



**Universidade do Minho**  
Escola de Engenharia

Sustainability Reporting in a company of the Automotive Sector

Eva Maria Gomes Correia

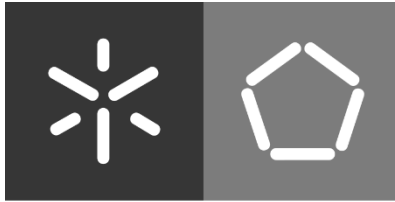
Sustainability Reporting in a company of  
the Automotive Sector

Eva Correia

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**Sustainability Reporting in a company of the  
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Mestrado Integrado em Engenharia e Gestão Industrial

Trabalho efetuado sob a orientação da

**Professora Doutora Paula Varandas Ferreira**

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### RESUMO

A presente dissertação foi desenvolvida no âmbito do Mestrado Integrado em Engenharia e Gestão Industrial da Universidade do Minho. O projeto de investigação é o resultado de um estágio curricular numa empresa do setor automóvel, que fabrica componentes plásticos decorativos para o interior de veículos - Fehst Componentes Lda (FCL). Assim, considerando a grande pressão colocada neste setor relativamente a práticas sustentáveis, é exigido que estas sejam transparentes e demonstrem o seu compromisso. Deste modo, surgiu a necessidade de fornecer orientação e estrutura para o primeiro relatório de sustentabilidade da empresa, seguindo as normas da *Global Reporting Initiative* (GRI) e, simultaneamente, superando as restrições de tempo e financeiras que as Pequenas e Médias Empresas (PMEs) enfrentam durante este processo.

Essencialmente, a principal lacuna identificada nos relatórios de sustentabilidade concerne a análise de materialidade. Considerando a discrepância de abordagens e matrizes entre os diferentes relatórios, é possível deduzir que existe uma necessidade em criar uma estrutura ou modelo de avaliação sistemática para determinar as questões de sustentabilidade materiais. Assim sendo, foi desenvolvido um método de avaliação para PMEs que pudesse facilitar a identificação dos tópicos materiais - o eixo vertical considera uma análise de *benchmark* dos relatórios de sustentabilidade do setor automóvel e, o eixo horizontal, reflete as considerações dos *stakeholders* internos, previamente selecionadas pela empresa. Uma vez identificados os tópicos materiais, iniciou-se a fase de aquisição da informação. Este processo exigiu principalmente a compreensão do método operacional da organização relativamente a aspetos económicos, ambientais e sociais e, obtenção de dados específicos exigidos pelas diretrizes. Além disso, para identificar a contribuição da FCL para os Objetivos de Desenvolvimento Sustentável, foi desenvolvido um *Triple Layered Business Model Canvas*, considerando os pilares ambiental e social. Posteriormente, foram recolhidas as informações solicitadas, procedendo-se a redação do relatório de sustentabilidade.

Por fim, considerando o conhecimento adquirido no desenvolvimento do relatório, foi essencial estabelecer um método padronizado para relatórios futuros. Portanto, o procedimento geral foi detalhado através de *Business Model Process and Notation*.

### PALAVRAS-CHAVE

Análise de Materialidade, Global Reporting Initiative (GRI), Objetivos de Desenvolvimento Sustentável (ODS), Relatório de Sustentabilidade, Setor Automóvel

### ABSTRACT

The present dissertation was developed under the scope of the Integrated Master in Industrial Engineering and Management at the University of Minho. The research project was pursued considering a curricular internship in a company of the automotive sector that manufactures plastic car interior decorative components - Fehst Componentes Lda (FCL). Hence, considering the high pressure placed in this industry respecting sustainability, companies are required to be transparent and to demonstrate their commitment to corporate social responsibility. Therefore, the aim of this dissertation is to provide guidance and structure to the company's first sustainability report, following the Global Reporting Initiative (GRI) Standards while overcoming the time and financial constraints that Small and Medium Enterprises (SMEs) often face during this process.

Essentially, the major gap identified in sustainability reporting was the materiality assessment process. Considering the discrepancy of approaches and matrixes by different reports, it is possible to deduce that there is a lack of a systematic evaluation framework or model to determine material issues. Thereby, an assessment method for SMEs that could facilitate the material issues' identification was developed. The vertical axle considers a benchmark analysis of the automotive sector's sustainability reports and, the horizontal axle, reflects internal stakeholders' considerations, previously selected by the company.

Once the material issues were identified, the collecting data procedure was initiated. This mainly required understanding of the organization's operating method respecting triple bottom line aspects and obtention of specific data required by the guidelines. Additionally, to identify FCL's contribution to the Sustainable Development Goals a Triple-Layered Business Model Canvas was developed considering the environmental and social pillars. Subsequently, the information required was gathered and the sustainability report was prepared.

Finally, considering the knowledge gathered while developing the report, it was essential to establish a standardized method for future reports. Therefore, the overall reporting procedure, having in mind the GRI Standards, was detailed through Business Process Model and Notation.

### KEYWORDS

Automotive Sector, Global Reporting Initiative (GRI), Materiality Assessment, Sustainability Report, Sustainable Development Goals (SDGs)



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## ACRONYMS

BMC – Business Model Canvas

BPMN – Business Process Model and Notation

CEO – Chief Executive Officer

CERES - Coalition for Environmentally Responsive Economies

CSR – Corporate Social Responsibility

EC – European Commission

EU – European Union

FCL – *Fehst Componentes Lda.*

GHG – Greenhouse Gases

GRI – Global Reporting Initiative

IR – Integrated Reporting

IS – Internal Stakeholders

ISO – International Organization for Standards

KPI – Key Performance Indicators

LT – Legitimacy Theory

MDGs – Millennium Development Goals

MNCs – Multinational Companies

NGOs - Non-Governmental Organizations

OEMs – Original Equipment Manufacturers

OHS – Occupational Health and Safety

SASB - Sustainability Accounting Standards Board

SCSR – Strategic Corporate Social Responsibility

SD – Sustainable Development

SDGs – Sustainable Development Goals

SMEs – Small Medium Enterprises

SR – Sustainability Reporting

ST – Stakeholder Theory

TBL – Triple Bottom Line

TLBMC – Triple Layered Business Model canvas

WRM – War Room Meetings

UNEP - United Nations Environment Program

UNGC – United Nations Global Compact

## 1. INTRODUCTION

The present dissertation was developed under the scope of the Integrated Master in Industrial Engineering and Management at the University of Minho. This dissertation is the result of an eight-month curricular internship at *Fehst Componentes, Lda.*, located in Braga.

This chapter aims to present a brief contextualization of the investigation subject, the goals of the study, the research methodology used and the overall framework of the dissertation.

### 1.1 Background

The last decades have witnessed the shift from economic interests to the acknowledgment of corporates' responsibilities towards the environment and society, as a consequence of the awareness raised regarding businesses' potential impacts, urging the need of rethinking firms' duties (Parsad & Mittal, 2020).

The concept of sustainability has gained projection at a global level (Siew, 2015). Currently, companies, society and, in particular, an increasing number of consumers are more informed and mindful of corporate sustainability (Sukitsch et al., 2015). As enterprises give more and more emphasis to social, environmental and economic issues, the urge to voluntarily disclosing this information increased as well. This movement is evident as, in the latest years, there has been an increase in the publication of Sustainability Reports (Hoffmann et al., 2018). According to the *KPMG International Survey of Corporate Responsibility Reporting 2020*, the reporting rates of N100 companies (top 100 companies of 52 nations) in Europe reached 77% and, very closely, Portugal achieved the 72% in sustainability disclosing (KPMG, 2020).

One of the leading initiatives providing global standards for sustainability reporting is the Global Reporting Initiative (GRI) (KPMG, 2020). Studies reveal that companies that endorse the GRI guidelines turn out to present higher quality Sustainability Reports when compared with organizations that do not apply these standards (Siew, 2015). Throughout this process, companies are encouraged to sustain constant dialogue between the various stakeholders, which will provide higher introspection regarding the positive and negative impacts of the business on the surroundings within which it operates. Besides this, the process of collecting data arouses previously unexplored interactions. Essentially, it enables companies to gain a much clearer perception of their information, both internally and externally, through analysis of

their departments and their market presence. Thus, GRI standards can increase organizations' performance, integration and transparency (Mendes et al., 2019).

With these high numbers of companies voluntarily disclosing sustainability information, there are some benefits that might be associated with this trend. Among these can potentially be "opening new markets, improving competitive position, generating greater consumer and shareholder acceptance, enhancing company image, improving employee motivation and cost reduction" (Sukitsch et al., 2015). In particular, according to Mendes (2019), the rise of the GRI guidelines can be possibly linked to situations relating to market incentives, interest in high-quality reports, improvements in financial performance, besides reductions in time and effort required to disclose information accurately.

Sustainability reporting should not be considered a mere communication tool to stakeholders. Instead, it should be seen as a tool that helps a company discover its diverse interactions, helping it be more conscious of its strengths and weaknesses (Sukitsch et al., 2015). Even though the GRI standards have contributed to the spread of sustainability disclosing, it is not certain that companies are fully committed to disclosing information properly. Specially materiality considerations might not be put into practice correctly due to a lack of precision and clearness, questioning the effectiveness of these guidelines in facilitating company-stakeholder interactions (Barkemeyer et al., 2015). The main concerns for organizations are how to identify relevant issues for sustainability disclosing and how to prioritize those material issues in conformance with stakeholder needs (Hsu et al., 2013).

Reporting by SMEs (Small Medium Enterprises) is relatively low compared to MNCs (Multinational Companies). Baumann-Pauly et al. (2013) argue that despite MNCs are advanced in making comprehensive CSR (Corporate Social Responsibility) reports and manifesting their commitment to the general public, SMEs are advanced at implementing CSR practices. SMEs prioritize informal reporting mechanisms, consisting of face-to-face interaction with stakeholders rather than formal written records such as annual sustainability reports. According to these authors, the main reason for this is related to the fact that SMEs, in general, do not have the economic and human resources to ensure proper documentation of their CSR activities and to disclose this information. Calabrese et al. (2016) claim that the current guidelines and methods for sustainability reporting have been designed exclusively considering larger firms and are not easily adjustable for smaller firms because they do not take into consideration SMEs' resources and constraints.

In the automotive industry, sustainability is a particularly relevant subject and, implementing sustainable practices is inevitable considering the high pressure placed in this sector. Stakeholder demands,

especially consumers and political agents, are experiencing dramatic change (Sukitsch et al., 2015). End consumers have been increasingly manifesting their concerns respecting environmental and social impacts, whereas regulatory bodies expect even further compliance with stringent laws and regulations requirements (Nassar et al., 2019). Therefore, challenges surrounding issues of sustainability and its implementation are strongly felt in the automotive industry, resulting in an evident necessity to take action. This sector has been proving its commitment to transparency regarding corporate social responsibility, as it is one of the sectors with the highest percentage of sustainability reporting (KPMG, 2020).

In view of the above, the purpose of this dissertation is to provide guidance and structure to the first sustainability report of a Portuguese SME parts supplier company in the automotive sector – *Fehst Componentes Lda* (FCL). Under these circumstances, the project aims at ease and standardize the process of identifying and disclosing economic, social and environmental information for future reports. Thus, overcoming the time and financial constraints that SMEs often face in sustainability reporting.

## 1.2 Goals

The aim is to establish a standard procedure to develop a sustainability report in accordance with the GRI Standards. Considering that these will be published biennially, this process will simplify the arrangement of *Fehst Componentes'* future reports.

The GRI standards imply the use of a holistic perspective. This perspective proposes a dynamic and simultaneous balance between economic, social and environmental with the temporal aspect. According to Lozano (2008), to achieve societal sustainability, a holistic, continuous and interrelated phenomenon must be used amongst economic, social and environmental aspects and the impact that decisions regarding these aspects have in the present moment and the future. The GRI standards merely mention guidelines to disclose information without providing a procedure that assists at identifying accurate sustainability material topics.

Thus, the goals of this project are the following:

1. To develop a framework to ease the process of identifying sustainability material issues for SMEs.
2. Identify the GRI Standards appropriate to the company's context, besides relevant Key Performance Indicators (KPI) and the methods required to obtain information.
3. To evaluate the company's Triple Bottom Line – environmental, social and economic – impacts and develop the first Sustainability Report proposal.

4. To formulate a standardized process for developing Sustainability Reports periodically.

According to these goals, this dissertation aims to respond to the following research question: How to identify, evaluate and disclose the environmental, social and economic impacts that a SME has on the surrounding in which it operates while following the GRI Standards?

### 1.3 Research Methodology

The first step before starting to answer the research question identified is to outline a research design. It will provide guidance and support to develop a coherent, organized and structured project. The research design reflects a clear vision of how the study will be conducted, in other words, the posture that the author will endorse to achieve the established goals (Saunders et al., 2016).

Saunders et al. (2016) developed the research “onion” diagram, represented in Figure 1, to support projects sustaining their choices respecting data collection techniques and analysis procedures. To reach this central goal of the “onion” several outer layers must be understood and explained concerning research philosophy, approach to theory development, methodological choice, strategy and time horizon.

