within the Portuguese market, this research seeks to provide input on the status of ESG standards adoption by some of the most prominent Portuguese enterprises, showing risks and/or opportunities for these groups to increase international competitiveness. The objective is to examine selected companies of PSI – the Portuguese Stock Index –, look through their internal processes, resources, values and drivers so as to conclude on where they rank relatively to ESG score.

The return was an average of 65.5% compliance within the organizations selected, when accounting for all three pillars of ESG, showing a relatively low will to innovate responsibly, leading to the conclusion that the subjects are content with moderate levels of ESG performance.

**Keywords:** ESG, Corporate Social Responsibility, Sustainability, CSR, Responsible Investing, PSI, Stock Exchange Index.

# Resumo

O conceito de Responsabilidade Social Corporativa tem vindo a crescer em importância ao longo do século XXI. Os padrões de investimento ao redor do mundo estão a sofrer uma grande mudança em direção à prioritização de práticas conscientes. Anteriormente do domínio exclusivo de investidores de impacto e de fundos de desenvolvimento sustentável, hoje, considerações ESG (Ambientais, Sociais e de Governança) são generalizadas aos maiores gestores de ativos, bancos, seguradores e fundos de pensão. Segundo o Forum for Sustainable and Responsible Investing (USSIF) (2021), há agora mais de US$30 biliões de ativos geridos considerando indicadores ESG, um aumento de 50% em apenas três anos. No mesmo período, duplicou o número de empresas que reportaram esses mesmos indicadores, alinhados com as normas internacionais.

Um (cada vez maior) conjunto de evidências demostra que empresas com fortes práticas a nível de ESG, têm uma melhor performance financeira, no âmbito de cotação de ações, crescimento económico, rentabilidade de capitais e avaliação de crédito.

Através da investigação de corporações selecionadas, esta pesquisa tenciona providenciar informação sobre o progresso de adoção de padrões ESG por parte de algumas das mais proeminentes empresas portuguesas, detalhando riscos e oportunidades para um aumento da competitividade das mesmas a nível internacional. O objetivo é examinar as empresa selecionadas do PSI (Índice da Bolsa Portuguesa), analisar os seus processos, recursos, valores e motores de crescimento, de forma a traduzir estes parametros em valores e chegar a uma avaliação numérica de medidas ESG.

O resultado foi uma média de 65.5% conformidade entre as organizações estudadas, quando considerando os três pilares da pesquisa. Isto demonstra um progresso relativamente baixo em relação a inovação responsável, o que leva à conclusão de que os sujeitos em estudo consideram satisfatório e adequado um nível moderado de performance ESG.

**Keywords:** ESG, Responsabilidade Social Corporativa, CSR, Sustentabilidade, Investimento Responsável, PSI, Índice da Bolsa de Valores.

# Contents

CHAPTER 1

# Introduction

The increase in social and environmental responsibility is a trend that has found its way into the homes of consumers and the list of concerns of major firms. This need to change processes and resource consumption to become more “green” or ethically compliant is not recent however, it is growing bigger, expanding from developed to emerging countries, escalating from big market players to small local enterprises. Taking into consideration one of the major drivers of corporations – profit –, this tendency towards becoming more sustainable and moral in companies’ practices is easily explained, as it attracts investors and consumers, improves brand reputation drastically, earns incentives and rebates and promotes a healthier and safer workplace for all collaborators, which translates into a more productive environment for all.

Today, players in most industries understand the importance of maintaining their practices as sustainable and socially responsible as possible. This comprehension derives from an effort from collective entities to impose laws that restrict the potential harm caused to the environment and protect workers. In addition, spending patterns leaned towards a demand for more ethical products as the awareness regarding these corporation-related problems grew. Investing patterns also followed this trend, prioritizing responsible investments to apply funds. These represent investments which aim at, not only financial return, but also social and environmental wellbeing that promotes a positive change.

Effectively, applying for money responsibly in the stock exchange is becoming the standard among investors. This implies that firms with conscious practices are increasingly more attractive to funding opportunities. Narrowing the focus to Portugal, as of the end of 2020, there were already a small number of ESG funds which managed a combined €283 million (Abreu, 2021).

With all mentioned in mind, a pertinent question arises from the singularity of different markets: if investors are leaning towards these types of companies, how much are Portuguese corporations changing to meet these demands? Are they following the trend?

The aim of this thesis is allowing readers to comprehend if some of the major Portuguese companies show signs of concern with sustainability and societal issues. Moreover, the main factor to be considered in this research, as a representative of Corporate Social Responsibility (CSR), will be the presence of Environmental, Social and Governance standards (ESG standards) in companies' methods.

The primary objective of the research is examining selected companies of PSI – the Portuguese Stock Index –, look through their internal processes, resources, values and drivers to conclude on whether these companies are compliant with ESG motivations, allocating them to a spectrum. Secondary targets to be fulfilled are the ranking of the organizations amongst each other, allowing for a direct comparison of performance of the companies, and inferences to be drawn regarding the market as a consequence of company behaviour. To do so, empirical studies researched beforehand will be followed and the organizations' documentation will be deeply scrutinized.

ESG criteria are a set of standards used by investors in the decision-making process that evaluate corporate governance around Environmental and Social matters (Chen & Mussalli, 2020). On the Environmental portion, investors might look at, for example, the company's waste, preoccupation for preserving natural resources and not mistreating animals in its processes, its energy usage and capacity to adapt to the challenges brought by climate change. Concerning social matters, investors can evaluate the company's relationship with suppliers and customers, safety conditions for employees, its publicized values and if they are followed, respect for human rights, amongst others. On corporate governance, the attention is focused on how transparent and precise the company's approaches and the policies in place to promote compliance.

### 1.1. Structure of the dissertation

The present dissertation is split into six sections. This first consists of the contextualization of the problematic, clarification of the research, objectives and structure of the paper. Following is the literature review, where the themes of research are described based on empirical past studies. The third section corresponds to the methodology used throughout the study. Afterwards, the registration of findings from company reports takes place, with the final purpose of attributing individual scores to each, followed by a section dedicated to the discussion of results. Finally, we proceed to the interpretation of results, reaching robust conclusions, and presentation of the limitations of the study.

CHAPTER 2

# Literature review

## 2.1. Literature Research

The main focus of this research is the ESG criteria maturity in the companies that make part of the Portuguese stock index – PSI. More specifically, an investigation on whether these 19 companies follow ESG criteria will be performed, having in consideration what these standards represent, how they are evaluated and the impact they hold on to these companies. The goal is to determine if the most successful companies based in Portugal are adhering to this value-based trend.

This section of the report focuses on past studies and reports performed within the scope of the matters mentioned. Extensive research was carried out in order to detect relevant information which could serve as a basis and/or guidance to complete this study. With this objective in mind, the investigation was split into multiple subparts. The first consists of the inherent sustainability and social needs which lead to the appearance of methods to combat them (such as those in examination). The second focal point is the surge of ESG standards, what they are and why they are important to the sustainable development of corporations and economies. A third component of this investigation is the most important frameworks by which we can evaluate the ESG behaviour of organizations. Furthermore, an essential factor for the depiction of ESG standards in any environment is their limitations, different views on how and why they are flawed and can be improved. After examining the broad scope of the matter and its inherent characteristics, the literature investigation took a narrower path in terms of target market. As this dissertation is centered in Portuguese companies, it is important to review the presence of ESG in the European market and only then examine the particularities of the Portuguese market. Within this last component, not only are ESG-related studies important to refer, but also studies and general information on PSI, to become familiarized with the object of study.

Moreover, whilst determining the most important factors of the research, we shall check which kind of documents to look for, their criteria of acceptance, which key words to use, amongst others. Firstly, relevant documents include articles, reports, official websites, academic journals, thesis and books published by governments, private and public entities, scholars and students. These should be recent enough to depict the current reality – most specifically from the past 15 years, which is when CSR reporting gained momentum (KPMG, 2017). Despite this, in order to provide historical information – for instance, about the early beginnings of ESG –, older resources will be required. The resources considered are both in English and Portuguese, customarily the broader topics in English and the more Portuguese-market-specific information in Portuguese, notwithstanding some exceptions. The most relevant keywords for the research were ESG, Corporate Social Responsibility, Sustainability, CSR, Responsible Investing, PSI, Stock Exchange Index.

### 2.2. Social and environmental responsibility in finance

In an ever-more competitive economy, with nonstop technological developments and scientific findings, where stakeholders are becoming increasingly aware of the recurring negative externalities of the different industries (Landier & Lovo, 2020), it is crucial for market players to subject their processes to detailed assessments of their impacts. From planning to sourcing, making, delivering and eventual returns, organizations ought to be conscious of the reverberations of their business decisions in the surrounding environment.

With this in mind, it is essential to understand the concept of sustainable finance. This term consists of financial activity that takes corporate, social and environmental responsibility as a priority. Its main objective is encouraging private investments in long-term projects and companies that promote climate neutrality – mass removal of greenhouse gases from the atmosphere in sufficient amounts to compensate those emitted – and can be defined as a “virtue-ethical approach” which fosters intergenerational equity (Soppe, 2004).

Intergenerational equity, in the scope of environmental law is the need to preserve the natural resources we are given and the surrounding environment so as to protect and benefit future generations. This way, it is a fundamental principle of sustainable development goals and sustainable finance, as it is understood that the irreversibility of climate adversities and uncertainty of long-term results is one of the major known threats to humankind in the future (Faber, 2008).

The path towards global sustainable finance in the XXI century is directly dependent of sustainable and responsible investments which are evaluated and conducted based on investors’ codes of ethics (Drempetic et al., 2019). If investors start narrowing their distribution of funds and promote this ideal, corporations ubiquitously will be obliged to adapt to this trend of moral and ethical procedures. Aligned with this, the United Nations (UN) created initiatives to improve compliance with such codes.

### 2.3. The growth of ESG standards

In 2006, a global network of investors, backed by the UN, formulated the Principles for Responsible Investment – PRI (Gond & Piani, 2012). These principles were a commitment to act in the best long-term interest of all beneficiaries and proved very fruitful as signatories' assets grew from less than 5 billion to 80 trillion in 13 years, worldwide. Their main measure, and difference from what had been done before, was the implementation of ESG criteria in their decision-making process (Yoon et al., 2020).

ESG – Environmental, Social and Governance – criteria are a set of standards by which stakeholders can be guided in order to determine whether a company with which they are involved, or intend to be involved, does follow the norms to be considered "green" or socially responsible.

> *"Environmental activities will give an impact to the society. Thus, the company should have a governance to be socially responsible. The combination of these three dimensions could strengthen the management practices to enhance the company performance."* (Tarmuji et al., 2016).

El Ghould et al. (2011) and Gregory, Tharyan and Whittaker (2014) defend that the importance of ESG standards to investors, when linked to company equity, can be greatly explained by the Discounted Cash Flow model. This model evaluates equity through the sum of future cash flows discounted at the cost of capital. In short, the cost of capital is fully dependent of systematic risk (market risk), which is where ESG characteristics of the firm are included and weigh in (Gregory, Tharyan & Whittaker, 2014). Investors typically pay closer attention to market risk, by contrast with firm-specific risk, as the latter can usually be avoided.

To increase public knowledge of the impact of ESG on company performance, Gunnar Friede and peers (2015) examined the findings of around 2,200 individual studies, published since 1970, in order to reach robust and undeniable conclusions. This study had the aim to fill in the fragmented information on the subject and make an exhaustive analysis, the findings of which could be generalized and easily understandable. The results of the study were pleasing from a pro-ESG point of view: around 90% of the studies examined found a non-negative relationship between

ESG criteria and company performance, 63% recorded a positive relationship and only 8% documented a negative dependence between ESG criteria and corporate financial performance.

The use of ESG standards to evaluate companies' potential is ever more common. In 2020, Larry fink, Blackrock CEO – the biggest asset management corporation in the world –, disclosed his intentions of making ESG the company's investing standards (Blackrock, 2020). The most renowned rating agencies and software developing multinationals all provide ESG indexes or ratings as an advisory complement. MSCI Inc., for example, holds more than 1500 equity and fixed income indexes for ESG investing (MSCI, 2020)

Meanwhile, many market players have subjected their processes to great changes to comply with these urgencies, as it is becoming the norm for investment attractiveness. Thus, ESG disclosure has grown substantially in the past years' consolidation reports. Scholars Pei-yi Yu and Van Luu (2021) examined 1,963 firms and delved on the correlation between the amount of ESG disclosure and the stock exchange the firms are listed on. They found that cross-listed companies – companies listed in a different exchange than its primary or original stock exchange – tend to disclose more regarding ESG than those listed in their original market. This is, according to the authors, to lessen the risks of foreignness in the capital market. Their study also concluded that ESG disclosure is substantially more dependent on firm-specific characteristics than in country-related factors.

There are numerous frameworks companies use to report on ESG matters (Bose, 2020). These differ in target industry – the reporting needs of a nuclear plant are different to the reporting needs of a paper factory –, in target entity – regulators, investors and customers need different information to make decisions –, methodology and, naturally, in metrics composing the reporting framework (Hopkins, 2005). The five most used frameworks are: CDP (Carbon Disclosure Project), CDSB (Carbon Disclosure Standards Board), GRI (Global Reporting Initiative), IIRC (International Integrated Reporting Council) and SASB (Sustainability Accounting Standards Board), described below.

The CDP is one of the most commonly used and focuses on corporations' environmental transparency and action. It originated from a non-profit organization which has now the widest data bank regarding climate actions and responses from commercial organizations (Farias et al., 2011)

The CDSB is very similar however, instead of providing a specific structure for data input for reporting, the CDSB integrates this ESG-related reporting into the statements companies usually present, such as internal annual reports. (CDSB, 2020)

The GRI is the pioneer framework. Created in 1997 to combat an oil spill, it is still the most used to this day. Its practicality stems from the adaptability of standards as each firm first completes the three universal standards (foundation, management approach and general disclosures) and can then opt for a varied set of standards to be inspected regarding ESG, focusing only on those of value to their industry (Fonseca et al., 2014).

The IIRC is a framework created to battle the need to disclose numerous reports for each company to have all the information required. With the IIRC, all information from the various reports is integrated into only one, with the aim to "explain to providers of financial capital how an organization creates, preserves or erodes value over time" (Deloitte, 2021).

The SASB is composed of 77 industry-specific standards to report on sustainability factors relevant to financial materiality. These are divided into Environment, Social Capital, Human Capital, Leadership & Governance and Business model & Innovation and the report's structure is very helpful for companies which do not know which factors are of importance to declare (Betti et al., 2018)

These frameworks and their reporting outcomes result in an outside evaluation which can be used by investors to aid in the decision-making process, or internally as a benchmark in the firms' progress towards a socially responsible future (Hopkins, 2005). As mentioned, each framework presents standards which converge and standards which diverge from the others, depending on industry, target users, location, amongst others. The European Banking Authority (2021) has compiled the most widely used ESG standards within European and external frameworks, industry-driven and the common areas between them in Table 2, extracted from their website.

| **Source** | **Environmental** | **Social** | **Governance** |
|---|---|---|---|
| International Frameworks | ▪ GHG emissions<br>▪ Energy consumption and efficiency<br>▪ Air pollutants | ▪ Workforce freedom of association<br>▪ Child labor | ▪ Codes of conduct and<br>business principles<br>▪ Accountability |

| | | | |
|---|---|---|---|
| | ▪ Water usage and recycling<br>▪ Waste production and management (water, solid, hazardous)<br>▪ Impact and dependence on biodiversity<br>▪ Impact and dependence on ecosystems<br>▪ Innovation in environmentally friendly products and services | ▪ Forced and compulsory labor<br>▪ Workplace health and<br>safety<br>▪ Customer health and safety<br>▪ Discrimination, diversity and equal opportunity<br>▪ Poverty and community impact<br>▪ Supply chain management<br>▪ Training and education<br>▪ Customer privacy<br>▪ Community impacts | ▪ Transparency and disclosure<br>▪ Executive pay<br>▪ Board diversity and structure<br>▪ Bribery and corruption<br>▪ Stakeholder engagement<br>▪ Shareholder rights |
| European Frameworks | ▪ GHG emissions<br>▪ Energy consumption and efficiency<br>▪ Exposure to fossil fuels<br>▪ Water, air, soil pollutants<br>▪ Water usage, recycling and management<br>▪ Land degradation, desertification, soil sealing | ▪ Implementation of fundamental ILO Conventions<br>▪ Violation of UN Global<br>Compact Principles<br>▪ Inclusiveness<br>▪ Inequality<br>▪ Exposure to controversial weapons<br>▪ Discrimination | ▪ Anti-corruption and anti-bribery policies<br>▪ Excessive CEO pay<br>▪ Diversity (unadjusted<br>gender pay gap and board gender diversity) |

| | | | |
|---|---|---|---|
| | ▪ Waste production and management (hazardous, nonrecycled)<br>▪ Raw materials consumption<br>▪ Biodiversity and protection of healthy ecosystems<br>▪ Deforestation | ▪ Insufficient whistleblower protection<br>▪ Rate of accidents and number of days lost to injuries, accidents, fatalities or illness<br>▪ Human rights policy<br>▪ Investment in human capital and communities<br>▪ Trafficking in human beings | |
| Industry | ▪ Consumption of materials, energy and water<br>▪ Production of GHG emissions, other emissions to air and water<br>▪ Production and management of waste and water<br>▪ Protection of biodiversity<br>▪ Research and development in low-carbon and other environmental technologies | ▪ Quality and innovation in customer relations, rights of customers to gain information about environmental issues<br>▪ Human rights<br>▪ Labor practices: human resource management and employee relations, diversity issues, gender equality, workplace health and safety considerations | ▪ Set of rules or principles defining rights, responsibilities and expectations between different stakeholders in the governance of the entity/sovereign<br>▪ Executive pay<br>▪ Board of Directors independence<br>▪ Board composition and structure<br>▪ Shareholder rights<br>▪ Internal audit<br>▪ Compensation |

| | | | |
|---|---|---|---|
| | | ▪ Access to credit and financial inclusion<br>▪ Personal data security | ▪ Bribery and corruption<br>▪ Integrity in corporate conduct/conduct frameworks |
| Common Areas | ▪ Water usage and consumption<br>▪ Waste management and production<br>▪ Energy consumption<br>▪ Pollution<br>▪ Biodiversity<br>▪ GHG emissions | ▪ Labor and workforce considerations<br>▪ Human rights<br>▪ Inequality<br>▪ Discrimination<br>▪ Gender equality | ▪ Rights and responsibilities of directors<br>▪ Remuneration<br>▪ Bribery and corruption |

Table 2: Examples of ESG factors (positive and negative) included in the most commonly used frameworks. Source: Adapted: European Banking Authority (2021, pp. 26–27).