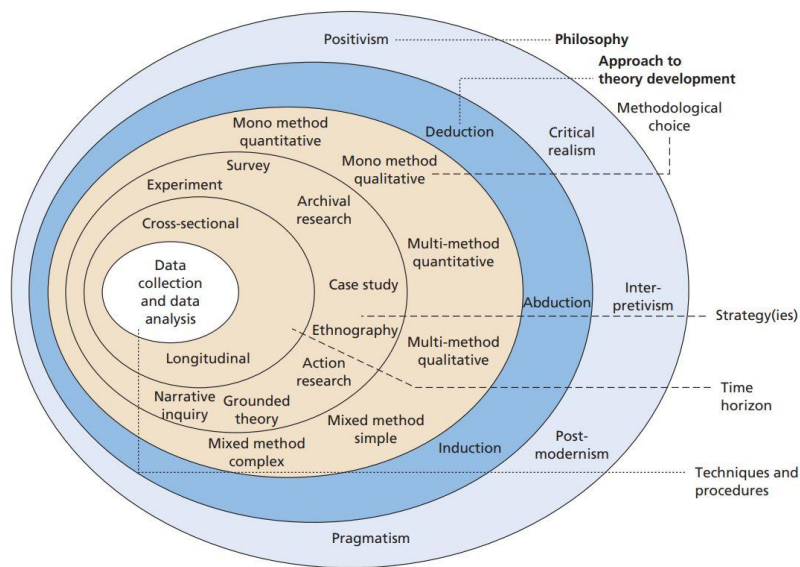


Figure 1 - Research "onion".  
Retrieved from (Saunders et al., 2016)

#### 1.3.1 Research philosophy

According to Saunders et al. (2016), the concept of research philosophy represents an investigators' perception respecting the development of knowledge. This perception will inevitably reflect the

investigators' approach when identifying the research question while choosing the approach and methods respecting the findings.

Regarding the development of this master thesis, interpretivism was the philosophy chosen. Interpretivists recognise that their interpretation of research materials and data plays the lead role in the research process. Besides, these researchers must adopt an empathetic posture (Saunders et al., 2016). It is crucial to evaluate the context within which the company operates and not simply consider data from an objective perspective, considering that the business world is complex, dynamic and often unique. An effective data collection process of economic, social and environmental aspects requires consideration of different perspectives of people within the company. Saunders et al. (2016) also referred that one of the main challenges of these researchers is to enter the social world of the research participants and understand that world from their point of view.

### 1.3.2 Approach to theory development

Concerning theory development, this project will apply an abductive approach, characterized as “theory generation or modification: incorporating existing theory where appropriate, to build new theory or modify existing theory” (Saunders et al., 2016, p. 145).

The reason for this choice is mainly related to the gaps respecting the GRI Standards. Therefore, this project will put into practice an existing framework. However, it will also develop a standardized process, which these guidelines cease to provide.

### 1.3.3 Methodological choice

This project requires mixed methods research since it is necessary the combination of “quantitative and qualitative data collection techniques and analytical procedures” (Saunders et al., 2016, p. 169). Among these methods, takes place:

- Document analysis of the GRI Standards, Sustainable Development Goals (SDGs) and sustainability reports of different companies.
- Company's intranet for documental and objective analysis through databases, records, files and archives.
- Interviews among the different departments within the company.
- Questionnaires to internal stakeholders.
- Application of different tools, such as GRI Standards, Triple Layered Business Model Canvas and Business Process Model and Notation.

#### 1.3.4 Research strategy

Regarding the strategy, the one that best fits the research question identified is the Case Study methodology. This strategy entails an intensive and detailed investigation of a real scenario, that can be, for example, a person, group, organization, association or an event (Saunders et al., 2016). According to Yin (2018), this strategy must be chosen when the research questions start with “how” or “why”, also when the study is focused on contemporary events and, throughout the investigation, there is no control of the events.

According to Yin (2018), the case study strategy is divided into four main stages:

1. Define and design: this is a descriptive single case study since it is only focused on *Fehst Componentes*' sustainability performance. Furthermore, it is a holistic case study and, along with the company, was defined the time horizon of the research (2018, 2019 and 2020). At this stage, in accordance with the GRI Standards, must be designed the strategy and tools to endorse and defined deadlines for each phase.
2. Prepare: according to the chosen methods to collect data, must be identified which stakeholders to include in the research. In particular, interviews, questionnaires and documents must be prepared in advance to ensure that the information is clear to the respondent. Also, the respondents must be prepared and informed about the sustainability report and the procedures.
3. Data collection: apply the methods chosen and proceed to data collection.
4. Data analysis: in this phase, data is aggregated and evaluated with the company if all topics were fulfilled, otherwise the process must be repeated.
5. Report findings: after the economic, social and environmental information have been collected and analysed, it is time to start writing the sustainability report.

#### 1.3.5 Time horizon

Even though the sustainability report mainly refers to the events of 2020, the GRI Standards imply a holistic perspective. Thus, companies must report quantitative information regarding the two previous years (2018 and 2019), permitting a thorough analysis of the evolution and progression of the company throughout the years. Therefore, a longitudinal approach will be applied.



## 1.4 Thesis Outline

Overall, this dissertation is divided into seven chapters. Concerning this first chapter, as mentioned previously, it intends to introduce a contextualization of the project and define its main objectives. Additionally, the research question is identified, and the research strategy adopted for this dissertation is also justified and explained.

Subsequently, Chapter 2 aims to establish a theoretical framework for the project. Thus, this section explores the existing academic literature respecting the various themes underlying this dissertation. Among these, are the rise of the corporate social responsibility concept and its influence in sustainability reporting, as well as trends on disclosing this type of information and tools that support this process.

Chapter 3 provides detailed information respecting the company where the project took place. Specifically, it presents a brief description of the group wherein the company is included and a summarize of the company's products, production processes and certifications.

Chapter 4 describes the materiality assessment method utilized and its results, considering a benchmark analysis of the automotive sector and internal stakeholders' considerations.

Thereafter, Chapter 5 encompasses the reporting phase, respecting the procedure and results of the GRI standards and SDGs disclosed.

Chapter 6 presents the sustainability reporting process standardization that FCL can adopt for future reports.

Finally, Chapter 7 provides an overview and reflection of the development of this project and describes the conclusions obtained, as well as suggests future research directions that deserve to be investigated.

## 2. LITERATURE REVIEW

This chapter intends to study the existing literature review focused on the concepts, frameworks and theories respecting sustainability reporting. Firstly, the expansion of the Corporate Social Responsibility concept is detailed. Then, the evolution of sustainability reporting is described, followed by the explanatory theories for this practice. Finally, the tools and framework used for sustainability reporting are investigated and explained.

### 2.1 Corporate Social Responsibility

The origin of the term Corporate Social Responsibility (CSR) that we acknowledge nowadays has an extensive background since it is possible to notice the business' concern for society several centuries back (Carroll, 2008). However, the concept was officially formalised in 1953 by the American Howard Bowen, often referred to as the father of CSR (Carroll, 1999). In his publication *Social Responsibilities of the Businessman*, the economist defined CSR as “the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society” (Bowen, 1953, p. 6).

The decades following the publication of Bowen's landmark book were marked by controversies over the political and social legitimacy of CSR (Lee, 2008). Moreover, there was an increasing wave of attempting to establish a better understanding of CSR and to present a more vigorous interpretation, revealed by the several definitions formulated in this period (Witkowska, 2016). Due to this popularity around CSR, it created uncertainty regarding its accurate meaning since it meant something different to everybody (Latapí Agudelo et al., 2019). This was a period to start the conversation about CSR with businessmen executives, for them to learn and begin the process of changing attitudes.

Nevertheless, it was only in the 1980s that CSR became relevant in institutions' decision-making processes (Carroll, 2008). According to Carroll (2008), the main concerns about corporate behaviour at the time were “environmental pollution, employment discrimination, consumer abuses, employee health and safety, quality of work life, deterioration of urban life, and questionable/abusiveness practices of multinational corporations”. Despite this, CSR was rarely embraced and implemented by all levels within organizations. The 1980s was a decade given to CSR's operationalization rather than focusing on the concept itself, leading to the development of new frameworks, models and methods able of assessing CSR from an operational perspective (Latapí Agudelo et al., 2019).

In 1979, Carroll presented one of the strongest CSR conceptualizations, stating that “the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time” (Carroll, 1979, p. 500). This definition included the economic factor, a turning point to also start associating economic viability as a contribution to society since it preserves the business system (Carroll, 2008). But it was only until the beginning of the 1990s that Carrol (1991) presented *The Pyramid of Corporate Social Responsibility* (Figure 2), intending to provide a helpful approach to CSR systematization. Specifically to help administrations find balance not only to their commitments to the shareholders but also to a wider group of stakeholders generated at the time due to new legislation (Carroll, 1991).

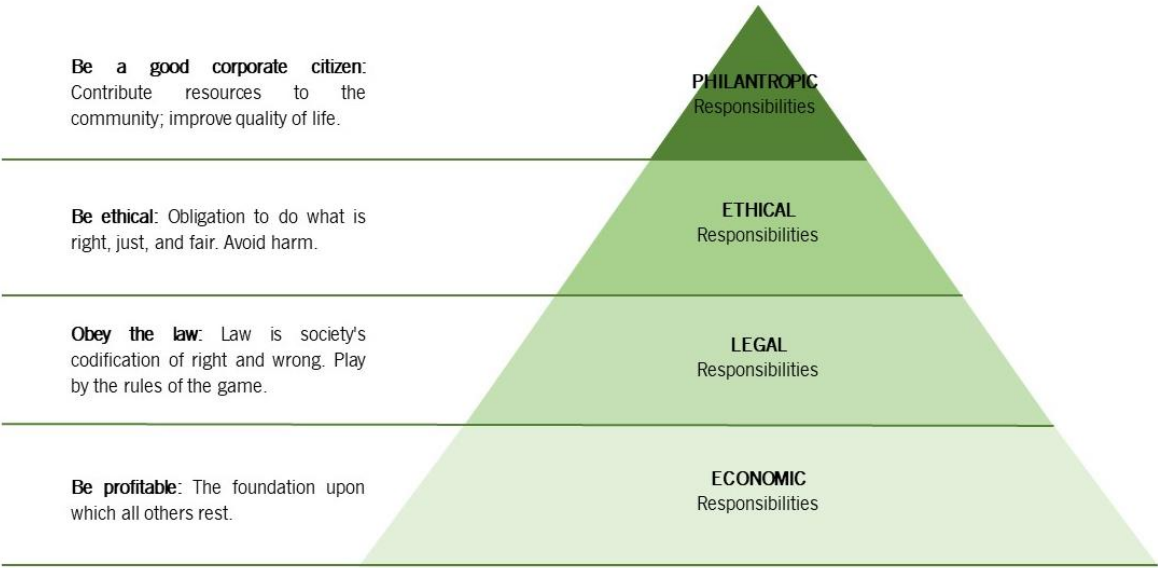


Figure 2 - Pyramid of Corporate Social Responsibility.  
Adapted from (Carroll, 1991)

According to Carrol (1991), the Pyramid of CSR represents the four fundamental responsibilities of a company: the economic responsibilities as the basis of the pyramid; then, the legal responsibilities of the firm; followed by the ethical responsibilities; and, finally, the philanthropic responsibilities.

Burke and Logsdon (1996) were the first to find benefits and associate strategic CSR with the financial performance of organizations. Consequently, they identified five dimensions of corporate strategy that are not only crucial for the prosperity of a firm but also suitable for CSR policies to reach value creation (Burke & Logsdon, 1996). As presented in Figure 3, the identified dimensions are centrality, specificity, proactivity, voluntarism and visibility. Besides this, in 1994, John Elkington developed the principle of Triple Bottom Line (TBL) defined as “a sustainability framework that balances the company’s social,

environmental and economic impact” (Latapí Agudelo et al., 2019). Afterwards, Elkington (1997) disclosed that effective and longstanding partnerships with stakeholders are the only way to achieve exceptional TBL performance. His approach towards transparency contributed to CSR reinforcement and systematization (Berkovics, 2010).

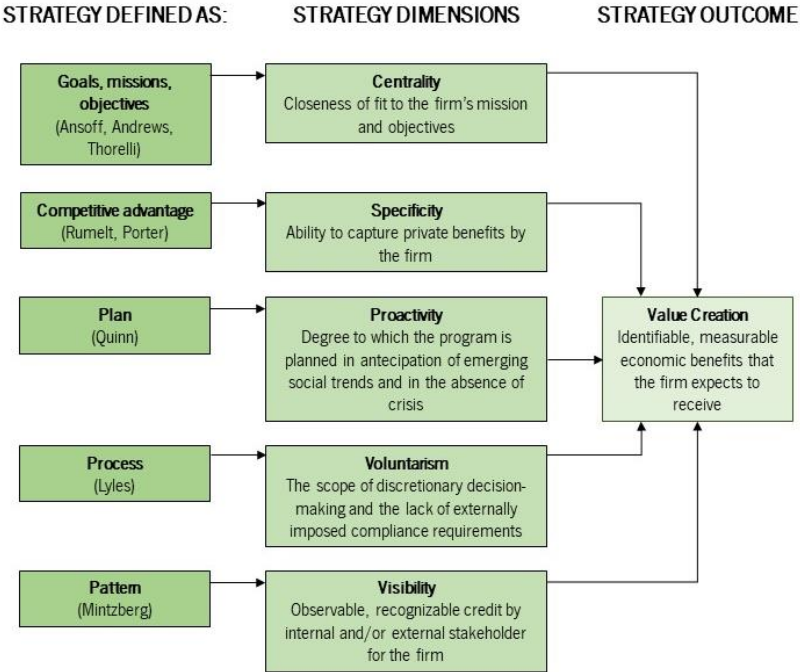


Figure 3 - How strategy is linked to Corporate Social Responsibility. Adapted from (Burke & Logsdon, 1996)

Regarding global environmentalism, despite the United States had made most of the progress so far, the European Union started to have a significant impact on the advancement of environmental policies in the 1990s (Gouldson et al., 2015). By the late 1990s, the concept of CSR grew to be generally accepted and promoted by governments and corporations to non-governmental institutions and individual consumers (Lee, 2008). A large number of multinational organizations started to recognize that being socially responsible could possibly ease the globalization process, therefore the systematization of CSR became stronger (Latapí Agudelo et al., 2019). Consequently, companies became more aware and started embracing non-financial reporting (Logsdon & Lewellyn, 2000). For this reason, there was an arise of several global sustainability initiatives at the time. For instance, in 1997, the Global Reporting Initiative (GRI) was founded to provide a standard framework for sustainability reporting (GRI, 2021d). Then, in 2000, the launch of the United Nations Global Compact (UNGC) also brought global attention to CSR. This initiative aimed to encourage companies worldwide to implement sustainable practices and socially responsible policies. The UNGC created ten principles respecting human rights, labour,

environment and anti-corruption, besides the eight Millennium Development Goals (MDGs) that set an international Agenda for 2015 (UNGC, 2021c, 2021a).

Furthermore, given the growing concern about the environmental impact of business activities, the European Commission published the Green Paper in 2001 (Latapí Agudelo et al., 2019). The EU defined CSR as “a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment” (European Commission, 2001). The Green Paper came to emphasize the importance of Corporate Social Responsibility, presenting the first European approach to CSR strategy.

The introduction of international certifications respecting social responsibility also helped move the globalization of CSR. In particular, the International Organization for Standardization (ISO), in 2002, started to reveal interest in creating CSR guidelines with the purpose of complementing its quality and environmental management standards (ISO 9001 and ISO 14001) (Ward, 2011). In 2010, the ISO 26000 – Social Responsibility was finally approved and released to provide guidance rather than requirements. In fact, ISO 26000 presents an exception - “it cannot be certified to unlike some other well-known ISO standards” (ISO, 2021).

Besides all these movements that influenced the globalization of CSR, in the 2000s it is possible to witness several contributions to the concept itself through academic literature. In particular, Lantos & Easton (2001) contribution, stating that:

CSR entails the obligation stemming from the implicit ‘social contract’ between business and society for firms to be responsive to society’s long-run needs and wants, optimizing the positive effects and minimizing the negative effects of its actions on society. Note the focus on both minimizing harms (ethical CSR) and promoting benefits for society (altruist CSR if the firm does not reciprocally benefit and strategic CSR if management plans for the firm to profit too). (p. 600)

This was one of the first moments directly linking the term strategic to CSR. Afterwards, the literature on CSR started to incorporate the concept of strategy and emerged the term Strategic Corporate Social Responsibility (SCSR) (Latapí Agudelo et al., 2019). The perception of creating value and achieving competitive advantage through SCSR started to settle in and, Heslin & Ochoa (2008) further developed the concept. The purpose of their study was to reveal that, even though every business is different, SCSR has common principles that organizations can implement into their strategies. These exemplary SCSR practices presented by Heslin & Ochoa (2008) highlighted how SCSR can help create shared value. Not only to the company but also to their stakeholders and the social context where the company operates.

The year 2015 has recently been one of the most important regarding CSR proliferation. It was possible to witness 190 countries plus the EU sign the Paris Agreement to “substantially reduce global greenhouse gas emissions to limit the global temperature increase in this century to 2 degrees Celsius while pursuing efforts to limit the increase even further to 1.5 degrees” (UN, 2021c). Furthermore, the UNGC developed the Sustainable Development Goals (SDGs) setting an international Agenda for 2030. Currently, UNGC mission is stated to be “a call to companies to align strategies and operations with universal principles on human rights, labour, environment and anti-corruption, and take actions that advance societal goals” (UNGC, 2021d). These events revealed to be a “wake-up call” since it is possible to observe, in 2015 and 2016, an increase in academic publications respecting CSR (Latapí Agudelo et al., 2019).

Overall, CSR has a vigorous past but also remains with loads of potential for the future. It is possible to observe multiple changes regarding the concept, the benefits and the way CSR can be implemented. Notably, the benefits to the business as well as to the society surrounding the implementation of CSR have been one of the main motivations for organizations (Carroll, 2015). Even though the future may bring transformation and evolution, one certain thing is that the global trend around CSR will continue to grow.

## 2.2 Sustainability Reporting

The first social report was published in the 1940s, but it was not until the 1970s that it got relevant to few larger companies that started disclosing non-financial information. Despite this, it did not succeed for too long. And, as the trend of CSR got stronger, in the late 1990s, the practice of social reporting re-emerged (Logsdon & Lewellyn, 2000).

As reported by Gray (2000), social accounting can be described as “the preparation and publication of an account about an organisation’s social, environmental, employee, community, customer and other stakeholder interactions and activities and, where, possible, the consequences of those interactions and activities” (Gray, 2000, p. 250). According to Golob & Bartlett (2007), disclosing the social impact of an organization is crucial, besides reporting accurate and relevant information about corporate behaviour can bring benefits both to stakeholders, organizations and society. Therefore, disclosing sustainability is the process through which companies show their commitment to CSR (Huang & Kung, 2010).

Society expectations and concerns keep changing yet still towards environmental and social interests (Latapí Agudelo et al., 2019). Hence, traditional financial reports are unable to fulfil current requirements and the various issues of public concern (Yongvanich & Guthrie, 2006). In fact, the trend surrounding

social accounting has generally been a response to stakeholder concern about the environmental, social and economic performance of organizations (Gillet, 2012). In the 1970s, social reports were often attached as a supplement to the financial statement. During the 1980s, the focus moved towards environmental issues. And, by the end of the 1990s, the reporting practice progressively started to include information regarding environmental and social performance in a joint report published alongside the conventional financial report (Hahn & Kühnen, 2013). Typically, most enterprises that disclose sustainability tend to release a stand-alone report detached from their annual financial report. However, disclosing information respecting the social and environmental dimensions with the financial statement in a single report is becoming a trend, defined as Integrated Reports (IR) (James, 2015). According to Hahn & Kühnen (2013), perhaps, only this type of report is accurately associated with sustainability reporting since these present associations between the TBL dimensions. Thus, disclosing this information in segregated reports might hide pertinent cause-effect links between the TBL dimensions.

The *KPMG International Survey of Corporate Responsibility Reporting 2020* (KPMG, 2020) proves that the practice of Sustainability Reporting (SR) has been rising. For instance, among the top 250 from the Global Fortune 500 (G250) companies, 96% have published a SR. Furthermore, in the top 100 companies of 52 nations (N100), including large and mid-cap firms, this practice reached its highest of 80% (KPMG, 2020). As the trend of disclosing sustainability information becomes popular amongst all companies, the necessity of providing accurate data increases, consequently the search for sustainability reporting assurance intensifies to present credibility (Gillet, 2012). Once again, the KPMG study reveals that the number of N100 companies investing in independent third-party assurance for their sustainability information has exceeded 50%, while the G250 companies have reached 71% (KPMG, 2020).

The global trend of SR urged the need of creating frameworks that would present guidelines and ease the process of developing reports. Besides this, it would also help in the process of comparing reports amongst companies. There is still no clear and defined format on how to perform SR. Nevertheless, there have been institutions developing frameworks and guidelines. Since the rise of the Global Reporting Initiative (GRI) in 1999, the organization suddenly became one of the leaders of SR, presenting a global benchmark for reports' structure (Brown et al., 2009). Currently, the KPMG study (KPMG, 2020) shows that the GRI guidelines remain "the most commonly used reporting standard or framework" (73% - G250 companies; 67% - N100 companies). Regarding other guidelines, the Sustainability Accounting Standards Board (SASB) framework and International Standards Organization (ISO) standards are commonly used for SR (KPMG, 2020).

Despite this, sustainability disclosing remains mostly related to MNCs. In particular, the Baumann-Pauly et al. (2013) study revealed a “sustainability reporting gap” related to company size, referring that this practice is mainly endorsed by larger companies since they aim to improve their image to the general public. In contrast, SMEs adopt informal reporting processes due to a lack of time, knowledge and financial resources to endorse proper sustainability reporting. According to Calabrese et al. (2016), for SMEs to start embracing SR frameworks, there is the need to reduce the level of resources and skills required for conforming to the standard accountability methods.

Overall, sustainability reporting “is the periodic voluntary assessment and public disclosure of sustainability information, with the purposes of assessing the efforts and progress towards sustainability of an organization, and communicating the efforts and progress in the economic, environmental and social dimensions to stakeholders” (Yalin et al., 2019).

### 2.2.1 Global Reporting Initiative

Global Reporting Initiative (GRI) is an independent organization created by an international network of members focused on helping businesses and other organizations take responsibility for their economic, environmental, and social impact (GRI, 2021a). Founded in 1997 by non-profit organizations Coalition for Environmentally Responsive Economies (CERES) and Telles Institute and, since then has become a leading guidelines’ framework for sustainability reporting by companies (Brown et al., 2009).

The mission of GRI is to ensure a future where sustainability reporting becomes a regular practice by all organizations around the world. To promote transparency by providing a wide range of standards as a common language for organizations, whether large or small, public or private, to report their economic, environmental and social impacts. By encouraging companies to be accountable for their impacts and consistent in reporting, GRI believes that can achieve its main goal, which is a more sustainable future (GRI, 2021d).

Currently, this organization encloses members from several companies of different areas, Non-Governmental Organizations (NGOs) and the United Nations Environment Program (UNEP). Diversification and variety are crucial for GRI to ensure its guidelines are achieving their purpose of meeting the needs of multiple sectors. Besides, GRI has the ambition of continuously improving its guidelines in an ongoing process. In order to do that, it has a stakeholder council, up to 50 members that are constantly evaluating how the layout of the standards and what information it should contain (Hedberg & Programme, 2003).



Initially, at the launch of GRI its main goal was to provide the first accountability mechanism to ensure companies adhere to responsible environmental conduct principles. However, within a year, the scope expanded to the TBL concept, focusing not only on environmental reporting, but covering all aspects of sustainability: economic, environmental and social (Brown et al., 2009). The first version of the GRI guidelines (G1) was published in 2000, becoming the first global framework for sustainability reporting. Later, in 2002 GRI launched G2 and, as the interest in GRI reporting from organizations steadily grew, the guidelines were broadened and upgraded, leading to G3 (2006) and G4 (2013). Finally, in 2016, GRI set the first global standards for sustainability reporting: GRI Standards. These standards continue to be updated and revised to include new topics (GRI, 2021d).

The GRI standards are currently structured in 3 universal guides (101 Foundation, 102 General Contents and 103 Management Approach) suitable for all types of organizations. Furthermore, there is a total of 33 specific guides organized by economic (200 series), environmental (300 series) and social (400 series) topics, that can be applied according to the issues relevant for the organization. According to the level of application of these standards, sustainability reports can disclose based on the core or comprehensive option (GRI, 2021c).

Additionally, the organization developed the GRI Sector Program to help identify a sector's most significant impact. These sector standards "describe the sustainability context for a sector, outline topics that are likely material for an organization based on the sector's significant impacts, and list disclosure that are relevant for the sector to report" (GRI, 2021f). The first sectors prioritized that dictated the structure of the Sector Program were oil and gas, coal, agriculture, aquaculture and fishing, due to their significant environmental, social and economic impacts. At the moment, more sectors are included in this program, such as airport operators, construction and real estate, electric utilities, event organizers, financial services, mining and metals, food processing, media and NGOs (GRI, 2021c).

Even though the only authorized language for GRI sustainability reports is English, the GRI platform provides guidelines translated into 12 languages (GRI, 2021b). This ensures that the standards are accessible to enterprises around the world. Not only the guidelines are 100% free for the general public but also GRI developed a database of sustainability reports accessible to everyone (GRI Database, 2021).