**2.4. Limitations of ESG reporting**

Despite the credibility allocated to ESG throughout the years, ESG scoring is not as linear as it might appear. There is no definite set of parameters that the companies must oblige to in order to have a "good score". This means that the ratings do not all have the same metrics, standards or appraisal methods (Hopkins, 2005). The assessment of the final ESG score is dependent of many variables. Drempetic et al. (2019) concluded in their research that, despite ESG bringing transparency to the firm's legitimacy, the criteria are not fully descriptive of the level of sustainability and social responsibility, due to the many factors that influence greatly the ESG rating, mainly firm size.

Aligned with this view, Mooij (2017) concluded that the criticisms to ESG reporting could be attributed to 4 pillars: lack of consistency within ESG initiatives, low quality of reporting, reporting fatigue and lack of transparency. These conclusions come after examining 218 initiatives

- namely the Global Reporting Initiative, International Integrated Reporting Council and the Sustainability Accounting Standard Board - and comprehending that, due to their numerous amount and lack of common points between them, companies are forced to overreport on these matters, causing a reporting fatigue. However, the amount of reporting does not translate into an increase of transparency as it is often of poor quality and revision. The inconsistency of the initiatives in determining ESG issues also leads to difficulty in comparing companies.

Other studies dictate reporting assessments also depend on the internal features of the firms examined. Bhuiyan et al. (2021) studied the characteristics representative of firms that demonstrate highest ESG performances. They concluded that corporations tend to be more ESG-friendly, the more independent their director. Female leaders are also more likely to attribute greater investment towards sustainable and socially benefic approaches. Moreover, companies with environmentally driven bonuses for higher positions and with sustainability subcommittees, naturally, also seem to follow the trend. Garcia, Mendes-da-Silva and Orsato (2017) focused on an important external characteristic of firms with higher ESG performance. After examining 365 listed companies in the BRICS markets (Brazil, Russia, India, China and South Africa), the authors determined that firms operating in more sensitive industries tend to have a superior performance regarding ESG standards. Sensitive industries are all those which are subject to systematic moral dilemmas, taboos, political and societal pressures and are more likely to be damaging to the environment and/or society. Very intuitive examples are tobacco and alcohol, gambling or adult entertainment.

Furthermore, one of the most noticeable risks of ESG reporting is greenwashing (Netto et al., 2020). This term describes a situation where, despite fully reporting on ESG standards and seeming transparent regarding these matters, a company performs poorly on ESG. This means, the company is transmitting an illusion of being in compliance with ESG criteria though it is not as much as is broadcast. Nevertheless, there are measures to be taken to avoid this risk: submitting the company data to greater scrutiny by independent directors, institutional investors, public opinion via a non-corrupted country system (where people are vocal about bad practices like greenwashing), and, finally, becoming a cross-listed company (Pei-yi Yu et al., 2020).

According to Michael E. Porter and peers (2019), the ESG view for evaluating companies is flawed and should be surpassed by a new "shared value" view. In the authors' perspective, there is low understanding of the power of value-based metrics from leaders and investors. The authors defend that these stakeholders only look at the ESG valuations as a "way to enhance their reputations and attract socially aware consumers, employees, and investors". These benefit from attracting SRI (Socially Responsible Investments) and avoiding issues with regulatory limitations. However, it is crucial to understand the opportunities for financial growth and competitive advantage which stem from "treating social and environmental issues as integral to a company's core strategic positioning".

### 2.5. ESG applied to the European markets

The Principles for Responsible Investment has now over 7,000 signatures in 135 countries (Report Yak, 2022). Entities everywhere are taking a stand towards a more ethical corporate future, but there is a region that has continuously stood out – Europe.

In 2019, Europeans represented $12 trillion worth of SRI (Cornell and Damodaran, 2020). In the following year, 19 European countries were on the top 25 positions of the Environmental Performance Index, published by Yale Center for Environmental Law & Policy (Wendling et al., 2020)

This intensive demand around the world, and specifically in Europe, for investments and products which are aligned with stakeholders' codes of ethics, forced regulators to quickly keep up and impose a "range of rules of significance to an asset manager, either as a publicly listed company with new ESG disclosure requirements, or specifically relating to its role in the design, delivery and sale of financial services and products. Depending on the nature of their business, type of client and activities, asset managers face new requirements at the corporate governance, process and product levels." (Otterström et al., 2020).

This type of regulation – focused on encouraging companies and governments to act in conformity to the needs of people and the environment whilst seeking financial profit – is not recent but has been developing simultaneously to the growing awareness of ESG needs (Alamillos & de Mariz, 2022)

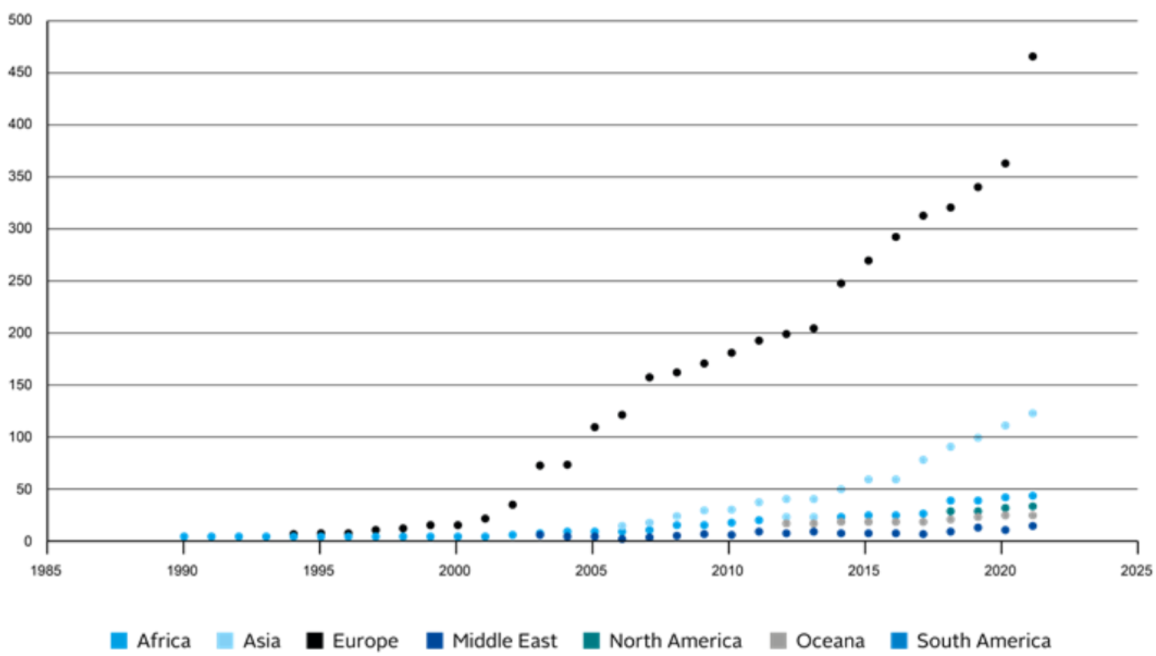
A notorious surge of regulations which incentivize the compliance with ESG standards began in the early 2000s. Before then, there was a limited number of global initiatives promoting, mainly, social justice in the workplace, such as the ILO 8 Fundamental Conventions (1939)– voluntary guidelines which focus on forced and child labor, freedom of association, discrimination, etc

(Winant, 1939) – or the ILO Declaration of Fundamental Principles and Rights at Work (1998) – which functioned as a mandatory complement of the 1939 Fundamental Conventions.

It was only in 1976 that the OECD firstly included the environmental factor in the OECD Guidelines for Multinational Enterprises (OECD, n.d.) and the succeeding great benchmark was in 2000, when we saw the appearance of the first global guidelines which simultaneously cover all three components of ESG – The Ten Principles of the UN Global Compact. These were a set of recommendations for corporations worldwide to follow on subjects of the environment (E), human and labor rights (S) and anticorruption (G) (Williams, 2015).

Following this, most developed and developing countries began formulating their own national guidelines or revising those existing to cover the three pillars of ESG.

As seen in the UN Principles for Responsible Investment website (2021), as of 2021, Europe maintained its constant lead as the region with the most policy interventions introduced, whereas the Middle East occupies the opposite position, as represented in Graph 1.




Graph 1: The rise of Responsible Investment policy interventions. Source: Regulation database| Policy, 2021, fig. *Cumulative number of policy interventions per year*

From 2020 to 2021, European figures rose at a higher pace than usual, which is explained by the announcement, in April 2021, of the European Commission's second sustainable finance package. This package included a new Sustainable Finance Strategy – with actions to aid in the financing of a transition to a more sustainable economy in the areas of inclusiveness, resilience, contribution of the system and global ambition –, new regulation on European Green Bonds and the Delegated Act on taxonomy reporting rules – a requirement for the disclosure of the environmental performance of the economic activities and assets of financial and non-financial enterprises (European Commission, 2021)

In the United Kingdom, the TCFD (Task force on Climate-related Financial Disclosures) reporting recommendations were made mandatory for pensions schemes, companies in the stock exchange, large private companies and limited liability partnerships as of January 2021 (UK Government, 2021). These (now) mandatory "recommendations" are a set of disclosure components to be included in the annual reports concerning governance, strategy, risk management, metrics and targets. The UK was, in fact, the first G20 country to mandate that TCFD standards be used in corporations' reports, followed by New Zealand. This ruling is expected to be instated in considerably more countries such as the US and Canada.

Several other European countries imposed new ESG reporting requirements in 2021 namely Austria, Belgium, Bulgaria, Canada, Chile, China, Colombia, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, India, Ireland, Israel, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland and the United States of America (PRI, 2021). Of the 42 listed, around 70% are European countries, undeniably in alignment with Graph 1.

### 2.6. ESG applied to the Portuguese market

In Portugal, ESG disclosure has followed the same trends. Examining the ESG disclosure data from 2003 until now, the number of reporting provisions has more than tripled. Reporting provisions are requirements or resources to aid in the disclosure of financial/non-financial data. The upsurge of provisions is in direct alignment with the Sustainable Development Goals Compass – a guidebook for companies to achieve success parallel to a sustainable development –, more specifically, target 12.6, the objective of which is to "encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle" (WBCSD, 2019).

Throughout time, there have been historical benchmarks regarding the reporting requirements for companies in Portugal. One of the crucial developments in this area was in 2017, when the EU imposed a directive for all companies with more than 500 collaborators to report on non-financial issues (Caputo et al., 2020). Nevertheless, beforehand, there were already significant laws and directives targeting similar objectives. In 2003, the Accounting Directive no.29 was imposed – a directive that required corporations to disclose the environmental and social risks they represent (IAS Plus, 2003). Later on, in 2006, the Portuguese Commercial Company Act was published which states that companies have to include in their annual report, in addition to all financial issues, when applicable, a "reference to relevant performance issues of a non-financial nature, such as environmental and labor related issues" (Decree-Law No. 76-A/2006, 2006). All these reporting requirements are complementary to the Portuguese Corporate Code, published in 1986, which focuses the requirements on corporate governance practices and structures.

The majority of Portuguese disclosure provisions are directed at large companies with public interest or in specific sectors. According to the WBCSD, in Portugal, these directories focus mostly on governance – structure, risk management, remuneration – and environmental issues – waste treatment, climate change, resource usage. There is a significant discrepancy between the level of disclosure requirements for these two components of ESG and the social segment – health, wellbeing, safety, diversity, respect in the workplace, etc.

Many studies have been conducted regarding the importance of ESG standards in the valuation of companies in different countries, as well as the relationship between Corporate Social Responsibility (CSR) and those companies' performance. These studies mostly focused their research on corporations based in developed countries, with a higher GDP, where the financial markets are very sizeable. Examples of these are Lourenço et al. (2012) referring to North America, Schadewitz and Niskala (2010) to Finland, Cardamone et al. (2012) to Italy and de Klerk et al. (2015) referring to the United Kingdom.

These studies have endless backing from previous research, as the subject markets are large enough to have a high probability of reaching robust conclusions, with big samples, where the norm and the outliers are easily identifiable. Despite the Portuguese financial market having been considered a developed financial market since 1998, its size and number of participant firms are not enough to grant significant results (Floros et al., 2007). However, having characteristics of both developed and developing markets, it poses as a good opportunity for a very interesting analysis.

Portuguese companies which have become public integrate Euronext Lisbon stock exchange. Within Euronext Lisbon, the best performing firms, with the highest market capitalization and business volumes, are included in the Portuguese Stock Index (PSI), founded in 1992. This index was created to act as a reference for the exchange market in Portugal and as a base for futures and options contracts (Monteiro, 2019). In order to be a part of the index, companies must oblige to some standards: the number of shares to be sold (free float) cannot be less than 15%; the free float velocity has to be at least 25%; the maximum weight each company can have in the total yearly index is 12%; the stock capitalization has to be higher than €100 million.

Concerning the index's history, it was originally composed by 20 companies (Costa, 2022) however, in 2014, PSI lost two of its integrates – BES and ESFG -, in 2020 Sonae Capital was withdrawn and Ramada was added and, in 2021, the last entrance was registered – Greenvolt Energias Renováveis. Finally, in 2022, due to the imposition of new requirements, the index registered the exit of Ramada, Ibersol, Pharol and Novabase. It is now composed of 15 companies in varying sectors from industry, banking, logistics and transport, energy, restauration, food retail, construction and materials, communications and business management. These are: Altri SGPS, BCP, Corticeira Amorim SGPS, CTT SA, EDP Energias de Porugal SA, EDP Renováveis, Galp SGPS, Jerónimo Martins SGPS, Mota Engil SGPS, NOS SGPS, REN SGPS SA, Semapa SGPS, Sonae SGPS, The Navigator SA and Greenvolt Energias Renováveis SA.

In March 2018, Euronext publicly expressed their support for the TCFD reporting recommendations (TCDF, 2021). Despite seeming just a bureaucracy, this support means that the index is actively working towards a more stable and resilient financial future in parallel to environmental action. As of 2021, three PSI companies emulated this action, showing their agreement with the initiative: EDP, BPI and Galp. In total, only six Portuguese companies or entities have followed this procedure: those mentioned, Banco de Portugal, Grosvenor House of Investments and Autoridade de Supervisão de Seguros e Fundos de Pensões (ASF), a governmental regulator and supervisor (TCFD, 2021)

Arraiano et al. (2021), used Ohlson’s valuation model (1995) to determine the effect ESG scores have on company performance. The goal of the research paper was determining the impact ESG had on the performance of all PSI companies. For this study the authors analyzed the integrated companies from 2002 to 2020. They first proceeded to the calculation of the ESG score of each individual company by integrating ESG in the market value of equity within the referred model. This implementation of CSR in the module was adapted from Barth and Clinch (2009), authors of the model extension which is commonly used in this area of studies.

In the paper mentioned previously (Arraiano et al., 2021), ESG scores were calculated as follows: each company is attributed a valuation from 0 to 100, this valuation is divided between the three pillars of ESG – Environmental criteria, Social criteria and Governance – having, respectively, a weight of 34%, 35.5% and 30.5%. With these parameters in practice, 13 out of the 19 firms scored above 50%, showing pleasing levels of compliance towards CSR. The lowest score was 31.48 and corresponded to Banco BPI - the second largest bank in Portugal in 2020, in terms of profit – and the highest value was accredited to CTT – the public network of postal services – with 72.32.

CHAPTER 3

# Methodology

This dissertation has the goal of determining whether a set of Portuguese companies are making efforts to combat ESG issues. These efforts go beyond abiding by the Portuguese law regarding these matters, focusing on individual measures, initiatives and overall data which show an outstanding dedication to improving environmental, social and governance conditions, from selected PSI companies, both internally and externally.

For the sake of simplicity and information detail, we will proceed with the examination of only eight of the organizations within PSI. This number corresponds to the number of industry sectors represented in the index, being them energy, banking, extractive industry, manufacturing industry, logistics and distribution, engineering and construction, telecommunications and retail. The sectors were defined based on PORDATA (2022). The organizations studied were narrowed due to time constraints and selected based on multiple criteria such as sector, market size, maturity, importance in the national economy, revenue, number of employees and availability of information.

Taking the previous into consideration, the organizations chosen were:

| **Sector** | **Organization** |
|---|---|
| Banking | BCP |
| Energy | EDP |
| Engineering and construction | Mota-Engil |
| Extractive/manufacturing industry | Corticeira Amorim |
| Logistics and distribution | CTT |
| Retail | Jerónimo Martins |
| Telecommunications | NOS |

**Table 3:** Organizations studied in this dissertation

This study will be both qualitative and quantitative, in the sense that each of the organizations will have its sustainability report, and website, when necessary, deeply examined, in order to retrieve all ESG-related initiatives and data and, as a basis for the final evaluation of these companies belonging to PSI, a numeric score will be attributed to each of the organizations.

This score incorporates the different categories by which ESG performance is influenced. The maximum a participant might obtain is 100, the minimum is 0 and all participants will be ranked from highest to lowest – allowing for a comparison to be made as individuals, and broad conclusions to be drawn regarding the Portuguese Stock Index, taking into consideration the limited information and sample.

To begin with, it is important to correctly define the objects of study and divide them into parameters for future calculation of scores. Naturally, the three main pillars of ESG will be the highest-level hierarchy of division. The total, amounting to 100, will be split mirroring the methodology of previous studies i.e. Arraiano et al. (2021). This means attributing more weight to the social parameters, followed by environmental ones and, finally, governmental. Effectively, 35% of the score will be allocated to the "S" in ESG, 34% to the "E" and 31% to "G". Moreover, within each of these sections, a further partition will be made consisting of subcategories of interest for the main pillars (table 4, below).

Each of these subtopics of interest are evaluated through a Likert scale, from 0 to 5. The selection of a Likert-scale methodology was also a reflection of previous literature, i.e. Ahmed (2018) Zaccone (2020) and Tamara (2022). The lower extremity of the scale, 0, corresponds to an outcome of no data available for the topic, seen as, in case of no information, we assume that the organization is not allocating resources to the problem solving. Following the latter, comes the classification of 1. This corresponds to a very low level of commitment to the issue. 2 is low commitment, 3 matches a moderate degree of commitment to the causes and 4 means a high level of commitment to the solving of ESG issues. Finally, if the category receives an evaluation of 5, it means that the organization shows a very high level of commitment to the problematic.

Starting by the Environmental section, 5 subsections will be considered (table 4). The first measure is *Carbon Dioxide equivalent* $CO_2e$ *emissions*. For this subsection, we will examine the level of emissions and variation from the previous year, the organizations' commitment, and effectiveness towards reducing environmentally harmful emissions in the everyday operations of the company. The following parameter is *resources*, which encompasses all types of materials, energy and water. This consists of the companies' resource performance and their capacity to reduce consumption and innovate, looking for better alternatives, eco-friendly solutions by means of improvement of the supply chain. The succeeding subsection is capacity to operate in a *circular economy*, which encompasses the amount and reduction of residues, reduction of the environmental footprint and of resource dependency and demand generation**.** The measures considered for this include how the organizations dispose of residues, their efforts to reapply them into the supply chain and the recycling processes to which these are submitted, the optimization of resources used and, finally, the maintenance processes to increase resource lifetime. A further parameter is respect for *biodiversity*. Businesses are dependent on the neighbouring ecosystems' durability and prosperity for long-term success. This parameter evaluates how the companies interact with the surrounding environment, their initiatives to improve it and efforts to sustain it. Furthermore, the companies will be evaluated on their investment on environment-related *Research & Development (R&D)*, consisting of the development of innovations, including products and services, towards reducing the environmental impact of their activities.

Regarding the Social component, other parameters are to be taken into consideration (table 4). Firstly, the organizations should have a clear *commitment to the community* in which they operate and should take measures to ensure that their activities do not harmfully affect it. This includes donations and beneficial projects, listening to negative and positive feedback and taking actions to address it, having policies and procedures in place to ensure that their employees respect and do not engage in any activities that could adversely affect the community. The organizations should also promote initiatives to benefit the surrounding society, such as, but not limited to, in areas of education, health, environmental protection, economic development, amongst others. One of the main factors of the social component of ESG is *work safety*. Indicators for this factor are number and frequency of workplace accidents as well as mechanisms in place for investigating these accidents and taking action to prevent them from happening in the future. The following parameter is *employee satisfaction*, for which internal surveys will be examined and compared to previous year (when available), as well as training received and wellbeing initiatives. Important factors for this parameter are absenteeism, retention and turnover, vacation days used, new hire failure rate, overall happiness, etc, to determine whether the companies have procedures in place to increase employee satisfaction and investigate and act on complaints. An ever-more important topic is *diversity in the workforce and equality of opportunities.* This encompasses salary gaps, gender and racial equality and discrimination towards disabled individuals in selection, recruiting, retention and promotions for employees, as well as in decision making processes regarding suppliers, customers and other stakeholders. The following parameter is *customer and supplier relationships*, which is evaluated by the production quality goods and services for customers, and the fulfilment of contracts with suppliers, integrating their well-being, safety, integrity and data privacy as well as the respect for all intervenients. Topics of *human rights* such as child labour, forced labour, freedom of association, workplace conditions, amongst many others, will be examined simultaneously to all other categories, being integrated in them.

At last, we define the components of Governance (table 4). Firstly, in *anti-corruption and bribery initiatives and anti-competitor behaviour* we evaluate policies and procedures, risk assessment, training and communication within the company regarding corruption, fraud, bribery and conflict of interests. The anti-competitor behaviour variable includes legal actions taken against the companies regarding this matter, including anti-competitor, anti-trust and monopoly-inducing practices, and internal policies in place to avoid this. Furthermore, another component of Governance is *compliance*, which consists of following laws and regulations which span to the companies examined, the Codes of Ethics and policies of each company and their implementation. The following component is *disclosure of information* for which public statements and reports will be considered, in addition to any incoherence of data discovered during the analysis of the reports. Finally, an analysis of the *certifications and public commitments* made by the company will take place, taking into consideration awards, signatories of charters, members of ESG committees, amongst others, for example, the UN Global Compact, integrating the Sustainable Development Goals, the UN Climate Change Conferences, amongst many others. This last topic is important as the certifications and awards show recognition from different entities, which are assumed to be non-biased, and the public commitments show what the organizations interpret as important problematics to be tackled.

| Environmental (34%) | Social (35%) | Governance (31%) |
|---|---|---|
| $CO_2$ emissions | Commitment to the community | Anti-corruption and bribery initiatives and Anti-competitor behaviour |
| Biodiversity | Work safety | Disclosure of information |
| Resources | Employee satisfaction | Compliance |
| Circular economy | Diversity in the workforce and equality of opportunities | Certifications and public commitments |
| Research and Development | Customer and supplier rights | |

Table 4: Parameters to be evaluated within each pillar.

The components were defined based on research of reports which study the topic and, especially, indexes of ESG performance from multiple rating agencies and organizations. The corresponding weights were, as mentioned, attributed based previous literature but also on the importance given to each topic from a professional standpoint, taking into consideration current events and trends around the world which might influence the importance of each topic.

It is important to mention that companies do not all report on the same indicators. Comparison of information cannot be made in a direct way as the Sustainability Reports of the different organizations have different information. The categories selected might have endless information for company A but very little for company B. Data that is not present in the report will be considered as less important for the company, or of negative outcome. One example is not mentioning number of employees with disabilities – this will have a negative weight in the final evaluation of diversity.

CHAPTER 4

# Data Analysis

## 4.1. CTT – Correios de Portugal

The organization CTT – Correios de Portugal dates to 1520, when the first Portuguese mailing and communications service was created. Throughout history, the company has suffered many changes, slowly disaggregating communications services from the operations, currently a totally different company denominated PT Comunicações, and more recently branching out to the banking industry.

In 2004 the organization acquired Payshop, an online payment facilitator, then Mailtec, a packaging and ecommerce player and, finally, Tourline Express, a mailing and distribution company operating in Spanish territory. The most recent noteworthy development in the group is Banco CTT. The organization was introduced to the banking industry in 2015, opening 52 branches in the same year.

Currently, the group detains five different companies: Banco CTT, CTT Expresso, CTT Express (Spain), Payshop and CTT Contacto.

In 2013, the Portuguese government decided to privatize the enterprise, releasing about 70% of the capital to the Portuguese stock exchange. The following year, the remaining capital is alienated, making CTT the first fully privately owned company with 100% of capital as free float.

All information in this section of the report is extracted directly from CTT Integrated Report 2021, in https://relatoriointegrado2021.ctt.pt/en/home?_gl=1*lfhhg1*_ga*MjcxMDY2MzAwLjE2NjgwOTc0NTU.*_ga_E7081XHXZZ*MTY2OTcyMDMwOC44LjEuMTY2OTcyMDM0MC4yOC4wLjA.&_ga=2.73306515.1856226945.1669720310-271066300.1668097455, and website, in https://www.ctt.pt/grupo-ctt/sustentabilidade/, both accessed on 04/03/2022

### 4.1.1. Environment

The group CTT has many initiatives to combat the environmental issues we are living today. On the topic of emissions of $CO_2$, the organization is committed to reducing its amount, especially in its transportation fleet, the biggest contributor to the total value. In 2021, CTT represented a total of 66,253.9 tons of $CO_2$, 12.6% more than the year before. The most impactful to this number were scope 3 emissions, representing 75.8% of the total. However higher these emissions have become, the amount of emissions per thousand of sales has decreased 15.2%, reaching 27.6 kg $CO_2$per €1000 in sales.

This decrease can be justified by the initiatives implemented by CTT. Beginning with "Uma árvore pela Floresta", in partnership with Quercus, an initiative devoted to the plantation of a tree per every dedicated kit sold. It is prospected to retain 35 thousand tons of $CO_2$ emissions. In the same scope, CTT created the Carbon Offset Program. Like the naming suggests, the program is set to offset emissions of the operations of CTT Express, Correio Verde and DM Eco, reaching the carbon-neutral delivery services statute. In addition, the group endorses the European Mobility week, an initiative that encourages countries and organizations to devote one week to sustainable mobility.

Furthermore, CTT shows great concern towards the electrification of its fleet. The group holds the largest ecological fleet of the logistics sector in Portugal, resulting in a reduction of its carbon footprint by 64% between 2008 and 2019. Effectively, a fully electric delivery service is available however, only in Porto and Lisbon. Finally, on this problematic, CTT is determined to reduce 60% of $CO_2$ emissions, scopes 1 and 2, and 30% total emissions by 2030.

Regarding biodiversity, the group shows limited initiatives specifically focused on the topic, despite all environmentally beneficial projects promoting an improvement to the problematic. As mentioned, "Uma árvore pela Floresta" is an important project as the planting of trees aids in the creation of habitats, improves soil water retention, enlarges the amount of oxygen produced via photosynthesis, combats soil erosion, etc. In addition to this, CTT joined the program Act4Nature, promoted by the BCSD, by which it commits to the constant protection of biodiversity of the surrounding environment. Furthermore, the group subscribed the "Portugal Chama" initiative to bring awareness to Portuguese consumers on the risks of forest fires, as Portugal is one of the most affected European countries of this issue. Finally, CTT launched a collection of stamps to bring awareness to the topics of endangered species, oceans, protected forest areas, agricultural heritage and hunting.

In terms of energetic efficiency, the group has switched to LED lighting in seven facilities and has implemented energy monitoring systems in 44 buildings, which translated to a saving of 13% of energy. In 2021, total energy consumed was 358,273 GJ, a 0.9% reduction since the previous year. This is detailed by, positively, 36.7% green electricity, 0.04% solar panel power (produced internally), 1.6% thermal power, and negatively, 61.32% of fuel and 0.3% gas.

Material consumption has risen 1.1%, to a total of 3,470 tons of materials – 72.2% paper, 20% plastic, 0.1% metal and the remaining 7.7% correspond to undisclosed others. This increase is reportedly due to a higher demand for express delivery logistics. Though paper is still the most consumed material, the group had instated, as goal for 2021, the full elimination of the material in offices, a goal which was not fulfilled, as there is still 15% of the target to accomplish.

The water capture was 3.6% higher than the previous year. Attaining 32,809.2 $m^3$, 6.3% was taken from wells, 91.09% from the public network and 2.58% from rainwater. There is no information on hydric stress levels.

The year in study, CTT recorded an impressive 97.7% residue valuation and the total amount of waste was reduced by 5.3%, meaning 2,303.7 tons of waste. There is no information on the type of waste, nor its destination.

Finally, on the matter of R&D, in addition to the previously mentioned creation sustainable products and services, it is worth mentioning a €4,729.3M investment towards ESG solutions – 37.4% growth in value since the previous year. A part of this investment is directed at providing ECO packaging for customers and integrating recycled materials in the products sold, with an average of 8% per product. Furthermore, in line with the COVID pandemic, the program “To be Green” was started to convert used masks, a great source of unrecyclable materials, into Christmas ornaments to be sold at stores.

#### 4.1.2. Social

CTT is clearly committed to improving the quality of life in its surrounding communities. The group has multiple projects to dynamize communities and institutions like the Juvenile Center of São José de Guimarães, where the recycled card boxes for the “To Be Green” initiative are produced. The project “Tampinhas do Gonçalo”, a nationwide collection of plastic and cork caps to aid in the financial burden of treatments of Gonçalo's cerebral palsy, was addressed by the organization through the provision of logistical support. An endorsement to the initiative “Apoio à digitalização do Comércio Local" was also a priority, providing literacy to local business owners and small-scale producers regarding online presence.

Overall, there was an investment of €1.19M in philanthropy actions to support at risk groups and promote volunteering programs. In this is included monetary and material donations to institutions such as Cáritas, Banco Alimentar, fire departments and communities in Mozambique as well as sponsorships of the organizations Save the Children and the Fenacerci Fundraising and partnerships with various non-profit organizations to raise awareness in schools regarding gender inequality in the workplace.

The safety of employees must be one of the key priorities of any business. To reduce road sinistrality, CTT implemented the Road Prevention Program, a training program dedicated to reducing road fatalities, focused on employees who drive regularly. The group has a plan for the mitigation of risks concerning accidents in the workplace and professional diseases, resulting in a 2% drop in workplace accidents (789), shy of the goal of a 5% reduction. The occupational disease rate was 0.11, with 21 occurrences and the accident injury rate was 2.9%, both very similar to the previous year. Fortunately, labour mortality is null, however lost days after accidents indicator is 102.3 days, an increase of 2.7%.

Employee satisfaction, for which the group holds a survey every trimester, is a factor with multiple branches. Beginning with training, 215 thousand hours of training were registered in 2021 (decrease of 14.6% from 2020), reaching 93% of all employees. On bureaucratic topics, 89.5% of the workforce had permanent contracts, 75.4% were unionized and 95.8% were part of a collective labour agreement.

The employees of the group are entitled to subsidies for day-care, children's studies and breastfeeding, in addition to parental leave. The absenteeism rate is 6.9%, retention rate is 90.1% and turnover is 18.5%, all registered increases from the previous year.

The group has a social services teams designed to support employees in case of illness, accidents or other personal issues, regular health check-ups, especially for employees with work limitations and campaigns to raise awareness regarding health and well-being.

Diversity is one of the most popular corporate topics of the XXI century. CTT has 12,608 employees, of which 33.7% are female. The same percentage of women is registered in management positions, which is, coincidentally or not, almost the exact proportion mandated by law. Furthermore, CTT holds a female to male salary ratio of 1, meaning women are men earn on average the same for the same job, a decrease of 0.6% from the previous year. Alongside the Plan for Gender equality, a plan for revision of these indicators was planned for 2021, however not implemented. It is also worth mentioning that management positions do not receive training on equality of opportunities and non-discrimination, despite the goal for the year being above 800 hours dedicated to the topic.

The workforce of 12,608 employees is age distributed the following way: 21.3% under 30 years old, 66.6% between 30 and 50, and 12.1% above 50. Of these, 18% attended university, 50.5% finished the 12$^{th}$ year of school, 23.4% hold the 3$^{rd}$ cycle and 8.1% have a schooling level below the 3$^{rd}$ cycle of elementary education.

Despite there being no information on disabled workers with above 60% disability, 297 employees have special needs, for which there is constant assistance and special goals defined, a well as a redefinition of positions to better fit these candidates. By law, Portuguese companies with over 250 employees are obliged to have at least 2% disabled employees. In 2021, CTT recorded no cases of discrimination within the company.

The respect and care for consumers has awarded CTT with the "Marca de Confiança" Award (Trusted Brand) and "Best Reputation in the Industry". Though the average response time for complaints is 16 days, for national cases, and 75 days for international ones, internal studies on consumer satisfaction have resulted in a position of 83.5% satisfaction. On supplier relationships there is little information in the integrated report other than all partners being selected based on environmental criteria.

#### 4.1.3. Governance

Anti-corruption and bribery initiatives and anti-competitor behaviour are mentioned in the Code of Conduct and Ethics regulations of the group. To prevent these risks, employees receive focalized training, including against money laundering and terrorism financing. These seem to be effective as there were no registered occurrences on this topic in the year of study.

For better disclosure of information, CTT assures a yearly monitoring, update and communication of the organization's strategy to all stakeholders through press releases, webcasts and public reports. All ESG information is disclosed in the integrated report, namely via ESG indicator tables, with little qualitative detail about initiatives implemented, for which the website is the best source, despite lack of updates on most pages where data is from 2018.

To promote compliance in ESG topics, CTT created a Sustainability Committee, an Employee Committee with 98 subcommittees and the Committee for Equality in the Workplace.