The GRI Standards emphasize the importance of providing reports that are material, thereby address topics "reflecting the organization's economic, environmental, and social impacts, or influencing the decisions of stakeholders" (GRI, 2021b). Hence, GRI recommends that companies prioritize the standards in terms of materiality, revealing their sustainability performance. For sustainability reporting

in general, the materiality analysis of sustainability issues is essential. Despite this, Hsu et al. (2013) claim that the main challenge for reporting organizations remains in “how to identify relevant issues for sustainability reporting and prioritize those material issues in accordance with stakeholder needs” since there is still a lack of a systematic evaluation framework or model to determine material issues. Especially, SMEs present unique difficulties indicating the appropriate levels of completeness for their reporting since they cannot invest the same amount of resources for sustainability reporting as MNCs (Calabrese et al., 2016).

On the whole, the GRI Standards, when applied correctly, can help strengthen competitiveness, assure communication between stakeholders and measure the negative and positive impacts of an enterprise in the world. Organizations embracing the GRI guidelines might improve performance, integration and transparency (Mendes et al., 2019).

2.2.2 Sustainable Development Goals

The publishment of the Brundtland Report by the World Commission for Environment and Development in 1987, under the title *Our Common Future*, disseminated the term sustainability (Christofi et al., 2012). This report brought one of the most widely accepted definitions for Sustainable Development (SD), describing it as the ability of humanity “to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission for Environment and Development, 1987). Dyllick & Hockerts (2002) transfigured this definition to the business level, interpreting corporate sustainability as “meeting the needs of a firm’s direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc), without compromising its ability to meet the needs of future stakeholders as well”.



Figure 4 - The Sustainable Development Goals. Retrieved from (UN, 2021a)

The 2030 Agenda for Sustainable Development was conceived in 2015, intending to provide “a shared blueprint for peace and prosperity for people and the planet, now and into the future” (UN, 2021b). At its core are the 17 Sustainable Development Goals, represented in Figure 4, as a reminder of the urgency of taking action in a global partnership. To facilitate the implementation of these goals, have been developed 169 targets and 230 indicators, which define not only a specific task of the given SDG but also the respective deadline (UN, 2021b) - Attachment 1 – 17 Sustainable Development Goals.

The UN is confident that responsible corporate behaviour encourages the achievement of the SDGs. Consequently, international organizations have suggested diversified approaches to help companies incorporate the SDGs into strategic management and sustainability reporting (Tsalis et al., 2020). In particular, GRI and UNGC recently launched a joint initiative: Reporting on the SDGs (UNGC, 2021b). It presents a practical guide for companies to simplify the process of measuring sustainability performance and introduce these goals into sustainability reporting (GRI, 2021e). Thus, empowers companies to incorporate these goals into their reporting practice and, consequently, eases the accomplishment of the SDGs.

SDG reporting can be defined as “the practice of reporting publicly on how an organization addresses the SDGs” (Rosati & Faria, 2019). According to the *KPMG International Survey of Corporate Responsibility Reporting 2020*, companies are becoming more comfortable in addressing the SDGs in their reports. In fact, 72% of G250<sup>1</sup> companies and 69% of N100<sup>2</sup> companies have connected their business activity with the SDGs in their 2020 sustainability reports (KPMG, 2020).

Overall, Sustainability Reporting is rising. Therefore, companies are required to present and prove how sustainability is embedded into their corporate vision and values, how it forms the value creation process and strategy. Besides, recently, which is the contribution that they have regarding achieving the SDGs (Izzo et al., 2020).

### 2.3 Explanatory Theories for Sustainability Disclosure

The motivations regarding the interest of companies in CSR and sustainability disclosing have been a topic of research and interpreted from different theoretical perspectives. Considering that sustainability

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<sup>1</sup> The world’s 250 largest companies by revenue as defined in the *Fortune 500 Ranking* of 2019.

<sup>2</sup> It comprises the top 100 companies by revenue in each of the 52 countries and jurisdictions researched in the *KPMG International Survey of Corporate Responsibility Reporting 2020*.

reporting remains a voluntary practice and, as this practice increases, researchers become more and more interested in understanding why this is occurring (Deegan, 2002). As a result, several theories were developed throughout the years. However, there are two theories based on the political economy perspective that have stood out due to their popularity and academic acceptance: legitimacy theory and stakeholder theory.

The political economy theory is based on the perspective where “the economic domain cannot be studied in isolation from the political, social and institutional framework within which the economic takes place” (Gray et al., 1995). Regarding the legitimacy theory and stakeholder theory, some academics disagree that these two theories should be seen as competing explanations. Gray et al. (1995) stated that:

(...) the essential problem in the literature arises from treating each as competing theories of reporting behaviour, when “stakeholder theory” and “legitimacy theory” are better seen as two (overlapping) perspectives on the issue which are set within a framework of assumptions about “political economy”. (p. 52)

Both theories consider that “the entity is assumed to be influenced by, and in turn to have influence upon, the society in which it operates” (Deegan, 2002, p. 292). The main divergence between these two theories is that the legitimacy theory views society as a whole and expects compliance with society expectations in general. While the stakeholder theory takes into consideration that society is segregated into various groups with different beliefs and expectations on how organizations should conduct their operations and, consequently, how they can affect organizations in different ways (Deegan, 2002). Despite this, one and the other identify that an open and honest dialogue between organizations and stakeholders is an important communication and management tool (Qian et al., 2011).

Furthermore, when applied as complementary, the legitimacy and stakeholder theories can enlarge the understanding of why organizations adopt the GRI framework as a disclosing mechanism of reporting practice.

### 2.3.1 Legitimacy Theory

The Legitimacy Theory (LT) is one of the most endorsed to justify and explain the motivations of CSR disclosing (Khan et al., 2013). This approach is formulated upon the idea of a social contract that, as claimed by Deegan (2002), “organizations exist to the extent that the particular society considers that they are legitimate, and if this is the case, the society “confers” upon the organization the “state” of legitimacy” (p. 292).

Within the legitimacy theory, legitimacy is deemed to be a resource that an organization depends on in order to survive (O'Donovan, 2002). Legitimacy can be defined as:

(...) a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy. (Lindblom, 1993 cited in Deegan, 2016)

Society's expectations are constantly changing what was once perceived as acceptable corporate behaviour is no longer considered sufficient. Besides this, certain events can impact an organization's reputation and, therefore, legitimacy (Deegan, 2002). Leading to the conclusion that legitimacy is a dynamic concept, as stated in the following definition:

Legitimacy is dynamic in that the relevant publics continuously evaluate corporate output, methods, and goals against an ever-evolving expectation. The legitimacy gap will fluctuate without any changes in action on the part of the corporation. Indeed, relevant publics change the corporation must make changes or the legitimacy gap will grow as the level of conflict increased and the levels of positive and passive support decreases. (Lindblom, 1994 as cited in Deegan et al., 2002)

Legitimization is linked to corporate survival. Thus, companies must adapt to these constant changes to "survive" according to the social contract. Indeed, how or whether an organization responds to legitimacy gaps is founded on a corporate's perception of what is acceptable or not by society (Deegan, 2002). Hence, organizations might not react equally to the same legitimacy gap. According to Suchman (1995), efficient legitimacy management requires different approaches adjusted to whether an organization is trying to gain, maintain or repair legitimacy. Dowling & Pfeffer (1975) identified three actions that organizations can do to become legitimate: starting to adapt their strategy and operations according to existing societal expectations; also, organizations can attempt to alter society's view, through communication, on what is acceptable and legitimate to conform with existing organizations' practices; finally, again through communication, organizations can attempt to promote their public identification with symbols, values or institutions that have vigorous social legitimacy.

Therefore, sustainability reporting might be a means to perform the strategies stated above since it can demonstrate that an organization is in conformity with society expectations or can also attempt to change society's negative perception regarding the organization (Rufino & Machado, 2017).

### 2.3.2 Stakeholder Theory

The Stakeholder Theory (ST) is considered to be a more comprehensive perspective since it does not consider society as a whole but particular groups within society – stakeholder groups (Deegan, 2002). Hence, “there will be various social contracts “negotiated” with different stakeholder groups, rather than one contract with society in general” (Deegan & Blomquist, 2006, p. 350).

According to Logsdon & Lewellyn (2000), the stakeholder concept has brought a wider view of the complexity and variety of relationships that organizations have with individuals and groups and, consequently, this concept has transformed the business paradigm. More specifically, stakeholders have been defined as “groups and individuals who benefit from or are harmed by, and whose rights are violated or respected by, corporate actions” (Freeman, 1998 cited in Branco & Rodrigues, 2007). Hence, stakeholders can include shareholders, employees, customers, lenders, suppliers, local charities, various interest groups and government. Moreover, can include future generations and the environment, depending on the broadness of the definition chosen (Deegan, 2016).

The stakeholder theory imputes accountability to organizations, extending beyond their economic performance. It implies that companies will voluntarily disclose environmental and social information beyond legal requirements (Guthrie et al., 2004).

Furthermore, according to Deegan (2016), this theory can be separated into two branches – an ethical (normative) and a managerial (positive) branch. The ethical perspective views stakeholders with intrinsic rights that should not be infringed. This perspective considers that managing a business has the purpose of benefitting all stakeholders. Even if they might or not represent improvements in the financial performance. Within the managerial perspective, enterprises identify their stakeholder groups, especially the most important and relevant to business operations. Consequently, will not respond to all stakeholder groups equally but will give emphasis to the “powerful” groups. As stated by Ullman (1985), the probability of a particular stakeholder’s expectations to be integrated into the operations of a business is directly linked to the level of importance that the respective stakeholder’s resources have for the organization. Thus, the survival perspective in the managerial stakeholder theory concludes “(...) that organisations survive to the extent that they are effective. Their effectiveness derives from the management of demands, particularly the demands of interest groups upon which the organisation depends” (Ullman, 1985, p. 552).

When considering the ethical ST, sustainability reporting is motivated to address the issues of interest of the stakeholders to whom the company has greater impact (Deegan, 2016). Alternatively, considering

the managerial ST, public reporting is associated with the expectations of specific powerful stakeholder groups (Gray et al., 1995). Either way, social disclosure is seen as a communication tool between the company and its stakeholders.

In conclusion, for companies, the insights provided by the stakeholder theory can provide guidance to determine which groups might be relevant to a particular business decision and, possibly, the main expectations that they should focus on (Deegan, 2002).

## 2.4 Sustainability Reporting supporting tools

This subchapter will describe three supporting tools for the process of sustainability reporting, which are the GRI Standards framework, Triple Layered Business Model Canvas (TLBMC) and Business Model Process and Notation (BPMN).

The GRI Standards framework provides guidelines to be used by organizations to report their impacts on the economy, the environment and society. Therefore, this tool essentially assists in defining report content and how to disclose this information. On the other hand, even though the TLBMC also supports an organization to identify its economic, environmental and social impacts, it also helps identify its TBL benefits. Consequently, it assists at bridging the gap between an organization's TBL benefits and the SDGs. Finally, BPMN serves as a tool to describe the process of sustainability reporting, standardizing the method for future reports.

### 2.4.1 GRI Standards - Framework

The GRI Standards are structured as a set of interrelated standards that “provide a balanced and reasonable representation of an organization's positive and negative contributions towards the goal of sustainable development” (GRI, 2021b).

Overall, the GRI guidelines must be used simultaneously to support the organization achieve its goal. These standards have a total of four series, divided into two main areas (Figure 5):

- **Universal Standards** – integrate the 100 series (GRI 101: Foundation, GRI 102: General disclosures and GRI 103: Management approach).
- **Topic-specific Standards** – integrate the 200 (Economic), 300 (Environment) and 400 (Social).

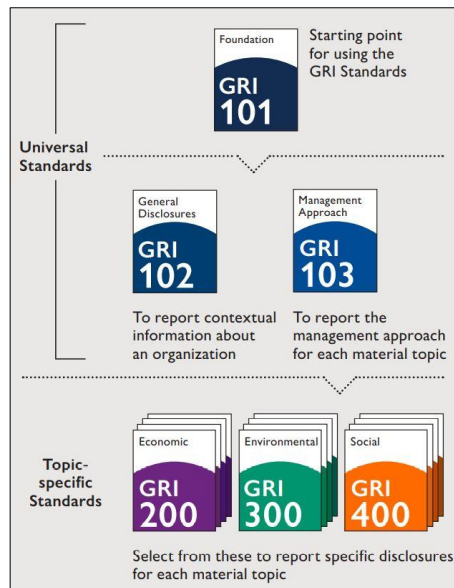


Figure 5 - Overview of the set of GRI Standards.  
Retrieved from (GRI, 2021b)

Furthermore, each standard disclosure contains specific reporting requirements and recommendations, besides a guidance section that provides explanations and demonstrates examples to facilitate comprehension.

#### 2.4.1.1 Universal Standards

The Universal Standards apply to all types of organizations and concern the overall guidelines to proceed to sustainability reporting.