Amongst the many awards and certifications CTT has received, the following stand out: 4$^{th}$ place Sustainability Measurement and Management System, by International Post Corporation; Marca de Confiança (Trusted Brand), for the 14$^{th}$ time; National Sustainability Award, category Sustainability Communication; Transformation Award, by Investor Relations and Governance Awards (Deloitte); Prince Michael International Road Safety Award, category Road Safety; Quality Assurance Award, by the Portuguese Association of Contact Centers which attributed the gold medal for CTT contact centers, silver for customer support and bronze for CTT Empresas; 5 Star Award, by U-Scott Ld, category Customer Support in Banking, and Right Choice Award, by Deco Proteste, both for Banco CTT; "Empresa Familiarmente Responsável" certification (Familiarly Responsible Company); 20$^{th}$ in ranking in the Interconnect Remuneration Agreement, by the International Post Corporation; 68.9% evaluation in the Global Monitoring System, by the Universal Post Union; rating A in the Carbon Disclosure Project for Climate Change

On public commitments and charter signatories, adding to those previously mentioned, CTT pledges to follow the 10 Principles of UN Global Compact, UN Sustainable Development Goals and the Universal Declaration of Human Rights.

Considering all the above mentioned, and according to the methodology previously indicated, CTT holds the evaluation in Table 5.

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 4(-) |
| Biodiversity | 2 |
| Resources | 3 |
| Circular economy | 3 |
| Research and Development | 2 |
| **Social** | |
| Commitment to the community | 4(+) |
| Work safety | 2 |
| Employee satisfaction | 4 |
| Diversity in the workforce and equality of opportunities | 3 |
| Customer and supplier rights | 3 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 4 |
| Disclosure of information | 2 |
| Compliance | 1 |
| Certifications and public commitments | 4 |

Table 5: CTT table of results

### 4.2. Mota-Engil

Mota-Engil is a Portuguese group with operations in the fields of engineering and construction, industrial engineering services, energy, road concessions, environment and capital. Having been founded in 1946 by the Mota family, the group is now leader in construction and infrastructure in Portugal, is in the top 25 of the European and top 10 of the African continents and is one of the 100 leading groups in the world. To achieve this brilliant position, the group began its internationalization immediately after creation, having multiple projects in Angola. Currently, it is present in three continents – Africa, Europe and South America – and 25 countries.

Holding more than 280 companies, the group owns, at least partly, multiple successful and well-known ventures such as SUMA (waste management), Mota-Engil Real Estate (Real Estate), EGF (waste treatment and recovery), Mota-Engil ATIV (asset management), etc.

Mota-Engil entered Euronext Lisbon in 1987 and has now a share capital of €306,775,950. It is still predominantly owned by the founding family, through FM – Sociedade de Controlo with 40% of the organization. 32.4% belong to CCCC, a Chinese construction group, fourth biggest worldwide, 2% are treasury shares and 25.6% are in free float.

All information in this section of the report is drawn directly from Mota-Engil's Sustainability Report, 2021, in https://www.mota-engil.com/wp-content/uploads/2022/07/RS_EN.pdf, accessed on 06/06/2022.

### 4.2.1 Environmental

Mota-Engil's sustainability report mentions $CO_2e$ emissions with little detail on initiatives implemented to minimize them. In 2021, the group registered 1.7 million tons of $CO_2$ emissions, of which 98.5% are of scope 1 and 1.5% of scope 2 (scope 3 are still in calculation). The group justifies the first with the operations within the 14 organic waste recovery amenities and 26 landfills, which are responsible for 80% of scope 1 emissions. Overall, in 2021, a carbon intensity of 774.53 tons of $CO_2e$ per million euros in turnover was recorded, a 7.8% decrease from the previous year.

As $CO_2$-related goals, the group aims to reduce 40% of scopes 1, 2 and 3 emissions by 2030 (comparing to 2020) and reach carbon-neutrality status by 2050. The electrification of the fleet is believed to result in a reduction of 35% of emissions by the end of 2022.

The combat measures put in place against biodiversity deterioration are very limited, with mentions of only awareness raising sessions on the topic. On the more negative side, Mota-Engil detains, through its waste management, collection and recovery companies, a number of waste management facilities in protected areas such as Tagus Estuary Special Protection Zone, Caldeirão Special Protection Zone, Vascão Creek, Serra da Estrela Natural Park and the National Ecological Reserve, as well as various projects still in development to be implemented in areas with similar characteristics to the before mentioned that require special attention and measures to reduce the environmental risks. To control this, the group regularly monitors and examines the environmental impacts of their operations to prevent harm to species and ecosystems.

The consumption of resources has grown continuously, a consequence of expansion. The year in study, 10% more energy (6,231 TJ) was consumed. Of this amount, 92% is originated from fossil fuels, 5% is renewable and 3% electrical. It is important to mention that the group produces photovoltaic energy and its consumption rose 4.5 times from 2020. To reduce energy consumption the group began a transition to electric vehicles and installation of LED temporary lighting instead of fluorescent lighting, resulting in a 60% cut in energy use for the same amount of lighting. Despite the higher consumption, there was also a higher amount of energy sold, 12% higher than 2020 (1,857 TJ), representing 29% of all energy consumed.

Furthermore, water capture increased 9% to 2.1 million $m^3$, 37% from municipal sources, 34% ground water and 29% surface water. There is no information on the hydric stress of the sources, only that the group is searching for more efficient solutions. Finally, the consumption of materials has seen an improvement of the environmental footprint. Despite there still being an enormous gap between renewable and non-renewable materials, the use of renewable materials increased 76%, to 51,000 tons, while the use of non-renewable decreased 6%, to 10.6 million tons.

In terms of waste generation, Mota-Engil produced 671.8 thousand tons of waste, 24% more than 2020, almost all from construction businesses (95.8%). Of this waste, 97% is non-hazardous and 3% hazardous. Both types see around 64% recovery rate and the rest disposed of. The goal is to have 80% of waste valued by 2030. Moreover, to boost economy circularity, the organization implemented initiatives such as the collection of 12,400 tons of recyclable packages to redirect towards the appropriate waste treatment and recovery facilities, the gifting of wood remains to the surrounding communities, the constant search for resource lifecycle enhancements and employee training.

A total of €465,600 was invested in innovation and €500,400 obtained through financing methods for the development of processes, activities and resources. To ease the development of new, more efficient solutions, the group created the Innovation Hub, the Partner Ecosystem and the Corporate Venturing project, all contributors to ESG progress. This search for new solutions has brought digitalization, construction of energy-efficient buildings, implementation of solutions with more efficiency and a lower environmental footprint, procurement for the most efficient routes to waste less fuel, optimization of materials to improve lifetime, change to a hybrid fleet, installing charging towers, installation of more photovoltaic panels, integration in collaborative lab projects and optimization of IT resources and processes.

### 4.2.2. Social

Investments in local communities amounted to approximately €927 thousand, distributed via the Manuel António da Mota Foundation, aiding 75 different institutions in the fields of social development, literacy and culture. This aid was handed through the construction and rehabilitation of buildings[1], awareness campaigns[2] and charity work[3]. In addition to these, the group's foundation distributes monetary awards to the projects that most benefit the community. There is also community engagement in children's day celebrations, tree planting initiatives and volunteering for environmental and social related causes. Moreover, the group has partnerships with universities and youth institutes to promote young talent with projects such as Learn@ME and Start@ME, which have satisfaction evaluations of 5 and 4.6, respectively. The latter has received the Empresa Comprometida Con Las Juventudes 2021 Award (Company committed to the youth) in Colombia.

Regarding work safety in 2021, the following indicators are of the utmost importance: 4 accidents resulting in death (3 more than 2020), 0.07 rate of deaths from occupational accidents (0.05 more than previous year), 14 confirmed occupational illnesses and no recorded deaths from occupational illnesses. Accordingly, the Lost Time Injury Frequency Rate (LTIFR) was 12.13. Sustainability bonds were created to fund the improvement of the sustainability performance indicator LTIFR, with the goal of achieving a 50% decline in accident frequency by 2026.

In 2021, the group reinforced and instated multiple programs dedicated do SHEQ (Safety, Health, Environment and Quality), focusing on monitoring, analysis, training and risk and opportunity assessment. In total, 80.5% of employees are covered by SHEQ management systems and 40% of all training is dedicated to SHEQ.

The group provided 367,848 training hours (19% more than 2020), translating into 9.5 hours per employee (9% increase from 2020). There are many initiatives in place to improve employee satisfaction such as regular staff meetings, newsletters, surveys, talent management (though only 77% of employees are covered), internal job opportunity communication, safety, health, quality and environment committees, health and wellbeing activities, etc. In 2021, the employee support

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[1] Making use of leftover materials for constructions in poor communities, for example a school in Colombia, improvement of roads in Guinea and Uganda and refurbishment of a paediatric hospital in Poland

[2] Mainly in the areas of health, safety and environment

[3] By collecting and donating food, materials and money and funding charitable projects. In the year in analysis, there were two initiatives of this last kind in Mexico and Poland, three in Portugal and one in Brazil, Angola and Mozambique

program resulted in study grants for 5 employees to take an MBA, assistance and kindergarten aid for new parents, social support fund for four employees in extreme poverty conditions, the Ability2Executive program to train future managers for their role with 1,200 partakers and 90% satisfaction rate, and financial consultation for 118 employees. An extra donation of €192,760 was given to 354 employees in need. Unfortunately, only 48.3% of contracts are permanent.

Regarding diversity, the group has 38,574 employees of 76 different nationalities. 87% of employees are men and only 13% are women. Accordingly, only 19% of management positions are occupied by female workers. The Gender Equality Plan of the company sets a goal of 30% women in management positions by 2026. There is no information available on number of employees with disabilities.

The group holds activities to promote diversity and inclusion (for example women's day celebrations and special aid dedicated to disabled workers), aiming at reducing the discrimination of underrepresented races, genders, etc. In 2021, there were seven confirmed cases of discrimination within the company, of which only 1 had disciplinary consequences.

Furthermore, dedication to customers is visible by the constant taking of customer surveys and the direct customer consultations, complaint and call centres. For suppliers, Mota-Engil provides training and satisfaction surveys.

#### 4.2.3. Governance

To combat corruption, bribery and anti-competitor behaviour, the company has an internal audit team, specialized in fraud investigations, to instate the multiple dedicated policies. Training on these matters is received by 60% of all suppliers and only 24% of employees. Last year, there were five cases of corruption, 100% of which were terminated or suffered sanctions.

The disclosure of information to stakeholders is done through annual and trimestral reports and press releases. In addition to financial statements, the group presents a Sustainability Report where readers can find all useful information on ESG-related topics. An important note on this is that there are slight incoherencies of data, most likely manmade mistakes easy to identify however this could lead to difficulties in understanding the information.

In addition to the integrity and compliance program, to improve ESG compliance the group has multiple policies communicated to stakeholders[4] along with several dedicated committees[5]. Moreover, are specific channels and procedures in place for the reporting of irregularities. The most common cases of irregularities reported are in the scope of are improper conduct, internal corruption, conflicts of interest, harassment and discrimination. Of the 100 reports registered, 83% were investigated and resolved and 63% were concluded to be groundless.

Finally, Mota-Engil has received the following awards: Trusted Brand, in the category Environment, for SUMA; Medal of Merit for services rendered to the community, by the mayor of Vila Pouca de Aguiar, Portugal, for the Manuel António da Mota Foundation; Infra + Integrity Seal, by the Ministry of Infrastructure, for ECB Brasil; 3rd Prize in Communication for the campaign “The Planet’s Future is not Recyclable”, by the International Solid Wate Association, for EGF; World Summit Awards Portugal, category Environment and Green Energy, for the Recycle Bingo Project; National Sustainability Awards, by Jornal de Negócios, for Recycle Bingo Project; Portugal Digital Awards, category Best consumer & Professional Services Project, for Recycle Bingo Project; Euronext Lisbon Awards, category Finance for the Future, for the issuing of sustainability bonds; Empresa Comprometida Con Las Juventudes, for the StartME program in Colombia; won four bronze medals, categories Environment and Energy, Integrated Multimedia, Public Relations, and Sustainability and Social Responsibility, by the newspaper Meios Publicidade, and 3rd prize in the International Solid Waste Association Congress, category communication, for the campaign “The Planet is Not Recyclable”.

The group signed the CEO Guide on Human Rights and the Climate Delegated Act and is a member of GRACE, a Portuguese association focused on social and environmental responsibility, the BCSD and the Consultative Council of the National Centre of Social Innovation Skills.

Considering all the above mentioned, Mota-Engil holds the evaluation in Table 6.

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[4] Code of Ethics and Business Conduct, Harassment and Discrimination Policy, Social Responsibility Policy, Procurement Policy, ESG Policy, Anti-Corruption and Bribery, Prevention of Money Laundering and Terrorism Financing Policy, Fair Competition Policy, SHEQ Policy, Movement-minimization Policy, People Management Policy

[5] Sustainability Committee, Executive Committee, Risk and Internal Audit Committee, Harassment and Discrimination Committee, SHEQ Committee, Corporate Committee of Inquiry

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 2 |
| Biodiversity | 1 |
| Resources | 2 |
| Circular economy | 2(+) |
| Research and Development | 4 |
| **Social** | |
| Commitment to the community | 4 |
| Work safety | 2(-) |
| Employee satisfaction | 4 |
| Diversity in the workforce and equality of opportunities | 1(+) |
| Customer and supplier rights | 1 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 3 |
| Disclosure of information | 3 |
| Compliance | 3 |
| Certifications and public commitments | 3 |

Table 6: Mota-Engil table of results

### 4.3. BCP

The group BCP, Banco Comercial Português, was founded in 1985 by a large group of 200 shareholders and professionals of the banking industry, aiming to provide an alternative to the governmental banking agencies in Portugal, a country with an underdeveloped banking industry at the time. Two years later, the group debuted in Euronext Lisbon.

After several mergers and acquisitions to solidify the national presence of the group, an internationalization strategy began in emerging markets in Europe and Africa as well as the United States of America, Macau and Canada. In 2003, the subsidiaries of the group suffered a rebranding process in which the brand Millennium BCP, a leading bank in Portugal, was created.

The group is currently composed of various entities in Portugal – Millennium BCP and ActivoBank, two banks, Interfundos, a real estate enterprise, and Milleniumbcp Ageas, of insurance – and outside national soil – Bank Millenniun, in Poland, Millennium bim, in Mozambique, and Banco Millennium Atlântico, in Angola.

All information in this section of the report is drawn directly from BCP's Sustainability Report, 2021, in https://ind.millenniumbcp.pt/pt/Institucional/sustentabilidade/Documents/Relatorios_anuais/RS2021_pt_29032022.pdf, accessed on 15/07/2022.

#### 4.3.1. Environmental

Since 2011, BCP reduced 48% of its emissions and, in the past five years, 36%. Of the three scopes of emissions, scope 2 are the most predominant with around 31 thousand tons of $CO_2e$ emissions (26% lower than the previous year), followed by scope 1, which have almost 7 thousand tons (9% higher than 2020), and, lastly, scope 3 with 182 tons of $CO_2e$ emissions (28% lower than 2020). The group saves about 8052 tons of $CO_2$ through the acquisition and photovoltaic production of renewable energy. It also avoids emissions by having an electrical fleet which represents 4.3% of the entire fleet. The objective is to have 80% of the fleet electric by 2030.

There is no information on biodiversity other than the financing of external projects of conservation of biodiversity, ecosystems and sustainable management of forests.

On resource-related topics, BCP seems to have much more transparency. Beginning with the consumption goals previously set for 2021, there were multiple accomplishments but also many failures. On the positive side are noticeable the goals of -5% electric energy (-32%*), -7% energy (-17%*), -5% indirect energy (-32%*), -7% water (-15%*), -7% $CO_2$ emissions (-61%*) and -7% indirect emissions (-99%*). On the other hand, the failed goals are -9% direct energy (+19%*), -20% residues (+77%*), -10% materials (-2%*) and -7% direct emissions (+14%*).

Since 2011, the group reduced electric energy consumption by 71% and, in the past five years, a reduction of 56% water and 38% material consumption took place. In the span of one year, from 2020 to 2021, there was a decrease of 13% in energy consumed and of 11.4% in printed copies, a result of the Go Paperless project, as well as the full elimination of single-use plastics.

* Actual performance of the company by 2021.

Furthermore, 80% of facilities now have LED lighting installed and all energy consumed in Portugal is from renewable sources.

Despite the goal of reducing waste by 20% by 2021, the group had a massive increase on the indicator – 48%. This increase in allegedly due to the return of employees to offices after the pandemic, the construction work in facilities resulting in substantial debris, the closing of branches which leads to the destruction of resources and the elimination of expired documents. The main residues produced are paper, plastic and tonners/ink cartridges, with a variation of +49.4%, +24.1% and -33.3%, respectively. The initiatives to reduce waste include the elimination of tableware and cutlery, the provision of potable water to avoid plastic bottle use, the auction of equipment from closed branches to employees, emission of virtual cards to avoid the production of physical cards and the implementation of procedures to reuse water.

Regarding R&D, BCP shows dedication to developing solutions to ESG problems. The group created the Task Force for Sustainable Finance which created multiple products and services to promote a green transformation in households such as credit lines for energetic efficiency improvements and technological investment, green and social bonds, housing credit with energetic certification of A+, A or B and credit cards from recycled plastics. Moreover, 41% of the organization's investments are considered "green" (5% more than 2020).

Another important factor is the creation of a fully digital bank – ActivoBank – providing online banking services and innovative solutions in the digital banking area. However, the digital transformation of the banking industry and its impact on sustainability is the third lowest score in the materiality matrix, and the creation of products and services with environmental benefit is forth out of 30.

### 4.3.2. Social

BCP has various projects to aid the surrounding communities, including "Oeiras Solidária Program", "Mais Moçambique para mim" and "#Todos Juntos". The "Banca Sem Barreiras" project is an industry-specific project to eliminate barriers of access to financial services and promote financial inclusion. The group also provides financial products with benefits for non-profit organizations and has partnerships with universities, medical institutes, non-profit organizations, volunteering programs, hospitals, etc. It is the owner of the Millennium BCP

Foundation, which totalled €2.7 million in monetary and material donations, as well support to projects covering culture, knowledge and social solidarity.