#### GRI 101: Foundation

The GRI 101 is the base for an organization to proceed to sustainability reporting using the GRI guidelines. The purpose of this standard is not to provide specific items in the report. Instead, it provides self-assessment mechanisms for the activities carried out by the organization, as well as principles that must be followed to ensure disclosing transparency. Hence, the first standard is divided into three sections, explained in Table 1:

- Section 1 presents the Reporting Principles required to define report content and quality.
- Section 2 explains the procedure of using the GRI standards for sustainability reporting, by describing the fundamental requirements to apply the reporting principles, also to identify a report on the material topics.
- Section 3 describes the different forms of applying the GRI standards and the specific claims required for organizations using the standards, reflecting the degree of the appliance.



Table 1 – Disclosures of the GRI 101: Foundation.  
Adapted from (GRI, 2021b)

GRI 101: Foundation	
<b>1. Reporting Principles</b>	1.1 Defining report content
	<b>Stakeholder Inclusiveness</b> The report must identify the organization’s stakeholders and explain how it has responded to their reasonable expectation and interest. Therefore, understand the level of detail that its stakeholders expect.
	<b>Sustainability Context</b> The report must present the organization’s performance in the wider context of sustainability. It is intended for the organization to present how it contributes, or aims to contribute in the future, to the improvement or deterioration of economic, environmental, and social conditions at the local, regional, or global level.
	<b>Materiality</b> The topics addressed in the report, must reflect the significant impact economic, environmental and social impacts (positive or negative) or the ones that potentially influence the decisions of stakeholders. To identify a material topic there is the need to consider internal and external factors, including the organization’s overall mission and competitive strategy, and the concerns expressed directly by stakeholders.
	<b>Completeness</b> The report must ensure coverage of the material topics and their boundaries sufficient to reflect significant economic, environmental, and social impacts, and to enable stakeholders to assess the reporting organization’s performance in the reporting period. The concept of completeness can also refer to practices in information collection, therefore whether the presentation of information is reasonable and appropriate.
	1.2 Defining report quality
	<b>Accuracy</b> The reported information must be sufficiently accurate and detailed for stakeholders to assess the organization’s performance. Information can be reported in various different forms, hence, depending on the nature of the information and the person/organization receiving this information, the characteristics defining accuracy might vary.
	<b>Balance</b> The report must contain information that reflects positive and negative aspects to enable a reasoned evaluation of the overall performance.
	<b>Clarity</b> The reported information must be presented in a way that is understandable and accessible to stakeholders to use that information.
	<b>Comparability</b> The reported information must be selected, compiled and reported consistently. Besides, it must be easy to identify changes in the organization’s performance over time, permitting comparison with other organizations.
	<b>Reliability</b> The organization must ensure the quality and materiality of the information, allowing the feasibility of subjection to examination. Therefore, the reported information, as well as the methods and processes used in the preparation of the report, must be gathered, recorded, compiled, analysed and reported.
	<b>Timeliness</b> The reports must be published on a regular schedule. Thus, information is available in time allowing stakeholders to make informed decisions.
<b>2. Using the GRI Standards for sustainability reporting</b>	2.1 Applying reporting principles
	2.2 Reporting general disclosures
	2.3 Identifying material topics and their Boundaries
	2.4 Reporting on material topics
	2.5 Presenting information
<b>3. Making claims related to the use of the GRI Standards</b>	3.1 Using the GRI Standards as a set to prepare a sustainability report in accordance with the Standards
	<b>Core Option:</b> indicates that a report contains the minimum information needed to understand the nature of the organization, its material topics and related impacts, and how these are managed.
	<b>Comprehensive Option:</b> builds on the core option by requiring additional disclosures on the organization’s strategy, ethics and integrity, and governance. In addition, the organization is required to report more extensively on its impacts by reporting all the topic-specific disclosures for each material topic covered by the GRI Standards.
	3.2 Using selected Standards, or parts of their content, to report specific information
	3.3 Claims that a report has been prepared in accordance with the GRI Standards

## GRI 102: General Disclosures

The GRI 102 standard establishes reporting requirements on contextual information about an organization (such as organizational profile, strategy, ethics and integrity, governance, stakeholder engagement) and its sustainability reporting practices. The guidelines concerning this standard are described in Table 2.

Table 2 - Disclosures of the GRI 102: General Disclosures.  
Adapted from (GRI, 2021b)

GRI 102: General Disclosures			
Category	Disclosure Number	Disclosure Title	Option
1. Organizational Profile	102-1	Name of the organization	Core
	102-2	Activities, brands, products and services	Core
	102-3	Location of headquarters	Core
	102-4	Location of operations	Core
	102-5	Ownership and legal form	Core
	102-6	Markets Served	Core
	102-7	Scale of the organization	Core
	102-8	Information on employees and other workers	Core
	102-9	Supply chain	Core
	102-10	Significant changes to the organization and its supply chain	Core
	102-11	Precautionary Principle of approach	Core
	102-12	External Initiatives	Core
	102-13	Membership of associations	Core
2. Strategy	102-14	Statement from senior decision-maker	Core
	102-15	Key impacts, risks, and opportunities	Comprehensive
3. Ethics and Integrity	102-16	Values, principles, standards, and norms of behaviour	Core
	102-17	Mechanisms for advice and concerns about ethics	Comprehensive
4. Governance	102-18	Governance structure	Core
	102-19	Delegating authority	Comprehensive
	102-20	Executive-level responsibility for economic, environmental, and social topics	Comprehensive
	102-21	Consulting stakeholders on economic, environmental, and social topics	Comprehensive
	102-22	Composition of the highest governance body and its committees	Comprehensive
	102-23	Chair of the highest governance body	Comprehensive
	102-24	Nominating and selecting the highest governance body	Comprehensive
	102-25	Conflicts of interest	Comprehensive
	102-26	Role of highest governance body in setting purpose, values, and strategy	Comprehensive
	102-27	Collective knowledge of highest governance body	Comprehensive
	102-28	Evaluating the highest governance body's performance	Comprehensive
	102-29	Identifying and managing economic, environmental, and social impacts	Comprehensive
	102-30	Effectiveness of risk management processes	Comprehensive
	102-31	Review of economic, environmental, and social topics	Comprehensive
	102-32	Highest governance body's role in sustainability reporting	Comprehensive
	102-33	Communicating critical concerns	Comprehensive
	102-34	Nature and total number of critical concerns	Comprehensive
	102-35	Remuneration policies	Comprehensive
	102-36	Process for determining remuneration	Comprehensive
	102-37	Stakeholders' involvement in remuneration	Comprehensive
	102-38	Annual total compensation ratio	Comprehensive
102-39	Percentage increase in annual total compensation ratio	Comprehensive	
5. Stakeholder Engagement	102-40	List of stakeholder groups	Core
	102-41	Collective bargaining agreements	Core
	102-42	Identifying and selecting stakeholders	Core
	102-43	Approach to stakeholder engagement	Core

GRI 102: General Disclosures			
Category	Disclosure Number	Disclosure Title	Option
5. Stakeholder Engagement	102-44	Key topics and concerns raised	Core
	102-45	Entities included in the consolidated financial statements	Core
6. Reporting Practice	102-46	Defining report content and topic Boundaries	Core
	102-47	List of material topics	Core
	102-48	Restatements of information	Core
	102-49	Changes in reporting	Core
	102-50	Reporting period	Core
	102-51	Date of most recent report	Core
	102-52	Reporting cycle	Core
	102-53	Contact point for questions regarding the report	Core
	102-54	Claims of reporting in accordance with the GRI Standards	Core
	102-55	GRI content index	Core
	102-56	External assurance	Core

## GRI 103: Management Approach

The GRI 103 standard delineates the requirements about reporting practice regarding the approach an organization uses to manage each material topic (Table 3).

Table 3 - Disclosures of the GRI 103: Management Approach.  
Adapted from (GRI, 2021b)

GRI 103: Management Approach			
Category	Disclosure Number	Disclosure Title	Option
Management Approach	103-1	Explanation of the material topic and its Boundary	Core (for each material topic)
	103-2	The management approach and its components	Core (for each material topic)
	103-3	Evaluation of the management approach	Core (for each material topic)

There are exceptions to this standard which are the topic-specific 303 - Water and Effluents, 306 - Waste and 403 - Occupational Health and Safety. Particularly, these standards incorporate specific topics respecting the management approach.

### 2.4.1.2 Topic-specific Standards

Subsequently, once the sustainability material topics have been identified, the reporting organization can initiate disclosing that information. Therefore, the GRI created the Topic-specific Standards to assist organizations in reporting their economic, environmental and social impacts.

In particular, to ensure the core option for these standards, organizations are required to report the material topics, which will vary among organizations.

## 200 – Economic

According to the GRI Standards, the economic dimension of sustainability concerns not only an organization’s impacts on the economic conditions of its stakeholders but also on the economic systems at local, national and global levels. In other words, the economic guidelines “address the flow of capital among different stakeholders, and the main economic impacts of an organization throughout society” (GRI, 2021b). Therefore, the 200 series disclosures (Table 4) embody an organization’s economic performance, market presence, indirect economic impacts, procurements practices, anti-corruption, anti-competitive behaviour and tax.

Table 4 - Disclosures of the GRI 200: Economic.  
Adapted from (GRI, 2021b)

GRI 200: Economic		
Category	Disclosure Number	Disclosure Title
201 - Economic Performance	201-1	Direct economic value generated and distributed
	201-2	Financial implications and other risks and opportunities due to climate change
	201-3	Defined benefit plan obligations and other retirement plans
	201-4	Financial assistance received from government
202 – Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage
	202-2	Proportion of senior management hired from the local community
203 – Indirect Economic Impacts	203-1	Infrastructure investments and services supported
	203-2	Significant indirect economic impacts
204 – Procurement Practices	204-1	Proportion of spending on local suppliers
205 – Anti-corruption	205-1	Operations assessed for risks related to corruption
	205-2	Communication and training about anti-corruption policies and procedures
	205-3	Confirmed incidents of corruption and actions taken
206 - Anti-competitive Behaviour	206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices
207 - Tax	207-1	Approach to tax
	207-2	Tax governance, control and risk management
	207-3	Stakeholder engagement and management of concerns related to tax
	207-4	Country-by-country reporting

## 300 – Environment

GRI Standards (2021b) define that the “environmental dimension of sustainability concerns an organization’s impacts on living and non-living natural systems, including land, air, water and ecosystems”. Consequently, the 300 series, represented in Table 5, include guidelines for materials, energy, water and effluents, biodiversity, emissions, waste, environmental compliance and supplier environmental assessment.

Table 5 - Disclosures of the GRI 300: Environment.  
Adapted from (GRI, 2021b)

GRI 300: Environment		
Category	Disclosure Number	Disclosure Title
301 - Materials	301-1	Materials used by weight or volume
	301-2	Recycled input materials used
	301-3	Reclaimed products and their packaging materials
302 - Energy	302-1	Energy consumption within the organization
	302-2	Energy consumption outside of the organization
	302-3	Energy intensity
	302-4	Reduction of energy consumption
	302-5	Reductions in energy requirements of products and services
303 – Water and Effluents	303-1	Interactions with water as a shared resource
	303-2	Management of water discharge-related impacts
	303-3	Water withdrawal
	303-4	Water discharge
	303-5	Water consumption
304 - Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
	304-2	Significant impacts of activities, products, and services on biodiversity
	304-3	Habitats protected or restored
	304-5	IUCN Red List species and national conservation list species with habitats in areas affected by operations
305 - Emissions	305-1	Direct (Scope 1) GHG emissions
	305-2	Energy indirect (Scope 2) GHG emissions
	305-3	Other indirect (Scope 3) GHG emissions
	305-4	GHG emissions intensity
	305-5	Reduction of GHG emissions
	305-6	Emissions of ozone-depleting substances (ODS)
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions
306 - Waste	306-1	Waste generation and significant waste-related impacts
	306-2	Management of significant waste-related impacts
	306-3	Waste generated
	306-4	Waste diverted from disposal
	306-5	Waste directed to disposal
307 – Environmental Compliance	307-1	Non-compliance with environmental laws and regulations
308 – Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria
	308-2	Negative environmental impacts in the supply chain and actions taken

## 400 – Social

Respecting the social dimension of sustainability, the GRI Standards (2021b) refer that it “concerns an organization’s impacts on the social systems within which it operates”. Thus, the 400 series is the most extensive topic-specific standard, encompassing 19 different social categories represented in Table 6.

Table 6 - Disclosures of the GRI 400: Social.  
Adapted from (GRI, 2021b)

400 - Social		
Category	Disclosure Number	Disclosure Title
401 - Employment	401-1	New employee hires and employee turnover
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees
	401-3	Parental leave
402 – Labour/Management Relations	402-1	Minimum notice periods regarding operational changes
403 – Occupational Health and Safety	403-1	Occupational health and safety management system
	403-2	Hazard identification, risk assessment and incident investigation
	403-3	Occupational health services
	403-4	Worker participation, consultation, and communication on occupational health and safety
	403-5	Worker training on occupational health and safety
	403-6	Promotion of worker health
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
	403-8	Workers covered by an occupational health and safety management system
	403-9	Work-related injuries
	403-10	Work-related ill health
404 – Training and Education	404-1	Average hours of training per year per employee
	404-2	Programs for upgrading employee skills and transition assistance programs
	404-3	Percentage of employees receiving regular performance and career development reviews
405 - Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees
	405-2	Ratio of basic salary and remuneration of women to men
406 – Non-discrimination	406-1	Incidents of discrimination and corrective actions taken
407 - Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
408 – Child Labour	408-1	Operations and suppliers at significant risk for incidents of child labour
409 - Forced or Compulsory Labour	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour
410 – Security Practices	410-1	Security personnel trained in human rights policies or procedures
411 - Rights of Indigenous Peoples	411-1	Incidents of violations involving rights of indigenous peoples
412 - Human Rights Assessment	412-1	Operations that have been subject to human rights reviews or impact assessments
	412-2	Employee training on human rights policies or procedures
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening
413 – Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs
	413-2	Operations with significant actual and potential negative impacts on local communities
414 - Supplier Social Assessment	414-1	New suppliers that were screened using social criteria
	414-2	Negative social impacts in the supply chain and actions taken
415 – Public Policy	415-1	Political contributions
416 - Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services
417 - Marketing and Labelling	417-1	Requirements for product and service information and labelling
	417-2	Incidents of non-compliance concerning product and service information and labelling
	417-3	Incidents of non-compliance concerning marketing communications
418 - Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data
419 - Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area

## 2.4.2 Triple-Layered Business Model Canvas

The business model has been deemed for years as a fundamental tool to design and describe the process of value creation in business activities (García-Muiña et al., 2020). In particular, Shafer et al. (2005) have defined a business model as “the representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network”.

Meanwhile, with the evolution of this definition, there was an increased interest in how to formally display a business model (García-Muiña et al., 2020). Hence, the Business Model Canvas (BMC) was originally introduced by Osterwalder, Pigneur and Clark (2010) and remains until today one of the most widely used business model representations. The concept “must be simple, relevant, and intuitively understandable, while not oversimplifying the complexities of how enterprises function” (Osterwalder et al., 2010, p. 15). Therefore, the BMC includes nine basic blocks (key partnerships, key activities, key resources, value proposition, customer relationships, customer segments, channels, cost structure and revenue streams) that describe the logic behind wherewith a company expects to generate profit.

Nowadays, organizations urge to incorporate into their business practices the TBL perspective. For this reason, a new tool had to be created to explicitly integrate the economic, social and environmental value into a comprehensive approach of corporate sustainability (Joyce & Paquin, 2016). In 2016, the Triple Layered Business Model Canvas (TLBMC) was designed, offering “the opportunity for users to explicitly address a triple bottom line where each canvas layer is dedicated to a single dimension and together they provide a means to integrate the relationships and impacts across layers” (Joyce & Paquin, 2016, p. 1476).

### *Economic Layer*

The TLBMC complements and enlarges the traditional economic-oriented BMC, adding two new layers - social and environmental. Thus, the visual representation of the economic layer is the same as the conventional BMC (Figure 6).

As has already been mentioned, this layer integrates nine basic building blocks (Osterwalder et al., 2010):

- **Customer segments:** characterize the different groups of people or organizations an enterprise intends to reach and assist, segmenting distinct categories by common needs, common behaviour and other attributes.
- **Value propositions:** define the products and services that generate value for a specific customer segment.

- **Channels:** methods used to communicate with and reach the customer segment to deliver the value proposition.
- **Customer relationships:** description of the types of relationships a company establishes with specific customer segments.
- **Revenue streams:** represents the profit generated by each customer segment.
- **Key resources:** embody the most important assets required to make a business model work and can be physical, financial, intellectual or human.
- **Key activities:** embody the most important operations a company must perform to make the business model work.
- **Key partnerships:** include the network of suppliers and partners that make the business model work.
- **Cost structure:** costs encountered to operate a business model.










Key Partnerships	Key Activities	Value Proposition	Customer Relationship	Customer Segments
				
	<b>Key Resources</b>		<b>Channels</b>	
				
<b>Cost Structure</b>		<b>Revenue Stream</b>		
				

Figure 6 - Conventional Business Model Canvas.  
Adapted from (Osterwalder et al., 2010)

### *Social Layer*

The social layer of the TLBMC (Figure 7) aims to broaden the conventional BMC through a stakeholder approach to enable the analysis of the mutual relationships between stakeholders and the organization. Furthermore, it helps to identify the major impacts that originated from those relationships. Essentially, a



stakeholder management approach aims to balance stakeholders' interests instead of only considering the maximum gain for the organization itself (Joyce & Paquin, 2016).

Respecting the nine blocks presented in the social layer, these are:

- **Social value:** represents the mission of an organization towards creating benefits for its stakeholders and society in general.
- **Employees:** this section highlights the importance and the role of employees as core organizational stakeholders. For instance, this segment can present the number and types of employees, salient demographics such as variations in pay, gender, ethnicity, and education within the organization. As well as employee-oriented programs, in particular, training, professional development and additional support programs.
- **Governance:** this component demonstrates the organizational structure and the decision-making policies of a firm.
- **Communities:** an organization's suppliers and its local communities build social relationships. The success of an enterprise can be positively affected if organizations maintain and develop mutually beneficial relationships with local communities.
- **Societal culture:** this section aims to assist an organization in acknowledging the potential impact it has on society, in general, besides how it can influence society through its behaviour.
- **Scale of outreach:** characterizes the extent of an organization relationship with its stakeholders through its conduct over time. It can represent the effort of investing in long-term, integrative relationships and the outreach of the impact geographically, besides, if it addresses societal differences.
- **End-users:** this complement takes into consideration how the value proposition attends to the needs of the end-user, in other words, how it contributes to the quality of life. End-users can be segmented according to similar needs.
- **Social impacts:** this component addresses the social cost of an organization. For example, working hours, cultural heritage, health and safety, community engagement, fair competition, respect of intellectual property rights, etc. Even though there is still not a consensus on what can or not be considered, it is clear that depends on the nature of the organization, therefore, some firms might need to create their indicators.
- **Social benefits:** this section refers to the social benefits which come from an organization's actions and can also be characterized in a wide variety of indicators.

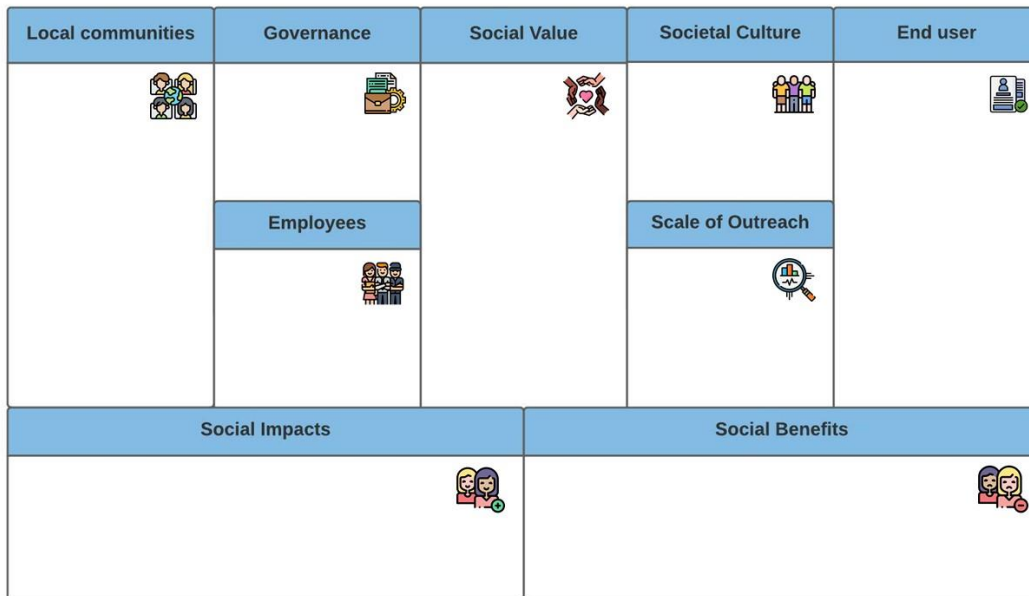


Figure 7 - Social Layer of the TLBMC.  
Adapted from (Joyce & Paquin, 2016)

### *Environmental Layer*

The environmental layer of the TLBMC (Figure 8) aims at assisting an organization in acknowledging how it can generate more environmental benefits than impacts. Through this practice, a company has better knowledge of its biggest environmental impacts and, therefore, knows where to focus its attention when creating environmentally-oriented innovations (Joyce & Paquin, 2016).

Hence, the nine blocks identified in this layer are:

- **Functional value:** describes the focal outputs of a product or service. Essentially to identify what is being examined and to serve as a baseline for exploring the impacts of alternative potential business models.
- **Materials:** this section is an extension of the key resources presented in the traditional BMC. Thus, materials refer to the bio-physical stocks consumed to provide the functional value.
- **Production:** this component is an extension of the key activities presented in the traditional BMC. It describes the organization's actions performed to create value, characterizing those which are core to the organization, and which have a high environmental impact.
- **Supplies and outsourcing:** illustrate all the other various material and production activities necessary for the functional value but not considered core to the organization.
- **Distribution:** similar to the channels block in the traditional BMC, it involves the transportation of goods.

- **Use phase:** concerns the impact of the participation of the client in the functional value. For instance, this can include, when relevant, maintenance and repair of products, besides the material resource and energy requirements of the clients through use.
- **End-of-life:** represents the phase when the client chooses to end the consumption of the functional value and usually causes concerns respecting material reuse such as remanufacturing, repurposing, recycling, disassembly, incineration or product disposal. This section encourages the organization to explore ways to manage its impact through expanding its accountability beyond the initially conceived value of its products.
- **Environmental impacts:** this component addresses the ecological costs of an organization respecting its actions. For example, these costs can be measured as CO<sub>2</sub>eq emissions and other emissions, human health, ecosystem impact, natural resource depletion, water consumption and energy consumption.
- **Environmental benefits:** this section encompasses the ecological value the organization creates through environmental impact reductions and even regenerative positive ecological value.










Supplies and out-sourcing	Production	Functional Value	End of life	Use phase
				
	<b>Materials</b>		<b>Distribution</b>	
				
<b>Environmental Impacts</b>		<b>Environmental Benefits</b>		
				

Figure 8 - Environmental Layer of the TLBMC.  
Adapted from (Joyce & Paquin, 2016)

### 2.4.3 Business Process Model and Notation

The Business Process Management Initiative (BPMI) developed, in 2004, the Business Process Model and Notation (BPMN) language to represent the graphical layout of business processes, which was later adopted as a standard by the Object Management Group (OMG) (Freitas & Pereira, 2008).

The main goal of BPMN is to provide a standard notation for communication that essentially overcomes the barrier between process design and process implementation (OMG, 2021). Therefore, this notation enables organizations with the capabilities of understanding their internal and/or external business processes, as well as the ability to communicate between business processes.

Later, in 2011, the model was upgraded to the BPMN 2.0, remaining until today as a standard for graphic representation of business processes (OMG, 2011). This version adds “an extensive mechanism that allows attaching additional attributes and elements to its original elements” (Stroppi et al., 2011, p. 59).

BPMN 2.0 provides five different notation categories, intending to simplify the understanding of the diagram through easy recognition of the basic types of elements. These categories are flow objects, swimlanes, artefacts and connectors (OMG, 2011).

### *Flow Objects*

In this category, these elements are the graphic representation that defines the behaviour of business processes. The flow objects are divided into three groups (OMG, 2011):

- **Event:** defined as something that “happens” during the flow of the process, affecting the flow of the model. Usually, these events have a cause (trigger) or an impact (result). Based on when these elements affect the flow, they can be one of three types: start, intermediate and end (Figure 9).

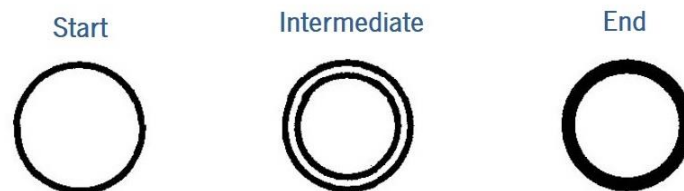


Figure 9 - Graphic representation of Events.  
Adapted from (White & Miers, 2008)

- Start event - demonstrate where the process will start and might or might not be caused by a trigger. This trigger can be a predefined time, a message or an external signal (core start events). Furthermore, there are advanced start events: conditional, when the trigger is a condition that must be satisfied for the process to start; multiple, when there is more than one trigger at the same time (Figure 10).

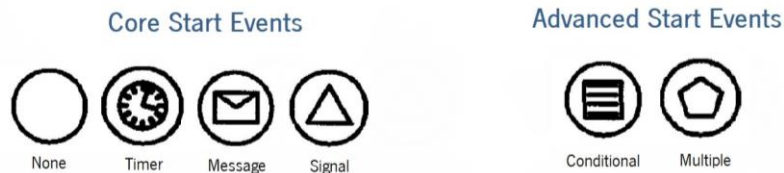


Figure 10 – Graphic representation of Start Events.  
Adapted from (White & Miers, 2008)

- Intermediate event – placed within the process flow to represent things that “happen” during the process. This type of event can either throw or catch the event, besides presents core and advanced events as well (Figure 11).