On work safety, the frequency of accidents in the workplace is 1.99 accidents per million of manhours. Occupational Health and Safety (OHS) is the lowest score in the materiality matrix.

Employees received 726 hours of training in 2021, corresponding to 45 hours per employee, a 14.6% increase from 2020. Regarding types of contracts, 92% of employees are permanent, 7% fixed term and 1% are internships. 99.6% are covered by a collective labour agreement and 75% of employees are unionized. There is a personnel turnover rate of 17.5% and absenteeism rate of 5.4%. The lowest salary of the group to minimum wage ratio is 1.2, a reduction of 8.4% from 2020. Lastly, employee satisfaction in Portugal is 79%, in Poland is 88% and in Mozambique is 80%.

The Plan for Gender Equality encompasses a regular monitoring of management indicators, a rigorous application of Remuneration and Promotion policies, a higher level of participation of the minority gender in the programs referring to the development of leadership skills, admission of new employees using criteria of gender diversity and pay equality and work-life balance support. At the time, of the 16,016 total employees there were 55% women, 44% women in management positions and 23.5% women in the board of directors. The female to male salary ratio was 0.85. There are 201 employees with disabilities. The average age of workers is 42 years old, having 16% of the workforce under 30 years old, 49% between 30 and 50 and 35% above 50 years old.

Supplier relationships are the second lowest score in the materiality matrix. All suppliers must abide to the Guiding Principles of Sustainability for Suppliers, following the norms BCP imposes. The group shows preference for local suppliers, reaching, in 2021, 92.3% local suppliers. Consumer relations are more detailed in the report in analysis, showing the satisfaction index in Portugal (78.6%, the highest score amongst the five leading banks in the country), and internationally (84%). One of the indicators for this index is consumer complaints, which, in 2021, were 172,749 and 93.3% were resolved.

#### 4.3.3. Governance

The fight against anti-corruption and bribery is communicated though internal policies, dictating how to deal with certain situations. To prevent occurrences, employees are encouraged to report all cases of concern and advised on how to do so in the Communication of Irregularities Policy. Money laundering and corruption are in eighth place of importance for the group in the materiality matrix.

To communicate information to stakeholders, in addition to financial statements, the group presents a Sustainability Report, the UN SDG Report, the UN Global Impact Progress Communication and the TCFD Climate Report. It is worth mentioning there were some incoherencies within the data of the Sustainability Report.

To guarantee compliance, the group has multiple policies in place. In addition to these guidelines, the group has a Sustainability Committee and the Compliance Office, responsible for defining and monitoring initiatives to ensure the execution of the Plan for Sustainability and compliance boosting programs.

The group holds multiple certifications such as: rating A, in the MSCI index; 64% in the Dow Jones Sustainability Index (DJSI); rating B, by the CDP; 81% in the Bloomberg Gender Equality Index; 49% in the Vigeo Eiris Index; 78% in the Gaïa Rating; 76% in the Refinitiv rating; 1st in the banking industry in Climate leaders Poland 2021, by Forbes; POLITYKA CSR Gold Leaf; Nº1 consumer choice – Millennium has won 6 in 10 editions.

Regarding charter signatories and commitments, are of major importance the following: Principles for Responsible Banking, by UN Environmental Programme – Finance Initiative; Charter of Principles, by BSCD Portugal; Letter of Commitment to Sustainable Financing Portugal; UN Global Compact; TCFD – Task Force on Climate-related Financial Disclosures; Statement from Business Leaders for Renewed Global Cooperation – UN Global Compact; Manifesto for COP26; Manifesto for a Green Economic Recovery, by BCSD Portugal; Human Rights Guide, by WBCSD; Promoter of sustainablefinance.pt; Commitment Lisbon European Green Capital 2020.

Finally, BCP is a participant in the technical group of reflection for sustainable financing of the Portuguese Ministry of Environment, as well as the Technical Sub-commission of Sustainable Finance of the Portuguese Association of Corporative Ethics together with the International Organization for Standardization, the Task Force for ESG Taxonomy of the Portuguese Banking Association, the working group on sustainability of the International Chamber of Commerce and the Steering Committee of the Women’s Empowering Principles.

Considering all the above mentioned, BCP holds the evaluation in Table 7.

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 4(+) |
| Biodiversity | 1 |
| Resources | 4 |
| Circular economy | 1 |
| Research and Development | 3(+) |
| **Social** | |
| Commitment to the community | 5 |
| Work safety | 3 |
| Employee satisfaction | 4(+) |
| Diversity in the workforce and equality of opportunities | 4 |
| Customer and supplier rights | 4 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 3 |
| Disclosure of information | 4 |
| Compliance | 3 |
| Certifications and public commitments | 4(+) |

Table 7: BCP table of results

### 4.4. EDP

EDP – Energias de Portugal – is the national producer and distributer of energy. Being the only group of the electricity industry of the Iberian Peninsula present in Europe, Latin America, Africa and Macau, it is one of the vital players of the European industry. With more than five thousand employees in national soil and 12 thousand worldwide, it is amongst the key entrepreneurial groups in Portugal.

The enterprise was founded 1976 with the name EDP – Eletricidade de Portugal as a result of the merger of 12 regional companies of the industry which were previously nationalized and, by 1980, it already covered 97% of the national grid. The privatization process began in mid-1990s and was finalized in 2013 while internationalization was made a priority in 1997. Nowadays, the group conducts business in 29 markets and provides electricity and gas for more than nine million clients around the world.

The group has multiple subsidiaries, amongst which the following stand out: EDP Renováveis, producer of renewable energy, namely wind powered and solar; EDP Produção, producer of hydroelectric and thermal energy; E-Redes, responsible for the management of the distribution grids; EDP Comercial, energy supplier of the free market; SU Eletricidade, energy supplier of the regulated market; EDP Gás, supplier of natural gas

As a final note, EDP Renováveis is itself a listed company, which means that EDPR-specific initiatives will not be accounted for in this report.

All information below is taken directly from EDP's Sustainability Report, 2021, in https://ungc-production.s3.us-west-2.amazonaws.com/attachments/cop_2022/510739/original/EDP%20Sustainability%20Report%202021%20and%20Commitment%20to%20Climate%20Transition%202030.pdf?1649757878, accessed on 27/06/2022.

#### 4.4.1. Environmental

EDP's emissions showed a clear decrease from 2015, more specifically, scopes 1 and 2 emissions were reduced by 51% and scope 3 by 30%. The company is determined continue this path by reducing the first type of emissions by 70% until 2025 (and by 98% by 2030) and the latter are to be reduced by 30% until 2025, a goal which is already complete in 2021 (and by 50% until 2030). Despite the global decrease registered since 2015, from 2020 to 2021, only scope 3 emissions continued the trend, lowering 3%, whilst scopes 1 and 2 emissions suffered an intensification of 8.5%. In total, there were 11,370 kt $CO_2e$ scopes 1 and 2 emissions and 10,304 kt$CO_2e$ of scope 3. The emission intensity registered is 0.7 kg $CO_2$ per euro in sales.

Though these values are high, EDP has avoided 4,579 kt$CO_2e$ emissions in Portugal, and 23,752 kt$CO_2e$ worldwide, through renewables. Also, the group has provided clients with ever-more efficient products which led to the saving of 5 TWh of energy since 2015 and avoidance of around 8.95 million tons of $CO_2$ emissions, setting an objective of 15 million tons avoided by the year of 2025.

Biodiversity seems to be a high priority for the group. It is also one of the areas which it most negatively impacts due to the organization's energy generation activities, for which the company installs equipment in natural areas and, consequentially, disturbs the forest, its species and its habitats. Effectively, EDP follows the directions of the Bird Life VII Protocol, LIFE Projects and the National Specific Wild Birds Program, analyzing specific risk maps to determine the best positions for its equipment, such as power lines and towers, minimizing electrocution potential and adapting equipment to become less of a hazard for bird life.

The thermal power plants of the group release cooling water into the natural environment, which can cause an increase of temperature of the receiving bodies. The damns used by the group also have negative impacts in the biodiversity as these change the nature of the ecosystems. Despite these negative effects, the damns regulate water streams and represent a possibility for water usage in agriculture and leisure, proving fruitful for surrounding communities. To protect aquatic ecosystems, 15 of the 16 Portuguese hydroelectric stations had biodiversity-specific protection systems installed which will be monitored constantly.

Additional measures were put in place such as not to build any projects in natural sites labelled UNESCO World Heritage Sites and to have zero net deforestation and zero net loss of biodiversity until 2030 in all significantly impactful developments. EDP has also implemented preventive actions, for instance, the monitoring of flora via satellite imaging, deviation of power routes, substitution of mineral oil transforming equipment for vegetable oil, which produces less hazardous residues, amongst others. The program +Biodiversity also promotes knowledge transfer around this topic and many others of great importance.

Furthermore, EDP Spain has become a member of the Technical Committee for Standardization in Biodiversity, EDP is a partner of the International Union for Conservation of Nature (IUCN) and has joined the Steering Committee and Advisory Board of the Act4Nature program, by the BCSD. In 2021, 27% of the €88.2 million investment in the environment was directed towards the overall protection of biodiversity.

The strategic plan for 2025 determines more than 80% of the full investment for renewable energies. Currently, there is an 80% production capacity for renewable energies, being that 75% of all energy generated is renewable. The production capacity is divided into 3% solar, 29% hydroelectric and 47% wind power, 8% coal and 12% gas. The group's goal for 2030 is to have

100% renewable energy produced. Despite this, only 63% of turnover is aligned with EU taxonomy, meaning 63% of revenue is certified as environmentally sustainable economic activity (5% more than the previous year) and there has been a decrease of 4% in the environmentally certified actives of the company.

Total water consumption has grown 8.56% since 2020, reaching 16 million $m^3$, of which 56% is retained from water stress areas. Comparing to 2015, 70% less water is consumed, being that the goal until 2025 is a 78% reduction.

For 2025, the group is aiming to have 40% of its fleet electrical (currently only 13.2%), improve renewable capacity production by 5%, be coal free and increase photovoltaic capacity by more than 800%.

Improving economy circularity indicators has been a great concern of the group. Since 2015, there has been a 77% acceleration of circularity in renewables concerning operational waste and decommissioning, an 81% decrease in operational waste and a 17% improvement in the recycling rate. Most of these indicators present great performance comparing to the 2025 targets: above 80% circularity in renewables, -82% operational waste and 85% recycling rate.

In 2021, the group valued 78.3% of the total residues, 8% less than 2020. Of the 216 thousand tons of residues produced (30% reduction from previous year), 42 thousand were turned into subproducts. The remaining residue is mostly composed of coal ash, coal slash, metal, plaster and used oils. The residues directed towards valuation are 96.8% non-hazardous and 3.2% hazardous, whereas the hazardous waste has a bigger weight in the non-valued residues – 6.3%. Of these, 23.5% end up in landfills.

In the scope of economy circularity, the group implemented a waste management strategy to align procedures with the waste production goals and made a partnership, R3FIBER, to find ways of recycling wind power tower blades. In planning stage are the use of new technologies to examine the circularity of resources and the digitalization of procedures. The program +Biodiversity is also focused on raising awareness regarding this topic.

The year in study represented a €103 million investment in R&D, of which €88.2 million were environmentally focused, 32% more than 2020. From this resulted the provision of green products and services in terms of renewable energy (solar panels), electric mobility and energetic efficiency, the Save to Compete project, a B2B platform with solutions for energetic efficiency, competitiveness and innovation, EV.Charge, a platform dedicated to electric vehicle charging, MiVë an app to customize consumer needs, EDP Zero, an app for clients to understand the potential saving of $CO_2$ emissions in their consumptions, Tarifa Verde, an energy plan based on renewable energies, the floating solar park in Alqueva river with capacity to supply solar energy to 25% of the families in the region, a project designed to not interfere with biodiversity, among many others. There was also a cumulative development of 3,804 charging stations in Portugal, Spain and Brazil (110% more than 2020). It is expected that this number rises to more than 40 thousand by 2025. An investment of €19.2 billion is on the way towards renewable expansion in terms of solar, wind power, green hydrogen and storage.

EDP also encouraged consumers to receive their invoices electronically, having reached 47% of Portuguese, 48% of Spanish and 27% of South American consumers this way.

### 4.4.2. Social

In 2021, the group invested €21 million in donations - €19.3 million monetary, €1.7 million in kind and €0.2 in working hours. The volunteering initiatives resulted in 11,307 manhours, 994 beneficiaries and 3,681 volunteers. EDP plans to dedicate €22.5 million until 2025 to the elimination of energy poverty and investment in projects to improve energy access. The year in study, projects in Kenya, Tanzania, Mozambique, Nigeria, Angola, Rwanda and Malawi were embraced.

On work safety, there were 21 EDP employee accidents and 132 accidents with external service providers, of which seven resulted in death. There were 109 days lost per million manhours as a consequence of these accidents (gravity index), with a 0.92 accident frequency index. To prevent this, the group is investing in internal support tools for accident reporting, regular preventive inspections and maintenance, training and safety awareness sessions, improvements to IT systems and the creation of a Security Operations Centre for safety monitoring. Safety and health is the number three priority in the materiality matrix.

There are 12,236 employees worldwide, 5,825 of them in Portugal. Every employee has access to training, having each received 28 training hours, amounting to 337,295 in total, 23% more than 2020. This training translated into an investment of €303 per person. This investment resulted in the creation of workshops, seminars, eLearning platforms, webinars, mentoring sessions and mandatory technical programs. The group also guarantees physical and psychological wellbeing programs and a special COVID-19 support program. 30.4% of employees are syndicated, mostly in Portugal and South America, and 86% are covered by a collective employee agreement (13% less than 2020). Moreover, there was a 4.13% employee turnover rate. The minimum EDP salary to national minimum wage ratio is 1.79 in Portugal, 1.17 in Spain, 1.09 in South America and 2.21 in North America. Of all, 76% of employees show high engagement to the company, 71% have high enablement (perception of organizational support) and 85% consider EDP to provide good employment stability. Finally, overall job satisfaction is 76% for male employees and 78% for female employees.

Out of the 12,236 employees of the group, 27% are women, a percentual point increase from the previous year. Also, there are 26% women in management positions and 34.4% new hires are female. These indicators are shy of the value mandated by law, which states companies must have at least 33.3% employees of the underrepresented gender. Another law which is not abided by is the employees with disability quota, which should be 2% but is just 1.6%. The goals set for 2025 on these are 30% women in the workforce, 30% in management positions and 2% disabled workers. The female to male salary ratio is only above 1 in Portugal, with 1.04. In Spain, the latter is 0.87, 0.93 in South America and 0.98 in North America. Regarding age inclusivity, the workforce is composed of 5.1% individuals under 27 years old, 50.7% between 28 and 40, 30.9% from 41 to 57 and 13.3% above 58 years of age.

To guarantee a diverse and inclusive environment, the group instated the Equal Pay project, the Diversity Policy and the Guide for Inclusive Recruitment. An important note is that the LGBTQ+ community is only addressed in EDP Brazil’s equality strategy. There were also 17 initiatives in the scope of Diversity Month such as workshops, partnerships, networking sessions and inclusive talks on the topic of diversity and inclusiveness. Additionally, the organization established partnerships with PWN Lisbon (Professional Women’s Network), GirlMove, Instituto das Pretas, ELO Institution, and others, and began an inclusive leadership program in partnership with NOVA School of Business and Economics.

EDP has a clear commitment to the selection of local suppliers – 91% in Portugal, 96% in Spain, 99% in South America and 100% in North America. The group has a preference for long-term supplier contracts to mitigate risks of prices rising and lack of supply, improving, at the same time, job safety for these contracted entities. It offers training regarding compliance and integrity, alongside its Supplier Code of Conduct, as well as certification for the organizations (60% certified).

Customer satisfaction is measured by different frameworks in the different markets. Beginning with Portugal, there is a, 82% NPS in the free market and 78% in the regulated market. In Brazil, the Perceived Quality Satisfaction Index is 71.05%. In Spain, customer satisfaction is 76% in the B2B market. EDP believes the most impactful factors of customer satisfaction are the prioritization of decarbonization, entrance of new competitors in the industry, decentralization of products, new regulations, growing importance of the energy sector when compared to the traditional energy selling business and infrastructure damage via adverse climate conditions.

Measures were implemented to improve the quality and safety of products. Namely, online simulators and field visits to determine the most appropriate solutions for customers, equipment installation made by trained teams, equipment tests performed in factories and then after installation to ensure quality, consumer training to avoid accidents, structural safety analysis and periodic inspections. Finally, to aid families in conditions of energetic poverty, special rates are financed by the government and companies of the EDP group, and aid mandated by law. Also, special services are provided for clients with special needs and priority users.

**4.4.3. Governance**

To minimize corruption, bribery and anti-competitor behaviour risk, the General and Supervision Council, the Operations Monitoring Commission, the Remunerations Commission, the Ethics Committee, among others, put in place the values and norms defended by the organization. These topics are all addressed in detail in the Commitment for Sane Competition Practices, Code of Ethics, Integrity Policy and the Compliance-Specific Program. The fraud combat programs implemented by the group have resulted in no confirmed corruption cases with impact on the company registered in 2021. Regardless, there have been 12 complaints concerning corruption and bribery, one of disloyal competition and one of money laundering, adding to the 24 complaints of harassment, two of human right violations, 17 of conflicts of interest, and others. Still, it is believed only one third of the irregularities observed were reported – only 58% of employees know how to report them. Moreover, 22% of employees believe that good results must be rewarded despite deriving from unethical procedures.