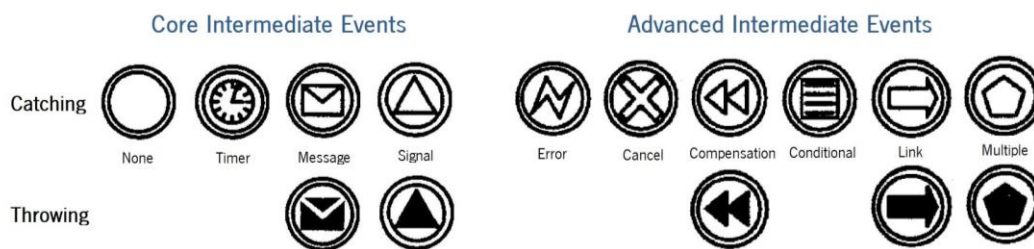


Figure 11 - Graphic representation of Intermediate Events.  
Adapted from (White & Miers, 2008)

- End event – marks where a process or a “path” within the process ends. Besides this, all end events are “throw” results. Similar to the others, it includes core and advanced end events (Figure 12).

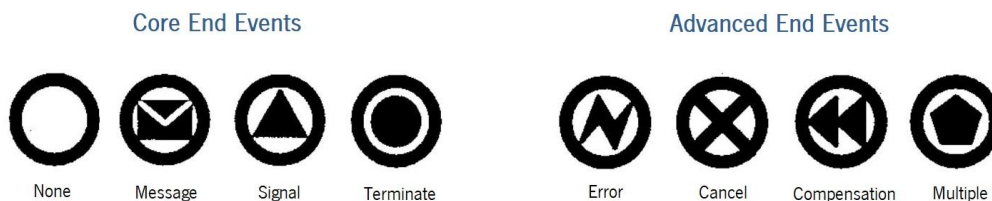


Figure 12 – Graphic representation of End Events.  
Adapted from (White & Miers, 2008)

- **Activity:** serves as a form of representing the work performed with a process. Typically takes some time to execute, might require one or more resources and can involve some sort of input or output. An activity can be displayed in two different types: as a task, the lowest level of detail in the diagram; or sub-process, a compound activity that expands to another business process (Figure 13).

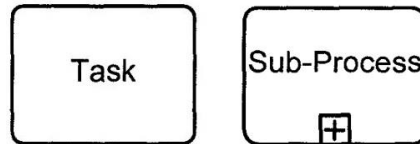


Figure 13 – Graphic representation of Activities.  
Adapted from (White & Miers, 2008)

- **Gateway:** modelling elements that dictate how the process diverges or converges. Besides, according to the decision type, there are different gateways (Figure 14).
  - Exclusive – splitting: depending on the sequence flow condition, there will be only one outgoing path; merging: any incoming path will pass through the gateway.
  - Parallel – splitting: will proceed to all outgoing paths; merging: the gateway will wait for all incoming paths.
  - Event – splitting: if a specified event occurs, then there will be one outgoing path; merging: any incoming path will pass through the gateway.
  - Inclusive – splitting: depending on the sequence flow condition, there will be one or more outgoing paths; merging: the gateway will wait from one or more incoming paths.
  - Complex – similar to the inclusive gateway, the difference is that the gateway has a specific condition.



Figure 14 – Graphic representation of Gateways.  
Adapted from (White & Miers, 2008)

### *Swimlanes*

Swimlanes split and organize activities, as a means of displaying the different roles and responsibilities (Figure 15).

- **Pool:** represents a participant in the business process.
- **Lane:** represents the divisions within a pool, based on the process or its elements.



Figure 15 – Graphic representation of Swimlanes.  
Adapted from (White & Miers, 2008)

### Artefacts

Artefacts contribute as a mechanism to present additional information about a process outside of the central flowchart. BPMN features three types of artefacts (Figure 16):

- **Data Objects:** portray the documents and data used in the process and can be presented as an output or input.
- **Groups:** used to highlight or categorize a group of flow objects.
- **Text Notations:** the modeller can add descriptive information or notes respecting the process.

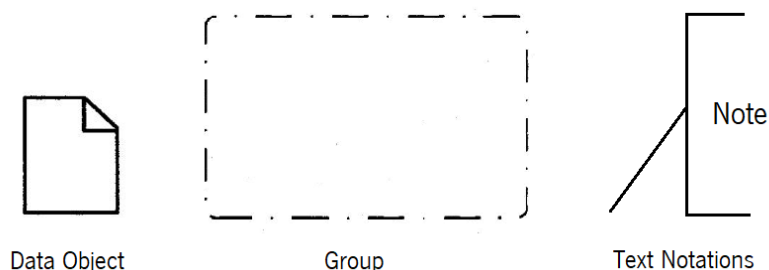


Figure 16 - Graphic representation of Artifacts.  
Adapted from (White & Miers, 2008)

### Connectors

Connectors link two objects in a diagram. There are three different types (Figure 17):

- **Sequence Flow:** determine the order of flow objects.
- **Message Flow:** define the flow of communication between participants or entities.
- **Association:** links artefacts with other diagram objects.

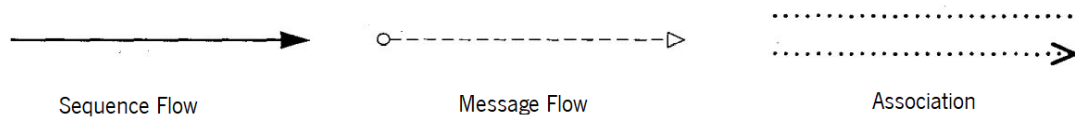


Figure 17 - Graphic representation of Connectors.  
Adapted from (White & Miers, 2008)

Furthermore, considering these five categories of elements from BPMN, Silvers (2011) identified three different levels of process modelling applicability:

- **Descriptive Modelling (Level 1):** implemented to simplify the representation of the process flow, mainly used to communicate the state of the model and for manual deployment. Easy to communicate across the organization, linked to the description of processes – most use of BPMN is at this level (requires an understanding of pools and lanes, tasks and subprocesses, and sequence flows).
- **Analytic Modelling (Level 2):** this level shows all steps of the process including exception paths (requires an understanding of various decision and merge patterns, events, and exception handling patterns).
- **Executable Modelling (Level 3):** flowcharts containing sufficient information that permit the simulation of the process. Also, it presents information that is not detailed on the diagram that enables direct execution or import into other tools that could execute that process.



### 3. COMPANY UNDER STUDY

#### 3.1 Fehst Componentes Lda.

*Fehst Group* is a family-owned industrial group based in Braga, Portugal and covers different businesses by incorporating: *Fehst Componentes, Lda.* (FCL) - manufacturing car interior decorative components; *Enancer Electrónica S.A.* - developing technological automation solutions for smart homes and smart hotels under the brand ONLY Smart Buildings; *Siroco* - developing and building industrial automation solutions and equipment.

*Fehst Componentes, Lda* (FCL) is the largest company under the *Fehst Group*, was founded in 1995 with origin on a management buyout of *Grundig Componentes*. At that stage, FCL had to compete with the far east market prices, flexibility and agility. Having at the first starting years Grundig Car Audio as its only client, the most important key factor to ensure FCL's sustainability was the pursuit to acquire new customers. This was consolidated through diversification of activities in terms of technology portfolio enlargement and market widening. Since then, FCL has kept evolving and learning. Soon became one of the most important automotive suppliers in Portugal.



Figure 18 - FCL's Logo

##### 3.1.1 Product Scope

FCL specializes in producing plastic interior decorative components for automobiles, such as centre stack HMI panels, steering wheel switches, roof switch modules, door switch modules and other switches and controls. The company's product scope is represented in Figure 19.

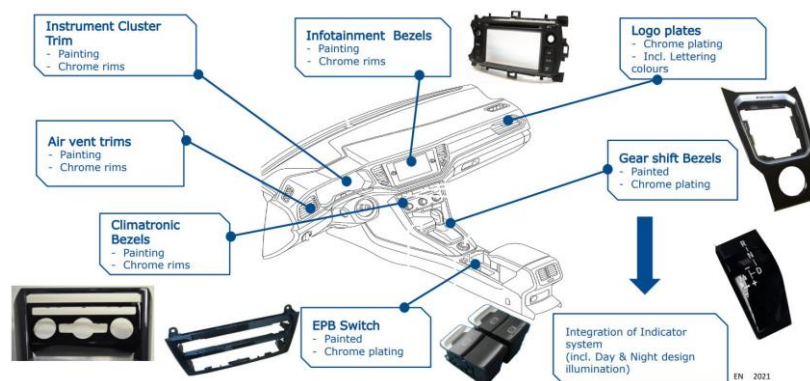


Figure 19 – FCL's Product Scope

### 3.1.2 Production Processes

To produce precision parts with high-level requirements of mechanical function and aesthetical finishing, FCL must have top-level manufacturing technologies. The company's current production processes are explained below.

#### *Plastic Injection Moulding*

The injection moulding cell automation level can vary according to specific project parameters to offer an optimum economic solution.

- Electric injection moulding 20 - 500 t
- 2K injection moulding 75 - 500 t
- 3K injection moulding 100 t

#### *Automatic Painting*

The flat-bed spray painting lines are installed in controlled environment rooms, allowing for high-level quality surface finishes. Besides this, FCL has extensive teamwork experience with the main paint material suppliers nominated by Original Equipment Manufacturers (OEMs), so that they provide the best solutions. Offering expertise in the design of masking systems or painting jigs for efficient processing according to project specifications.

- Flatbed for the conventional curing paint system
- Flatbed for UV curing: mono cure
- Dry Ice Blasting (CO<sub>2</sub> pre-cleaning process)
- Waterborne paint systems
- Partial painting surfaces with a masking system

#### *Chrome Plating*

The galvanic chrome plating line is equipped with state-of-the-art process controls and environmental protection systems and is capable of fulfilling all OEMs requirements.

- Chrome VI
- Chrome III with Sulphate-based bath
- Chrome III with Chloride-based bath (testing)

#### *Surface and Printing Technologies*

- Laser Etching for day and night design with automatic positioning
- Pad Printing

- Screen printing

### *Automatic Assembly Lines*

FCL has the expertise and capability of setting up assembly lines with varying sizes, complexity and levels of automation – from manual workstations to fully integrated stand-alone assembly cells. As a system supplier, it aims to deliver complex assemblies with zero defects. Therefore, the assembly lines have fool-proof safeguards and hi-tech inspection processes with vision and laser systems that were developed through partnerships with research institutions.

- Thorough inspections with vision and laser systems
- Fool detection systems

### 3.1.3 Certifications

The scope of FCL's Management System – Quality, Environment, Health and Safety at work and Information Security – aims at developing and producing plastic parts by injection, surface finishes, assembling modules/mechanical products and chrome plating plastic parts, considering the requirements of relevant stakeholders, besides their potential risks and impacts. Therefore, as a company in the automotive sector, FCL must ensure very rigorous quality standards and certifications. Currently, the company has the following certifications:

- ISO 9001:2015 Quality Management Systems
- ISO 14001:2015 Environmental Management Systems
- IATF 16949:2016 Automotive Quality Management Systems
- TISAX - Trusted Information Security Assessment Exchange

## 4. MATERIALITY ASSESSMENT

Materiality is a concept derived from financial accounting, that aims at differentiating between financially influential activities and those that carry no financial risk (Ortar, 2019). In terms of sustainability reporting, this concept is highly associated with the stakeholder theory since the prioritization process includes stakeholders' perspectives.

The first stage of preparing a sustainability report is to identify the relevant topics that it must address. For instance, in financial reporting, the materiality concept represents the threshold for influencing the economic decisions of those using an organization's financial statements (Gelmini et al., 2015). A similar notion is also relevant for sustainability reporting, except it concerns a wider range of impacts, integrating economic, environmental and social matters. In sustainability reporting, materiality establishes the relevant topics which are sufficiently important that it is essential to report on them. And, since not all material aspects are equally important, the report must underline based on priority (GRI, 2021b).

As previously mentioned, the GRI Standards define principles to disclose on sustainability and, among these are two particular principles related to materiality and the prioritization of topics, which are: the stakeholder inclusiveness principle, concerning the identification of stakeholders and the explanation of how the company responds to their expectations; and the materiality principle which corresponds to the topics addressed in the report that must reflect the organization's economic, environmental and social impacts, or influence the decisions of stakeholders (GRI, 2021b). The purpose of these principles is to provide stakeholders with relevant, complete and coherent information for the assessment of the organizations' performance. The GRI guidelines define stakeholders as:

(...) entities or individuals that can reasonably be expected to be significantly affected by the reporting organization's activities, products, or services; or whose actions can reasonably be expected to affect the ability of the organization to implement its strategies or achieve its objectives. This includes, but is not limited to, entities or individuals whose rights under law or international conventions provide them with legitimate claims vis-à-vis the organization. (GRI, 2021b)

Thus, a combination of internal and external factors is considered when determining whether a topic is material. These encompass the company's overall mission and strategy, besides the interests declared by stakeholders. The Materiality Matrix proposed by the GRI guidelines presents two axes - the vertical concerns the influence on stakeholder assessments and decisions; the horizontal axle represents the significance of economic, environmental and social impacts. Indeed, the use of the exact matrix displayed

in Figure 20 is not required. However, it is necessary to take into consideration the two dimensions to identify material topics (GRI, 2021b).