With disclosure values of equilibrium, comparability, transparency, rigor, up-to-datedness and reliability, EDP is very complete in terms of ESG indicator reporting. The group presents every year the Sustainability Report, Annual Supervision and General Council Report, Ethics Report, Report of assessment on potential impacts and respect for Human and Labor Rights (only in English), Health and Safety Report and Stakeholders' Report. The group also presents ESG indicators in the scope of DJSI, FTSE4Good, MSCI and Suatainalytics frameworks.

To improve ESG performance and compliance, the group imposed a variable compensation based on ESG criteria for board members. Despite the regular monitoring and communication of group policies and the creation of overseeing committees, there are issues still to be tackled. For instance, the group's gender quota (33.3%) and employees with disability quota (2%) are not being enforced and, in 2021 alone, EDP had to pay over €40,000 in environmental fines.

Finally, EDP was awarded with, or included in the indexes of, 1st place in the Dow Jones Sustainability Index, A- rating by CDP Water Security, Best Future of Intelligence Project, by Portugal Digital Awards, Best Energy & Utilities Project, by Portugal Digital Awards, Family Responsible Company by Fundatión +Família. DJSI, FTSE4Good, Bloomberg Gender Equality Index, MSCI, Suatainalytics, SDG and EV100 by The Climate Group. It is a representative of the Concentration Pathway, endorser or the Paris Agreement and participant in Electric Vehicle Users Association, ChargeUp Europe, Eurelectric, WindEurope, European Federation of Energy Traders, European Distribution System Operators, Portugal Mobi Summit, Associación Española de la Industria Eléctrica, American Clean Power Association, Associação Portuguesa das Empresas do Sector Eléctrico, SC Partners and the Solar Energy Industry Association.

Considering all the above mentioned, EDP holds the evaluation in Table 8.

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 4(-) |
| Biodiversity | 4(-) |
| Resources | 4(-) |
| Circular economy | 4(-) |
| Research and Development | 5 |
| **Social** | |
| Commitment to the community | 5 |
| Work safety | 2 |
| Employee satisfaction | 4 |
| Diversity in the workforce and equality of opportunities | 3 |
| Customer and supplier rights | 4 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 3 |
| Disclosure of information | 5 |
| Compliance | 3 |
| Certifications and public commitments | 4(-) |

Table 8: EDP table of results

### 4.5. Jerónimo Martins

Jerónimo Martins (JM) is a Portuguese group specialized in food distribution, retail and agrobusiness. Having been founded in 1792, the group has grown exponentially becoming the leading retailer in Portugal with Pingo Doce, a supermarket chain, Recheio, a wholesaler, Hussel and Jeronymo, both specialized retail. Pingo Doce and Recheio alone account for 24% of all sales of the group. Following the Portuguese success, in the late nineties, the group expanded to Poland, opening Biedronka, the national leader in food distribution and one of the largest in Europe, and Hebe, a chain of beauty and wellbeing stores. Finally, in 2013, internationalization to another continent began with the inauguration of Ara in the Colombian market.

By 2021, the group had opened more than 4,900 stores worldwide, where food distribution is responsible for 98% of consolidated sales, which amounted to more than €20 million as of

December 2021. The admittance to the Portuguese Stock Exchange took place in 1989 and, since then, Jerónimo Martins's market value grew more than thirtyfold.

All information in this portion of the report is taken directly from Jerónimo Martins' Corporate Social Responsibility Report, 2021, in https://www.jeronimomartins.com/wp-content/uploads/01-DOCUMENTS/Responsibility/Reports/Corporate-Responsibility-Report-JM-2021.pdf and press releases on Corporate Responsibility-related topics in https://www.jeronimomartins.com/en/responsibility/corporate-responsibility-publications/?tax_query%5Bthe_year%5D%5B%5D=2021-en, accessed on 30/07/2022.

### 4.5.1. Environment

Jerónimo Martins' fight against climate change starts with $CO_2$ emissions. Since 2017, there has been a decrease of 35% of $CO_2$ scopes 1 and 2 emissions, equivalent to less 48% emissions per thousand euros sold. This resulted in 789,976 tons of $CO_2$ emissions of the same scopes registered in 2021, translating in 0.0377 tons of $CO_2$ emitted per thousand euros of sales (-11.7% and -18.4%, respectively, from 2020). Regarding scope 3 emissions, the group showed a slight decrease of 0.5% since the previous year, amounting to 27,363 tons of $CO_2$. This global decrease in emissions is mostly due to a reduction of consumption of electricity, an increase of energetic efficiency, the acquisition of renewable energy certificates. On the other hand, there were also factors offsetting this decrease such as expansion, intensification of technical maintenance interventions, initiation of cattle and sheep farming operations and transportation from distribution centers to stores.

The group purchased Renewable Energy Certificates, which offset 100,000 tons of carbon dioxide. It also began self-production of renewable energies, which translated into 3,155 tons of $CO_2$ avoided and, due to an investment of €215 million in more efficient and environmentally beneficial practices, an additional 400,000 tons of $CO_2$ were avoided.

Two of the main sources of pollutant gases of the group are refrigeration and distribution. To combat emissions from refrigeration, Jerónimo Martins replaced fluorinated gases with natural refrigerants such as $CO_2$ and ammonia in 1,914 stores and 21 distribution centers. The freezers of 2,852 locations run solely on propane, a gas that reduces greenhouse emissions by 43% when compared to the national electricity grid. On transportation, the group began using a backhauling technique which avoided over 20 thousand tons of $CO_2e$ emissions – 72% in Portugal and 28% in Poland. This technique allowed for the elimination of 23,505km in distribution routes.

Due to the nature of the group's business – food production and distribution –, biodiversity protection is a very important indicator. In addition to joining the Forest Positive Coalition of Action (FPCoA), being one of ten signatories of an open letter to the EU to make deforestation a priority and publicly pledging to participate in the reduction of over-exploitation and extinction of fish populations, the group has multiple initiatives to protect biodiversity. In Portugal, the Green Heart of Cork partnership with the Portuguese Nature Association and the World Wildlife Fund (WWF) is highlighted, a project to protect cork oak forests in the country, as well as the Serra do Açor Reforestation project and partnerships with environmental protection agencies to plant trees, raise awareness, develop low-carbon agricultural processes and conserve forests. In Colombia, we have Save the Macaws, in collaboration with ProAves, to preserve five different species of Macaws and their habitat. In Poland, notoriety is given to the Support for Endangered Species project, partnering with the Polish Society for Nature Conservation to fund projects to protect, at first, the European hedgehog. In the scope of biodiversity also stand out the initiatives to fight plastic pollution such as Biedronka's shopping carts being made of 25% plastic taken from the Baltic, North Sea and Atlantic Ocean, customers being encouraged to bring their own containers for fresh food purchases, white label single-use products being made with FSC certified plastic-free forest fibers, the elimination of the plastic window in bread paper bags. All these resulted in the elimination of use of 80 tons of SUP (Single-use Plastics) per year and consumption of 900 tons of virgin plastic.

Despite these efforts, Jerónimo Martins has a challenge ahead: the use of commodities with risk of deforestation in white label and perishable products. In 2021, the group used 37,097 tons of palm oil – a whopping increase of 96% from 2020 –, 95% of which is sourced from Colombia. Though this number is worrying, the group guarantees its extraction is made in a way that does not cause deforestation, as mandated by the Voluntary Agreement for Zero Deforestation in the Palm Oil Chain, by the Colombian government, which JM signed. It is believed less than 0.5% of deforestation in Colombia is due to palm oil exploitation. In Portugal and Poland, all palm oil used and sold is certified by the Roundtable on Sustainable Palm Oil, while in Colombia, the certification level is very low. Soy consumption also increased, however only 13%, to 485,675 tons. It is estimated that 50% if this soy is allocated to poultry feed and 20% to pig feed.

On the same topic, paper and timber and beef consumption showed a decrease of 10% and 6%, respectively. Regarding paper and timber, only 0.4% of the materials come from countries with deforestation risk and 80% are recycled. 14% of virgin fibers used for packaging come from countries at risk of deforestation (12% more than 2020) but 96% of these are FSC® or PEFC certified, with a goal to reach 100% by 2030. Concerning beef, only 0.5% comes from Brazil, which is the highest deforestation risk country due to beef production. The group requires a certain degree of social responsibility in beef production[6], Relatedly, 67% white label eggs sold are from cage free chicken and is this number is expected to reach 100% in four years.

In conclusion, despite using multiple commodities which represent a high deforestation risk, the group shows great concern towards sourcing them with processes and from countries where this risk is mitigated.

Since 2017, there has been a reduction in energy use of 11% per thousand euros in sales. In total, 7.3 million GJ were consumed in 2021 (of which 36% are from renewable origin), representing an increase in total value of 4.5% since the previous year, mostly due to an increase in number of stores and adoption of agricultural processes such as milk processing. The group adopted renewable energy sources such as photovoltaic panels, solar panels and geothermal heat pumps, which amount to 36,700 GJ produced.

Material consumption, despite having increased in absolute value, suffered a 5.7% downfall per million euros sold. Using 41% paper, 3% cardboard, 29% plastic, 20% glass, 5% steel and 2% other materials in JM's self-label products, the group assures 39.8% of these are recycled materials. Moreover, single-use Plastics consumption has decreased around 3% per million euros sold and overall plastic use has fallen 18% since 2018.

Since the previous year, water consumption intensified by 15.8%, being mostly withdrawing municipal water. The group instated a water consumption management program and the Let's Go Green initiative, which brought awareness for overall resource consumption for employees.

[6] namely prohibiting the use of growth hormones and antibiotics for other than medical purposes, prohibiting animal testing for products, anesthetizing animals before slaughter in more than 95% of cases (the remaining 5% are due to religious methodologies in slaughter such as Kosher or Halal practices), ban of GMOs or transgenic additives when possible and regular analysis to products and suppliers.

To promote a circular economy, the group has multiple initiatives directed at consumers. Namely, providing recycling, battery collection, coffee pod recycling, cooking oil and PET plastic bottle bins at stores, encouraging purchases in bulk, using packaging and printing recipes that promote the reusage of the food.

The waste produced in 2021 was around 560 thousand tons, a 6.9% increase from 2020. Of these, 85.8% is going to recovery and the remaining goes to landfill. The food waste of the group is at 17.6 kg per ton of food products sold, 70% of which corresponds to the perishables section. To combat this waste, 21.4 tons of food was donated to charity and products close to expiration date were sold at a discounted price.

The organization's R&D path begins with the assessment of climate risks within the processes of the supply chain, returning risks and opportunities for the group regarding sourcing and origin of products and exposure to climate risks. This leads to a set of measures namely interest in renewable energy certificates, installation of equipment that runs on natural refrigerant gases and low global warming potential, combating deforestation, implementing sustainable agriculture projects and finding alternatives for the resources exposed to climate risks. In turn, the practice of EcoDesign has avoided 31,500 tonnes of material consumption. Furthermore, JM has a molecular laboratory to conduct analysis to its products and perishables, as well as finding alternatives to beef, milk, palm-oil and other non-sustainable products. In total, 7.8% of white label and perishables are sustainably certified. Additionally, the group is planning to expand its photovoltaic energy production by the end of 2022, which will be responsible for the avoidance of 4,000 tons of $CO_2$ annually.

#### 4.5.2. Social

In 2021, JM donated €51.3 million to more than 1,800 organizations. Of these, 95% were in kind, 1% in time and 4% monetary. 21.4 thousand tons of food were donated and 202 employees participated in volunteering initiatives, amounting to 262 hours. The group created partnerships to create philanthropy events in Poland and boost employability of disabled individuals through specialized training in Portugal and created the Bairro Feliz program, dedicated to aiding financially in the implementation of plans to better the communities surrounding Pingo Doce stores.

To promote healthier community lifestyles, the group adopted measures like adding the nutritional scores to products and significant indicators[7], the Escolha Saudável program, in collaboration with the Portuguese Heart Foundation, to provide products with less fat and salt, as well as the A Saúde Alimenta-se program to provide knowledge regarding the properties of fruits and vegetables and an overall healthy diet, and providing healthy recipes in magazines and cooking books.

Concerning work safety, there was a 22.58 rate of accidents of mandatory reporting and 0.13 rate of accidents with severe consequences[8]. There were 9.7% less work-related diseases[9]. To prevent adverse situations, there is regular monitoring and auditing to workplaces and materials, drills and medical examinations. The safety training towards OHS increased 81.6% since the previous year and €6.5 million were spent in new protective equipment.

Of the more than 123 thousand employees of the group, around 14% were promoted in 2021, €217 million were spent in recognition awards and almost the full workforce received performance reviews. In total, 84.6% of employees receive regular training, amounting to 10,208 initiatives and 5.6 million hours. Furthermore, there was a million-euro investment in employee wellbeing infrastructures such as rehabilitation and wellbeing centers and clinics, in mental health aid, wellbeing activities, sports competitions, care centers, etc.

Regarding remuneration, the internal minimum wage is around 9 to 29% higher than the national minimum wage in Poland, 2 to 20% higher in Portugal and above 29% higher in Colombia. Only 67.8% of contracts are permanent and 84.6% are full-time. Each employee is averaged to stay 6 years with the company, the turnover rate has risen to 27.7% and retention after one year is at 83.1%.

The workforce is composed of 75 different nationalities, 23.5% men and 76.5% women. Note that there is less than 33.3% of the underrepresented gender. Of the executive committees and management positions, 29.2% and 68.1%, respectively, are women. The gender pay ratio is 0.98. The ages are distributed the following way: from 18 to 24 years old, 13.9%, from 25 to 34, 32.4%, from 35 to 44, 32%, from 45 to 54, 16.8%, above 55 years old, 5%.

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[7] Fiber count, alcohol-related symbols, sugar, fat, lactose and gluten, "non-GMO", average time for consumption once opened, vegan/vegetarian products and icons to indicate high sources of fiber, magnesium and protein

[8] more than 180 days absent from work, not including death

[9] mainly tendonitis, epicondylitis and periarthritis (inflammation of tendons, elbows and shoulders, respectively)

The group has programs to give job opportunities to university students, people with disabilities and the underrepresented gender, namely the Incluir Center, which is responsible for 149 new hires. Despite this, the report does not disclose the number of employees with disabilities.

Customer rights are constantly reinforced in the Corporate Responsibility report in terms of quality of products. As mentioned previously, JM monitors and analyzes the quality of white label and perishable products used and sold, controlling amount of fats, sugar, calories, and others. The organization also uses packaging to inform consumers of nutritional values, calory count and indicators described before. This is part of a heath awareness program to promote healthier lifestyles across communities.

Regarding supplier rights, JM provided training to 155 suppliers for food safety, animal welfare and the EU's "Farm to Fork" Strategy, as well as an assessment to 160 worldwide suppliers of risks and opportunities of the negative impacts of climate change, contributing for the creation of alternative processes of production of unsustainable resources[10]. Moreover, the group is conscious about purchasing local (doing it in 89% of food purchases) and creates awareness initiatives to incite purchase of locally supplied products.

In Colombia, a partnership with BBVA was established to enable advanced payment to suppliers with advantageous rates not affecting their credit rating. In Poland, a reduction of the payment terms was made to 21 days, and, in Portugal, the average of payment is 10 days.

Jerónimo Martins audits regularly its suppliers regarding quality and food safety, human rights, practices, environment, and others. The environmental audits returned a total of 26.9% of suppliers as inadequate.

### 4.5.3. Governance

To prevent corruption risks, the adequate policies are communicated during onboarding, training is provided for all employees and specialized training for 84.6% of critical functions. In addition, the group regularly monitors whether it is subject to corruption risks. Bribery and anti-competitor behaviour are never mentioned in the Corporate Responsibility Report, showing no specific initiatives to prevent the problematics.

[10] Poultry and pork meat, tomato, potato, milk, wheat flour, coffee, and beer

Along with all the mandatory financial information available on the website, Jerónimo Martins regularly updates its collection of publications concerning corporate responsibility. Naturally, there is the Corporate Responsibility Report, from which all data has been drawn, but also many individual and easy-to-read reports on audits and analysis, health and safety indicators, nutritional reformulations, partnerships, commitments and their progress, etc.

To guarantee compliance, JM formulated designated organizations such as the committees for Labor Coexistence Sustainability, Health and Safety, Ethics, Corporate Governance and Corporate Responsibility, Anti-Mobbing, Anti-Discrimination and Sexual Harassment and Risk. These are responsible for ensuring compliance of their specific area towards the multiple policies.

On commitments and recognitions, Jerónimo Martins was included in the following indexes: Euronext Vigeo Eiris Eurozone 120, the ESG Large 80, FTSE4Good Europe Index and Bloomberg Gender-Equality Index; signed and participated in the SBTi – Science Based Targets initiative, EU Code of Conduct on Responsible Food Business and Marketing Practices (one of the first signatories), the TCFD, European Lean & Green and, in the forest conservation scope: one of eleven signatories of an open letter to the EU calling for greater dedication and measures to combat deforestation, Forest Positive Coalition of Action, by Consumer Goods Forum, Roundtable on Sustainable Palm Oil, Roundtable on Responsible Soy, Polish Coalition for sustainable Palm Oil, Tropical Forest Alliance. Finally, JM obtained the following ratings: CDP, rating A – categories “Climate Change” and “Water Security” programs, CDP, rating A- (leadership level) for commodities associated with deforestation risk (palm oil, beef and soy), positioning Jerónimo Martins as the food retailer with the best score worldwide, CDP, rating B for paper and timber

Considering all the above mentioned, Jerónimo Martins holds the evaluation in Table 9.

| Environmental | |
|---|---|
| $CO_2$ emissions | 3(+) |
| Biodiversity | 4(+) |
| Resources | 4 |
| Circular economy | 4 |
| Research and Development | 4(-) |
| **Social** | |
| Commitment to the community | 4 |
| Work safety | 2 |
| Employee satisfaction | 4 |
| Diversity in the workforce and equality of opportunities | 3(-) |
| Customer and supplier rights | 5 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 2 |
| Disclosure of information | 5 |
| Compliance | 3 |
| Certifications and public commitments | 5(-) |

Table 9: Jerónimo Martins table of results

**4.6. NOS SGPS, SA**

NOS is a Portuguese telecommunications group founded in 2014. It is the outcome of the 2013 merger between ZON and OPTIMUS, two of the biggest players in the Portuguese telecommunications industry. The organization is detained by Sonaecom (26.07%), KJ Group (26.07%), Sonae (7.38%), Mubadala Investment Company PJSC (5%) and 35.47% of the organization capital is in free float.

Currently, the group holds multiple companies, namely NOS Comunicações, NOS Lusomundo Audiovisuais, NOS Lusomundo Cinemas, NOSPUB, NOS Audio-sales and Distribution, NOS Wholesale, NOS Technology, NOS Sistemas, NOS Inovação, NOS Corporate Center, NOS Mediação de Seguros, 84% of NOS Açores Comunicações, 78% of NOS Madeira Comunicações, 50% of DREMIA, 30% of ZAP and 25% of SPORT TV. Amongst these are services of television, internet, telephone, cinemas, distribution of audiovisual content, cloud computing, R&D and management consulting.

After just two years of operations, NOS won the three most important awards of the sector – Consumers' Choice, Product of the Year and Trusted Brand – and has continuously proven to be a strong leader, bringing innovation to Portuguese homes. Effectively, the successful group has, as of 2021, 4.8M clients on mobile services, 1.6M in television, 1.8M in landline and 1.4M clients in broadband fixed internet.

All information on this section of the report is directly drawn from NOS Annual Integrated Report, 2021 https://www.nos.pt/institucional/Documents/Reportes Financeiros/20220229_NOS_RelatorioIntegrado_2021__ENG.pdf, accessed on 02/08/2022.

### 4.6.1. Environmental

Beginning with carbon dioxide and equivalents emissions, NOS was responsible for 488,028 tons of $CO_2e$ emissions in 2021, a value 5% higher than registered in the previous year. Of these, only 39,144 are scopes 1 and 2, being that 92% are scope 3. Having decreased 52% since 2019, scope 1 emissions slowed the tendency lowering just 2% from 2020 due to the electrification of the fleet and the replacement of harmful gases. Scope 2 emissions increased by 15% reportedly due to the energy market volatility and need to transfer consumption to a more environmentally harmful source of energy.[11] Scope 3 emissions increased 5%, mostly justified by purchased goods and services, capital goods and energy-related emissions.

The targets set for this thematic until 2025 are reducing client emissions in amounts that balance emissions from operations, reducing the carbon footprint of operations (scopes 1 and 2) by 50% (vs. 2015) and, until 2030, drop 90% scopes 1 and 2 emissions and 30% scope 3.

To protect the fauna and flora, the group eliminated 40% of the mobile network towers in natural sites, released reforestation projects to balance the unavoidable emissions coming from the non-electrical portion of the fleet, and initiated processes to mitigate the risk of forest fires in the locations of equipment such as network towers.

[11] Consumption of energy rose just 0.1% while its emission factor rose 15%

Regarding energy consumption, the group seems to be attempting to make the transition to more efficient equipment. Through the installation of LED lighting in the data centres, curtain systems that help prevent the use of AC units and the replacement of end-of-life equipment by low energy consumption and higher efficiency equipment, management believes to be on the way towards a significant reduction of consumption, though not impactful in 2021. By January 2022, a contract to purchase 100% electricity with renewable origin certificate is expected to be executed, fulfilling the 2030 target of 80% renewable electricity usage. Furthermore, consumption per data traffic is at 0.13 GJ/TB, an 85% decrease since 2015, having completed in 2021 another goal set for 2030.

Water consumption dropped 3%, to 49,374 $m^3$, of which 1% is reused. NOS facilities have integrated systems of rainwater collection, used for irrigation and firefighting, otherwise all water comes from the municipal system. Another material topic of the sustainability strategy is paper consumption reduction, for which the digitalization process was initiated. This includes, among others, the Paper Less, Digital Leaflets, and Digital Tags projects, as well as opting for digital invoices.

In 2021, NOS generated around 738 tons of waste, a 19.2% increase from the previous year. 48.6 tons were hazardous waste, of which 99.4% was recovered and the remaining 689.1 tons corresponded to non-hazardous waste with a 96.7% valuation rate. The overall recovery rate of residues grew 8% that year.

The group has various initiatives driven by a circular economy such as the Smartphone takeback program and selling of refurbished smartphones, the digitalization and dematerialization of operations, contribution to integrated recycling systems, lessening of incorporated material in products, the GreenUs project focused on digitalization and reorganization of processes, and the operation of collection, refurbishment and reusage of equipment.

With respect to R&D, the group is focusing on improving efficiency, reducing emissions and increasing environmental benefits. Since 2019, all products have had efficiency-driven developments. A reduction of customer emissions was achieved through the introduction of products in the following areas: communication and collaboration, cloud and data centre, IoT (Internet of Things), and Big Data Analytics. An increased environmental benefit was implemented via routers with 100% recycled plastic and seven times less energy consumption, remote controls and sim cards made out of 100% recycled plastic and its packaging made out of recycled paper and no plastic, Android TV packaging made out of 100% recycled paper with only the crucial information written in water-based inks.

Moreover, there was a €67M investment in innovation leadership (encompasses internal projects and support for external ventures), mainly in the fields of low carbon initiatives, energy efficiency, smart cities, smart mobility and health and activity.

### 4.6.2. Social

In the past three years, NOS contributed a constant €200,000 to the community. In 2021, many charitable initiatives took place, for instance, a partnership with a pediatric hospital to provide children with infantile audiovisual content in the hospital premises, the provision of data cards and hotspots to health, police and firefighting officials during the fight of the pandemic, as well as to the COmVIDas project, to support the elderly during this pandemic. To promote digital literacy, free online training content was published, with the goal to have trained 10,000 people by 2025. To support IST (Instituto Superior Técnico) university students, three scholarships and merit awards were given, an annual competition to fund projects was initiated and workshops organized.

Regarding donations, the group created a campaign to collect electrical and electronical equipment waste, to, in addition to collecting the waste, revert the amount raised to a social solidarity institution. There was also a donation of €2,000 to five local solidarity institutions and donation of personal protection equipment to combat COVID.

NOS also tries to benefit the community through its own products. In 2021, the group opened a €10 million fund dedicated to supporting Portuguese entrepreneurs and start-ups creating innovative technological projects to make use of the 5G band technology. Increase of coverage of NOS services is a priority as the target is to have 100% of the Portuguese population covered.

To reinforce work safety, in addition to the adoption of OHS Management Systems, the organization does an annual examination of main possible OHS hazards and plans to eradicate them, introducing more demanding action plans and reenforcing training. The training of overall personnel resulted in 88% completion rate on physical security training for new employees.

Accident frequency rate is 0.58, with 0% fatality rate. Lost days rate is 47.18 and there were no occupational diseases.

The internal evaluation of employee satisfaction is disclosed in the report examined, adding to the multiple indicators that impact the category. The group surveyed employees to find that the general satisfaction index is 80%. Contract indicators show that 99.1% of employees are under a permanent contract, there is a 15% exit rate, 7.3% internal mobility and 1.26% absenteeism.

Training is provided to 90.5% of employees, amounting to 13.6 hours per employee. Above 95% have regular performance evaluations and career development assessments. The group released the NOS Alfa Program, a trainee program of 12 months to integrate newcomers which resulted in 85% retention rate and 4.7/5 satisfaction.

The group gives every employee's birthday off, as well as the morning of the first day of school for parents of children under 15, full day on the 24th of December and afternoon of the 31$^{st}$. It also has a health and wellbeing program which organizes awareness webinars for health literacy, health and wellbeing classes and the NOS wellbeing community.

Diversity is the second most important topic for the company in the materiality matrix. Of the 1,829 employees, 59.1% are men and the remaining regarded 40.9% are women. There are 31% women in management positions, and only 21% in positions as top management. The group's goal is to reach 40% female workers in overall management. The average age is 42 years old, with 13.2% below 30, 72% between 30 and 50, and 14.8% above 50. Additionally, there is a portion of 1% of employees with disabilities.

To improve diversity indicators, NOS created the Diversity and Inclusion Committee, the NOS Women Community and the Gender Equality Plan. Their work resulted in initiatives to bring leaders awareness regarding gender and racial equality matters and a partnership with PWIT (Portuguese Women in Tech). There is currently a 100% Career Opportunity Index (women vs. men).

Supplier selection and evaluation, and selecting local suppliers are, respectively, the 2nd and 3rd least important topics in the materiality matrix. Despite this, NOS has more than 6,000 partners which receive training on sustainability matters and provides an annual supplier evaluation on ethical, environmental, and safety and health criteria. Those who return evaluations below 70% are advised to improve their performance (only 3% in 2021, showing an evolution facing previous year where half of the evaluated scored below 70%). To ensure good supplier relations, there is a dedicated supplier support email and regular satisfaction surveys are shared.

NOS focuses on customer right through the characteristics of its products. In 2021, NOS guaranteed a generalized access to its services and improved service resilience. It provides solutions for hearing and visual disabilities, as well as guides for self-installation of the products. To prevent health issues, there is constant monitoring and prevention of adverse health effects of electromagnetic fields originating from the operations of the company. The organization guarantees customer safety through NOS Safe Net, a partnership with a cybersecurity company to provide protection to all devices from the dangers of the internet and NOS Kids Upgrade, a program to provide a safe and easy access to children. Finally, the group has customer support lines and shares regular satisfaction surveys.

### 4.6.3. Governance

The ethics committee is responsible for monitoring and ensuring compliance regarding corruption, bribery and anti-competitive behaviour. The Code of Conduct for the Prevention of Corruption and Related Offenses is communicated to employees and, in 2021, there were no occurrences of corruption nor bribery to register. The group states its commitment to follow the Code of Conduct of the Portuguese Association of Advertisers and the Advertising Self-Regulation Association, assuring fair competitiveness. However, the same year, the Competition Authority filled legal action against NOS, for which NOS presented a defense and is awaiting verdict; In 2020, another offense had been filled, still awaiting verdict after NOS' defense.

NOS uses various channels to communicate information to shareholders. Firstly, it reports all financial and ESG data in the Annual Integrated Report. Effectively, it also makes use of conferences, roadshows, earnings announcements and directs contact to release information to shareholders and investors. ESG-specific information is also addressed in the Sustainability Forum and the internal ESG Scorecard.

Dedicated to promoting compliance within the group, NOS regularly monitors the performance against compliance indicators. The ethics committee releases its activity indicators for employee's knowledge and the Statutory Audit Board audits internally. In 2021, there have been two occurrences of non-compliance, for which NOS was obliged to pay €13,500 and €3,000 worth of fines.

Finally, NOS has been awarded with a ranking of A- from the CDP, AA from MSCI, 53/100 in global corporate sustainability assessment, 75/100 in the environmental dimension, 45/100 social dimension and 49/100 governance dimension, by S&P Global, 19.4/40 meaning low risk of negative financial impact due to ESG related factors, by Sustainalytis, 63/100 from Moody's ESG Solutions and 64.7/100 in the Bloomberg Gender-equality Index. In addition, the brand has been awarded Marca nº1 Escolha do consumidor (Consumers' choice), Product of the year, Best Contact Centers and Silver and Gold awards, by the APCC (Portuguese association of Contact Centers) to the corporate and consumer lines, respectively.

In 2021, the group subscribed the initiatives Digital with purpose, Portuguese Women in Tech, "Towards COP 26" Manifest, Women's Empowerment Principle, European Green Digital Collusion, Porto Climate Pact. These add to the previously subscribed UN Global Impact, Letter of Commitment "Business Ambition for 1.5ºC", CEO's Guide on Human Rights, UN Target Gender Equality, Lisbon Green Capital 2020, BCSD Portugal's Charter of Principles, Global Enabling Sustainability Initiative (GeSI), Manifesto "Taking advantage of the crisis to launch a new paradigm of sustainable development", by BCSD Portugal, Portuguese Charter for Diversity, ETIS Sustainability Working Group (circular economy in the telecommunications sector)

Considering all the above mentioned, NOS holds the evaluation in Table 10.

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 3(-) |
| Biodiversity | 4(-) |
| Resources | 4(+) |
| Circular economy | 5 |
| Research and Development | 4 |
| **Social** | |
| Commitment to the community | 4 |
| Work safety | 3(+) |
| Employee satisfaction | 5(-) |
| Diversity in the workforce and equality of opportunities | 4 |
| Customer and supplier rights | 4 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 3 |
| Disclosure of information | 4 |
| Compliance | 2 |
| Certifications and public commitments | 4 |

Table 10: NOS table of results

### 4.7. Corticeira Amorim

Corticeira Amorim (CA) is a Portuguese-owned brand dating back more than 150 years. Focusing on cork transformation, the organization leveraged its 100% natural raw material to become the world leader in its field. It is a pioneer in the industry concerning R&D, innovation and design, product portfolio and high value-added solutions.

To reaffirm its presence in foreign markets, Corticeira Amorim joined Euronext Lisbon in 1988. The group now operates in 28 countries, has 56 distribution companies, 12 joint ventures and more than 29 thousand clients in 100 countries. The brand Corticeira Amorim can be seen on the corks of the best wines, on groundbreaking architectural projects, Olympic sports articles and even satellites which were launched into space. Naturally, it is a great player in national exportations, having 93% of its total sales shipped abroad.

The information in this section of the report is directly extracted from Corticeira Amorim's Relatório de Sustentabilidade, 2021, in 2_PT_-_Relatorio_de_Sustentabilidade.pdf (amorim.com), accessed on 30/08/2022

### 4.7.1. Environmental

Corticeira Amorim's carbon intensity sits at 47 tons of $CO_2e$ per each million euros of sales. This value suffered a significant increase from 2020, when it was just 35 tons of $CO_2$/€1 million. In 2021, the group registered 256 thousand tons of $CO_2e$ emissions in its value chain (a 10% increase from the previous year), being that 17% of the total is of scopes 1 and 2, and the remaining 83% are of scope 3. Nevertheless, due to the nature of the organization's business, it has a capacity for offsetting a total of 5.2 million tons of $CO_2$ emissions which are stocked within the cork oaks and avoids around 73 tons per ton of cork produced. Furthermore, the main source of energy for the group is of renewable origin. The group produces energy mainly from biomass, for which cork residue is used, and via photovoltaic panels, in addition to purchasing renewably sourced energy. This transition to renewables avoided the release of 86 thousand tons of $CO_2$. It is targeted that, until 2030, the group will reach a null carbonic footprint of scopes 1 and 2.

To assure the sustainability of biodiversity, initiatives were put in place. The protection of the cork oak montado forest, a typical landscape of the Iberian Peninsula, and its ecosystem is, naturally, the key priority, through increased knowledge, resource mobilization and measure proposals. This way, the group developed PIF – Forest Intervention Project. The project focused in three areas: coordinating new plantations and giving tecnhical support to owners, research on the impacts of fertilization, watering, nutrition and soil on cork-oak exploration, and production of cork-oak adapted to different climatic scenarios, disease and pests.

The montado forests of the organization aid the surrounding environment by doubling as a forest fire barrier, regulating the hydrologic cycle, protecting the soil and reducing desertification risks. However, besides the natural beneficial characteristics of cork-oaks for the general ecosystems, CA presents no measures to improve biodiversity outside company assets.

The main materials used in Corticeira Amorim's operations are sourced from the hundred-thousand oak forest area explored by the group. With a 200-year lifetime, these explorations represent 251 ha of protected forest area. The group also purchases external cork, 95% of which is of Controlled Origin, a Portuguese certification for agricultural products. Of all materials used, 18% are non-renewable, 12% are virgin non-renewable materials. CA also used 801 tons of recycled cork, corresponding to 3.1% of cork stoppers produced in the year.

In 2021, energy consumption grew 15% comparing to the previous year, totaling 1.9 million GJ. Of these, 79% comes from a renewable source, a 4% decrease in weight. Contrarily, the organization states saving 72,625 GJ by implementing measures such as cleaner energy sources and efficiency improving technology, which made efficiency increase by 0.4%, reaching 3.8%. By 2024, the group plans to have 2% increased energy efficiency and, by 2030, to have all energy consumption from renewable origin.

To combat water excess, the corporation implemented the Project Zero Water Waste 2021. This project encompasses audits of all Portuguese facilities to implement a common methodology to determine water consumptions, as well as a list of diverse actions for better practices in the operations. This led to a great decrease of 25% in water consumption, to 516 $m^3$ per million euros in sales. The water retention is 92% from underground water and 32% in high hydric stress risk. By 2024, the group plans a reduction of 1% water consumption intensity.

In terms of economy circularity, firstly, CA affirms using 100% of the cork extracted. As mentioned, the group recycles otherwise wasted cork to fit into its products and uses the dust remains for energy production via biomass. All non-cork materials have a 93% valuation rate, 3% more than in 2020. Only 2.3% of residues are hazardous, having no indication on the Sustainability Report of how they are disposed of.

The group joined a UN committee to promote circularity and assure sustainable packaging for products, having the commitment to, by 2030, ensure all materials are recyclable post-consumption, reduce quantities consumed by packaging, minimize environmental impact of transportation and use 0% non-recyclable virgin materials.

The company’s focus on R&D is very directed to a circular economy. Between analyzing 60% of sales to guarantee useful and extended lifetime and developing more than 500 applications for cork products around circular economy and innovation for various sectors, the group is clearly looking for more accessible, efficient and renewable solutions, as stated in the report.

The creation of Green Bonds and PPC Sustainability Linked Bonds was meant to aid in finding better solutions for sustainable management of natural resources and residues, conversion of residues into energy, the implementation of low-carbon and eco-efficient technologies, processes and products adapted to a circular economy, etc. The company is also part of Smart Waste Portugal, Centro Habitat, PTV – Technological Platform del Vino and IBS – Institute of Science and Innovation for Bio-Sustainability, joining forces with other entities to create environmental solutions for the industry.

#### 4.7.2. Social

The operations of the group contribute massively to community wellbeing. It is estimated that around 100,000 people are directly or indirectly dependent of cork oak explorations due to its benefits to the soil and environment of surrounding areas, in addition to the economic benefits to individuals involved. Studies show the net benefit of CA's montado is approximately one billion euros, when accounting for its ecosystem services' impacts, multiplying direct benefits sevenfold.

In regard to direct aid from CA, the company does not concentrate its support in monetary donations, amounting to only €225 in 2021 and €381 in 2020, the lowest value of the companies examined. Nevertheless, the organization supports the community by creating jobs in remote rural areas, contributing to avoid desertification, and partnerships with universities for integration of interns, as well as providing technical advisory services for forest area owners in partnership with WWF and Quercus.

It also provides resources to foundations to improve their capacity to help in the scopes of elderly wellbeing, education of children and refugees, health, social emergency situations and services in hospitals, fire stations and shelters.

In terms of work safety, there were 76 employee accidents registered in 2021, from which no deaths resulted. The frequency index of these corresponds to 12 and the gravity index to 554. 67% of the workforce is certified by OHS Management Systems standards. In turn, occupational diseases registered in 2021 were 65, being that the occupational disease rate is 12.

Concerning employee satisfaction, the group presents a satisfaction of 71%. Of the 4,642 employees, 79% receive varied training, a 5% increase from 2020, and the goal is to improve this value to 95% by 2024 and 100% by 2030. To guarantee satisfaction within the workplace, the group provides a program (Mobilidade+) dedicated to promoting internal mobility and career development opportunities. On contract indicators, 78% of employees have a permanent contract, 94% are covered by a collective work agreement and 17% are unionized. There is a 10% rotation rate, and 5.8% absenteeism rate, representing a continuous growth.

As mentioned, Corticeira Amorim has 4,642 employees worldwide. Three quarters of these are based in Portugal, though there is no indication of employee nationalities. On gender, 25% of personnel is female, with the same weight in management positions. The board of directors is where there is the most female empowerment – 40% female members – nevertheless, the female to male salary ratio is still 0.88. The gender equality plan addresses this and many more issues, aiming for an environment with no discrimination by 2030. Lastly, the average age of the workforce is 42 years old, having no indication of the generational distribution of the group. The group will be considered as not being in compliance with the mandatory employee with disability quotas (in addition to gender quotas) due to not having indication of number of disabled workers.

Customer (only B2B) relations are maintained through client involvement programs, though not all CA subsidiaries have implemented these. These programs include initiatives to enforce communication, namely via reports, technical articles, participation in fairs and activity-related events, press releases, social network, website and satisfactions surveys, the results of which are not in the Sustainability Report. The group also provides environmental awareness sessions, performs seminars and allows clients to visit the montado and the company.

For suppliers, the measures mentioned beforehand are likewise valid. The company, which states a preference for ESG-compliant suppliers, also performs annual audits and quality examinations, resulting in 100% of non-cork suppliers covered by the supplier evaluation program.

#### 4.7.3. Governance

There are no mentions of initiatives specifically dedicated to the elimination of corruption, bribery and anti-competitor behaviour other than the presence of these topics in the Code of Ethics and Professional Conduct and the audits conducted by the internal Risk Committee.

For ESG disclosure purposes, the group presents the Sustainability Report and the Corporate Governance Report yearly. It also has important information and indicators in its website, newsletters and press releases. It is important to note that some incoherencies of data were found in the Sustainability Report.

To improve compliance, the group has created multiple committees that enforce the various company policies, namely, the Audit Committee, the OHS Committee, the Risk Committee and a dedicated ESG Committee. Moreover, it promotes the reporting of irregularities assuring confidentiality, investigation, respect and thoughtfulness. In 2021, there were no irregularities reported.

Finally, Corticeira Amorim has its operations aligned with the principles of UN Global Compact, CDP, ACT4NATURE Portugal, Statement of principles Porto Protocol, Statement of Principles BSCD Portugal, Sustainable Wine Roundtable and the Manifesto for COP26. The organization is included in the Business Roundtable Portugal, the 50 Sustainability & Climate Leaders and received undisclosed ratings from S&P Global Corporate Sustainability Assessment, MSCI, Sustainalytics and EcoVadis. Finally, the company was awarded with 1st in the industry by Employer Brand Research 2021, by Randstand, and World Finance Sustainability Awards, category wine products industry.

Considering all the above mentioned, Corticeira Amorim holds the evaluation in Table 11.

| | |
|---|---|
| **Environmental** | |
| $CO_2$ emissions | 3 |
| Biodiversity | 3 |
| Resources | 4 |
| Circular economy | 4(+) |
| Research and Development | 4(+) |
| **Social** | |
| Commitment to the community | 2(+) |
| Work safety | 2(+) |
| Employee satisfaction | 4(-) |
| Diversity in the workforce and equality of opportunities | 2 |
| Customer and supplier rights | 2 |
| **Governance** | |
| Anti-corruption and bribery initiatives and Anti-competitor behaviour | 2 |
| Disclosure of information | 2 |
| Compliance | 2(+) |
| Certifications and public commitments | 3 |

Table 10: Corticeira Amorim table of results

CHAPTER 5

# Discussion of results

| Organizations | E (25) | S (25) | G (20) |
|---|---|---|---|
| CTT | 13.8 | 16.2 | 11 |
| Mota-Engil | 11.2 | 12 | 12 |
| BCP | 13.4 | 20.2 | 14.2 |
| EDP | 20.2 | 18 | 14.8 |
| Jerónimo Martins | 19.2 | 17.8 | 14.8 |
| NOS | 19.8 | 20 | 13 |
| Corticeira Amorim | 18.4 | 12.2 | 9.2 |
| | | | |
| Sums | 116 | 116.4 | 89 |
| Total performance* | 0.663 | 0.665 | 0.636 |
| Ranking | 2 | 1 | 3 |

Table 12: Evaluations in absolute values and comparation of pillars E, S and G

*Total performance corresponds to the performance of each pillar, when accounting for all firms, equally. This value was obtained through the sum of all corporations' score in each pillar, divided by the total potential score of the pillar (E = 25x7; S=25x7; G=20x7)

| Organizations | E (34%) | S (35%) | G (31%) | Total |
|---|---|---|---|---|
| EDP | 27.5% | 25.2% | 22.9% | 75.6% |
| NOS | 26.9% | 28.0% | 20.2% | 75.1% |
| Jerónimo Martins | 26.1% | 24.9% | 22.9% | 74.0% |
| BCP | 18.2% | 28.3% | 22.0% | 68.5% |
| CTT | 18.8% | 22.7% | 17.1% | 58.5% |
| Corticeira Amorim | 25.0% | 17.1% | 14.3% | 56.4% |
| Mota-Engil | 15.2% | 16.8% | 18.6% | 50.6% |

Table 13: Final evaluations of each group, converted to percentages

Analysing table 13, we conclude none of the companies in the sample scored below 50%, being that the lowest evaluation of the sample is Mota-Engil, from the extractive/manufacturing industry sector. Having an outcome of 50.6% when all three pillars are accounted for, the firm’s worst performance was on the environmental assessment, the worst of the sample, showing a slow adherence to sustainability in operations. The social parameters also received the worst rating of the sample. The best for the group was governance showing a slight effort to be transparent and compliant however, it still represents the second worst rating of the sample. All indicators for this company are around half their potential score.

On the other hand, the best performing group was EDP, operating in the energy sector. With 75.6% final score, the company obtained the highest ranking of the sample in environmental criteria (20.2/25), third highest in social variables and tied in first place with Jerónimo Martins in governance measures. All indicators for this best performing group are around three quarters of the potential score.

Of the remaining groups, it is important to highlight NOS, with a final score similar to that of EDP (75.1%), strongest potential in social factors and weakest in governance. It is also crucial to note that BCP holds the highest score of all in the social standards (20.2/25) and Corticeira Amorim holds the lowest in governance (9.3/20).

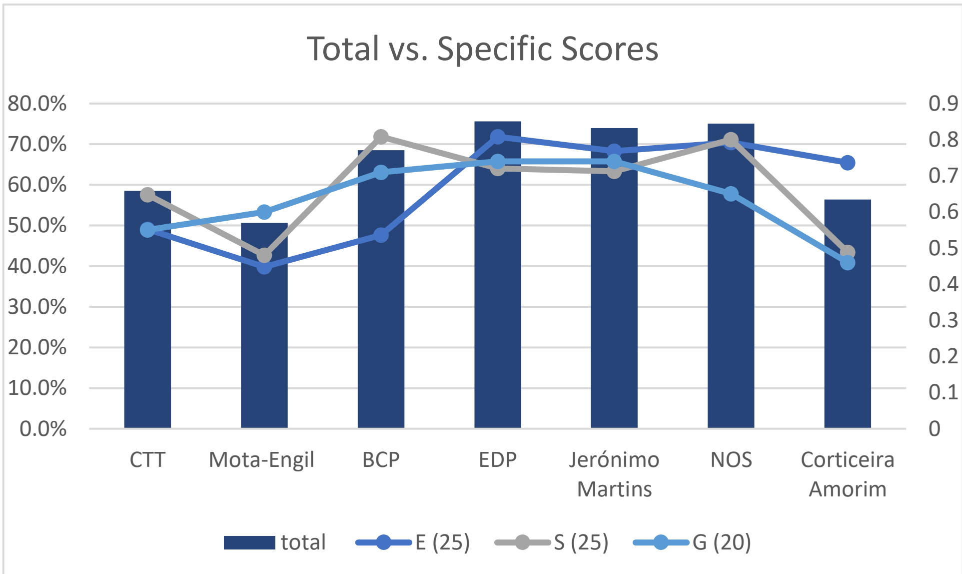
The sample examined – seven of PSI's most significant organizations – showed the highest levels of corporate dedication to fighting societal issues. This is visible in Table 12, where the performance of each of the three variables was calculated, returning very similar outcomes for all variables but a slight advantage for the social pillar.

| Correlation | E | S | G | Total |
|---|---|---|---|---|
| E | 1 | 0.344 | 0.246 | 0.725 |
| S | 0.344 | 1 | 0.727 | 0.863 |
| G | 0.246 | 0.727 | 1 | 0.776 |

Table 14: Correlation coefficients between pillars E, S and G and the total

Having such similar performances, one might tend to conclude that all variables are directly correlated amongst each other, meaning that, for instance, when governance is at a high level for an organization, the two other variables will tend to follow, being normally in agreement. However, this is not necessarily the case. Despite having no negative correlations, in this small sample of seven companies, the correlation coefficients (Table 14) are the lowest between environmental and social criteria and environmental and governance criteria, showing a weak positive relationship. This means that the environmental performance of an organization does not dictate, or impacts the least, the remaining criteria. On the other hand, the social and governance parameters show a strong positive dependency amongst each other, meaning that the social ranking will greatly impact governance and vice-versa. Finally, the correlation coefficients show that, in this study, the final evaluations of the PSI groups are strongly in agreement with the environmental and governance criteria of study but are, naturally, most influenced by the social parameters.

With all this in mind, we should interpret the results.




Graph 2: Total vs. specific scores comparison

CHAPTER 6

# Conclusion

In the past 50 years we have seen an unprecedented technological development worldwide. This allowed us to shorten production processes, producing more in less time, and use cheaper resources to obtain similar products. With such evolution, companies raised the economy exponentially. There was more employment, more investment and higher purchasing power, translating into more savings and more spending (The World Bank, 2020).

Today, players in most industries understand the importance of maintaining their practices as sustainable and socially responsible as possible. This comprehension derives from an effort from collective entities to impose laws that restrict the potential harm caused to the environment and society. In addition, spending patterns leaned towards a demand for more ethical products and services as the awareness regarding these issues grew.

This dissertation is intended to bring transparency to some of the most important Portuguese firms, concluding on whether these are evolving towards environmentally and socially conscious groups. Facing the initial question "are these Portuguese companies changing their processes to fit into a more CSR-driven profile?", the answer is explicit in the final ESG ratings, discussed previously.

The ranking of organizations obtained through the perusal of disclosed reports is, from best to worst: EDP, NOS, Jerónimo Martins, BCP, CTT, Corticeira Amorim, Mota-Engil.

EDP obtained an overall classification of 75.6%, being that the categories of Environment, Social and Governance corresponded to 20.2 out of 25, 18 out of 25 and 14.8 out of 20, respectively. The energy-sector group has its best rating in the environmental parameters. This is greatly due to its strong investment capacity for greener energy production, focusing on renewables rather than traditional sources. EDP's result is fully in line with Garcia, et al. (2017) who defended that sensitive industries such as the energy sector tend to perform better in ESG

Mota-Engil was evaluated in 50.6% overall. Its Environment, Social and Governance categories were 15.2%, 16.8% and 18.6%, respectively. Being that this organization belongs to the construction and engineering sector – a sector where the environmental footprint is significant due to its natural resources impact, ecosystem deterioration and public impact (Zolfagharian et al., 2012), and human rights are sometimes ignored for the benefit of speed and profit –, the position of the group within the ranking is somewhat expected.

The fact that the average performance rate of organizations in the E, S and G criteria studied in this research (Table 12) are all between 63.5% and 66.5%, shows that the Portuguese companies selected exhibit a low-moderate level of effort to adhere to responsible practices.

Since 2018, the investment in corporate responsibility has risen 42% in the USA and 48% in Canada (Bofinger, 2022). Globally, by 2020, the assets under management of sustainable investments were valued at $35.3 trillion – having increased 15% in just two years – and represented a considerable 35.9% of all assets under management (USSIF, 2021). Thus, with these levels of ESG compliance, the organizations analysed are falling behind when compared to the rest of the developed markets. This is a problem as it causes a decrease in investor attractiveness, both for the organizations and the country, translating into less funding for change and developments. It also deters human resources from joining the company and decreases employee retention, translating into a less driven and effective workforce. Ignoring the need to become sustainable and socially responsible also leads to vulnerability to legal action and fines, from governmental entities, and complaints from customers and suppliers, decreasing satisfaction levels and, therefore, decreasing demand and increasing cost of supply. To sum, the success of companies in the XXI century is significantly influenced by CSR. Hence, to maintain their market positions, the Portuguese organizations of PSI ought to improve their mindset and allocate more resources to the transformations required to keep up with the foreign markets.

Having concluded that seven of the major Portuguese groups, with the highest investment capacity, are shy of the expected levels of ESG compliance, what can we expect from the smaller players?

It seems logical that the largest organizations provide an example for smaller-scale players. Being that the first represent the biggest impact to the surrounding environment and communities, they would normally create solutions and propose measures which would then be followed by other organizations within the market. Making the assumption that the outcomes of the seven companies selected for this research could be generalized for the remaining national players, smaller companies are not expected to do well. These are less developed and have less available funds for deep structural changes, so it is predictable that the necessary CSR transformation is not taken as an urgency nor are resources allocated to it, opting for the prioritization of profit. Nevertheless, and returning to the previous argument, financial performance is proven in many studies to be directly dependant of ESG indicators (Friede et al., 2015).

### 6.1. Limitations and contributions to management

The elaboration of this dissertation had certain challenges. Firstly, the initial goal was to examine the enterprises of PSI in its entirety, not only one per sector. This method was not carried out as there were time and length constraints. After having started, it was understood that having 15 companies to examine, with the detail intended, would not be possible in the timespan of one year and, especially, in the report length of around 50 pages required by the university.

On the other hand, the strongest barrier that was overcome was the quality of information. As all information examined was drawn from the Sustainability Reports (or equivalents) of the organizations, the conclusions to be drawn were already limited and somewhat biased. It was quickly concluded that most of the corporations refer only the positive aspects of their operations, emphasizing less the components of ESG in which they are not having a good performance, and filling the sections of the report where they perceive a good performance with redundant and distracting information. In this scope, there were also multiple occurrences of incoherencies throughout the reports. Some seemed manmade mistakes, understandable wrong calculations or copy of values however, most incoherencies discovered seemed to benefit the data towards a more compliant version. Referring to the same issue of quality of information, it is also important to note that there is no way of confirming the data the entities present. Not only values that might be altered, but also initiatives publicized which might have not been implemented nor are planned to be in the future. A great example are the ambitious targets each entity continuously presents, i.e. reaching carbon-neutrality by 2030, 100% electrical fleet by 2025, etc. For individuals reading the reports, there is no assurance of the veracity of the information as these (very ambitious) goals might just be abandoned throughout time or simply considered unfulfilled targets when the time comes.

This research demonstrates the necessity for more significant developments in the areas of CSR. Despite having good reporting levels, Portuguese companies ought to adhere to initiatives that promote a pro-ESG régime. It is also exhibited that, in case the subjects do not comprehend this urgent necessity, consequences are sure to arise in the scopes of reputation, vulnerability to legal action, workforce motivation, partnerships and, taking all into consideration, profit.

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