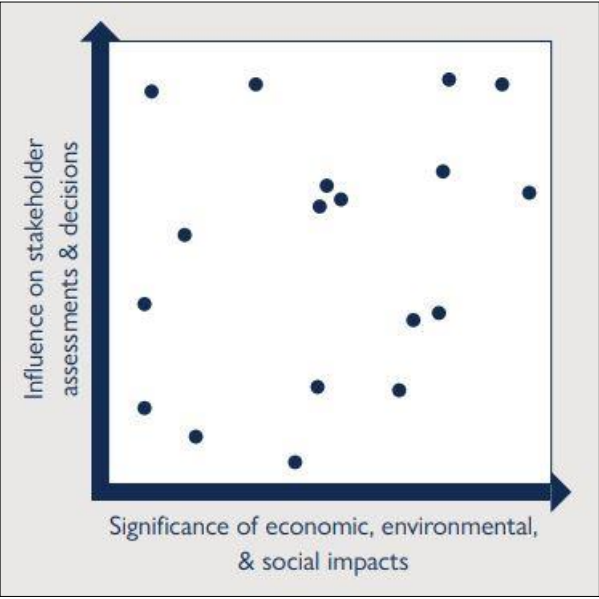


Figure 20 - GRI Materiality Matrix - Visual representation of prioritization of topics. Retrieved from (GRI, 2021b)

Additionally, the materiality assessment can also assist as an approach for organizations' strategic planning. According to Saenz (2019), this analysis represents a crucial element in creating shared value by helping identify the most relevant issues for the long-term maximization of value.

Considering this, the materiality process conducted to develop FCL's sustainability report contemplates two dimensions - a benchmark analysis of the automotive sector and FCL's internal stakeholders' considerations. The purpose of resorting to a benchmark tool is not only linked to the limitations faced by SMEs respecting the resources required to prepare the report but also because it is FCL's first time disclosing sustainability.

Overall, the purpose of materiality assessment in sustainability reporting is to identify, select and prioritize the topics that are the most important for the company and its stakeholders. This chapter describes the selected approach to materiality and the respective materiality matrix. The explained method aims to reduce the complexity level associated with SMEs' materiality assessment and, consequently, overcome the time and financial constraints often faced when conducting this analysis.

## 4.1 Benchmark Analysis

The benchmark method was elected, as previously mentioned, considering the challenges faced by SMEs in terms of sustainability reporting. Considering that this is FCL's first report, it is crucial to primarily consolidate the basic reporting requirements and then refine the process, enabling a future wiser choice with lower risk when allocating more resources to this analysis, which involve higher expenses. Thereby, the goal is to prospectively maintain direct contact with external stakeholders to quantify the vertical axle.

Given the current conditions, a benchmark analysis is the best option. This method will reflect the importance level of specific topics to the automotive sector since it will consider SR's materiality matrixes of companies in this industry. However, OEMs are the primary organizations of the automotive business that have the financial resources to publish and develop high-quality sustainability reports. Therefore, it will mainly consider OEMs perspectives, which is not entirely inaccurate given that these companies dictate the course of the automotive industry.

### 4.1.1 Sustainability Reports considered

Before proceeding to the assessment, it is necessary to select which companies will integrate this benchmark and, the goal was to include FCL's suppliers and clients in the analysis. However, as mentioned previously, there is still a gap in sustainability reporting and, OEMs remain the leading organizations performing this assessment.

Hereupon, the following 13 companies were the ones selected to the benchmark, considering their latest published report until March of 2021:

- TMG 2019
- Simoldes 2018
- Ford 2020
- FCA 2020
- Valeo 2017
- Gestamp 2019
- PSA 2019
- Renault 2017
- Honda 2020
- Hyundai 2019
- Bosch 2019
- GF 2019
- Volkswagen 2019

### 4.1.2 Benchmark Process

The materiality matrix of the reports mentioned above will be the primary resource for the benchmark assessment design. After the sustainability reports have been selected and analysed it is necessary to gather their matrixes.

Firstly, there was a need for standardization of the matrixes' assessment process. Thereby, to evaluate the topics' relevance according to the horizontal and vertical axis, it was formulated a hypothetical division of the matrixes (Figure 21) with different ponderations allocated to each section (Table 7).

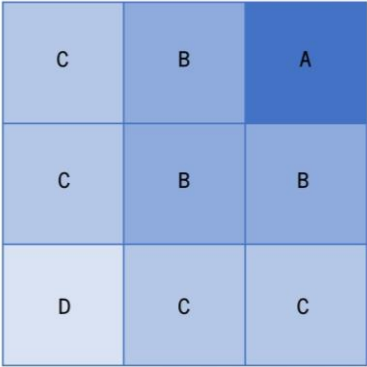


Table 7 – Ponderation of each section

Section	Weight A
A	1
B	0,7
C	0,3
D	0,1

Figure 21 - Materiality Matrix division: sections A, B, C and D

Every matrix was proportionally segregated into four sections according to each axle (consider TMG and Ford matrixes examples in Figure 29 and Figure 30, respectively, of Appendix 1). Topics located at the top of both horizontal and vertical axle - section A, more specifically, topics that have the highest significance level to external stakeholders, as well as to the company's business impact - will reflect an overall highest significance, retaining the maximum ponderation. A ponderation was assigned to each topic based on its position in the matrix.

Considering the differentiation level of these reports, it was necessary to connect topics and designate appropriate categories. Therefore, taking into account the categories mentioned in these reports the following ones were denominated:

- Environmental and Climate Impact
- Employees and Society
- Technology and Innovation
- Business Operations

To ensure the suitability of the benchmark results, it was considered relevant to assign different weights to the companies. Consequently, the analysis will not merely reflect the automotive sector perspective but will highlight the perspective of the organizations in FCL's value chain according to their impact on FCL's business. Different weights were assigned to each company, these weights were established in agreement with FCL representatives and are displayed in Table 8.

Table 8 - Companies' weights

Company	Weight B
TMG	0,5
Simoldes	2
Ford	0,5
FCA	0,5
Valeo	1
Gestamp	0,5
PSA	2
Renault	0,75
Honda	0,5
Hyundai	0,5
Bosch	2
GF	0,25
Volkswagen	2

The topics were gathered by subcategories due to the differentiation level and expressions used in these reports. Topics that, even though have different designations, resemble identical ideas were aggregated in on single subcategory. These subcategories were mainly defined considering the designations presented in the 14 sustainability reports. Additionally, since different reports embody different subcategories, to emphasize the most referred subcategories, weighting criterion was also developed, according to the degree of frequency wherewith were referred (Table 9).

Table 9 - Degree of frequency: subcategories in reports

Number of times	Weight C
13 – 11	1
10 – 8	0,9
7 – 5	0,8
4 – 2	0,7
1	0

To sum up, each topic score takes into account its position in the matrixes, the level of influence that the company of the SR has on the FCL value chain and, finally, the number of times the topic has been referred. Thus, subcategory scores are measured according to equation 1:

$$\text{Subcategory score} = 10 \times \text{Weight A} \times \text{Weight B} \times \text{Weight C} \quad (1)$$

For more information respecting this process, Appendix 1 demonstrates in more detail the excel used for this scoring system.

#### 4.1.3 Results

Considering the process described previously, the results displayed in Table 10, represent the subcategories final scores obtained from the benchmark analysis of the automotive sector. Furthermore,



it should be noted that the scores' scale is from 0 to 10, where 0 stands for no significance and 10 stands for maximum significance.

Table 10 - Results from the benchmark analysis of the automotive sector

Category	Subcategory	Score
Environmental and Climate impact	Air emissions	8,42
	Resources Management	6,73
	Energy	7,54
	Waste	6,27
	Water and Effluents	5,83
	Biodiversity	1,46
	Environmental Management System	6,56
Employees and Society	Training and Professional Development	6,54
	Occupational Health and Safety	7,56
	Quality of employment	7,45
	Diversity and equal opportunities	7,73
	Human Rights	5,88
	Community Engagement and Philanthropy	5,18
Technology and Innovation	Mobility	8,97
	Innovation	7,10
	Sustainable Product Development	7,13
Business Operations	Ethics and Integrity	9,80
	Cybersecurity and Data Protection	6,57
	Product Quality and Safety	3,83
	Clients Relationship Management	7,09
	Supply Chain	7,84
	Financial performance	5,25
	Governance	6,15
	Regulatory compliance	3,33
	Risk management	1,52
	Brand	4,43

## 4.2 Internal Stakeholders Considerations

The horizontal axle reflects the level of importance and impact that the topics have on FCL's business. To obtain accurate information, it was necessary to attend to internal stakeholders' considerations. Concretely, Internal Stakeholders (IS) comprehend individuals or groups within an organization integrating employees, owners, shareholders and administration who have a particular interest in the company since they can be influenced by the success or failure of the entity. For this reason, the feedback of these groups is the one that best reflects the business circumstances.

### 4.2.1 FCL Internal Stakeholders

The first step to quantify the relevant topics for FCL's business was to identify the internal stakeholder that would provide feedback to this analysis. Along with the company, the choice was to only consider department managers and the CEO since this is its first sustainability report. Despite this, the aim for

future reports is to include more individuals to obtain broader information and improve reporting transparency and accuracy. Hence, to disclose the organization’s sustainability impacts were identified the subsequent 14 individuals:

- CEO
- Managers of the following departments:
  - Research and Innovation
  - Research and Development
  - Purchasing
  - Project Management and Industrialization
  - Production
  - Chrome Plating Process
  - Injection Process
  - Quality Control
  - Information Technology
  - Logistics
  - Human Resources
  - Controlling
  - Occupational Health, Safety and Environment

4.2.2 Data Collection Process

Subsequently to the selection of FCL internal stakeholders followed the design of the data collection process. However, as the first time disclosing on sustainability, before starting to gather information, it was mandatory to perform an informational session respecting sustainability reporting, the questionnaire and, even more important, respecting the materiality assessment. Thereby, it is possible to be closer to ensuring that the internal stakeholders understand the goal of the assessment and, consequently, to be closer to obtaining more accurate data.

*4.2.2.1 Questionnaire*

The first stage concerns the design of the survey according to the topics raised from the benchmark analysis. Despite this, some topics that resulted from this analysis were not included in the questionnaire given that FCL did not consider relevant to address in the report. Specifically, the ones excluded were:

- Environmental Management System – considering that FCL already has ISO 14001 certification and that the other environmental topics are related to this management practice.
- Mobility – even though smart mobility and connected vehicles will be the future of the automotive industry, this will not have a significant impact on FCL since it produces interior plastic parts.

This topic was predominantly disclosed in the SR, considering that the benchmark embodies mostly OEMs.

- Regulatory Compliance and Risk Management – posteriorly in this subchapter, it will be explained the ranking system of the topics according to internal stakeholders’ considerations. In particular, this system endorses evaluation parameters including legal implications and severity level respecting each topic. Therefore, considering that these categories are directly linked to regulatory compliance and risk management, these topics were excluded of the assessment.
- Brand Image – FCL as a tier supplier, does not have direct contact with the final consumer. Therefore, there is no such thing as a “brand image” since marketing activities to target these groups do not occur.

Thus, the questionnaire segregates these topics into four sections: Environmental and Climate Impact, Employees and Society, Technology and Innovation, lastly Business Operations. Additionally, to ensure comprehension among all stakeholders respecting each sustainability issue, this questionnaire presents a brief description of each topic, as displayed in Table 11.

Table 11 - Sustainability topics covered in the questionnaire

Sustainability Topics			
Section	ID	Topic	Description
Environmental and Climate Impact	ECL_1	Air Emissions	Respecting atmospheric emissions management at FCL: Direct Greenhouse Gas emissions - sources owned and controlled by FCL; and Indirect - caused by electricity consumption in activities controlled by FCL. Including other types of atmospheric emissions: NOx; Volatile Organic Compounds - VOC; Particulate Material – MP.
	ECL_2	Resources Management	Concerning the efficiency level of the management of resources and materials at FCL (optimization of resources and materials, circular economy considerations, etc.).
	ECL_3	Energy	Regarding energy management at FCL.
	ECL_4	Waste	With respect to waste management at FCL: destined for final disposal (landfill, incineration, etc.) and not destined for final disposal (recycling, reuse and repair).
	ECL_5	Water and Effluents	Concerns water resources and effluents management at FCL: water withdrawal, control of the volume and quality of water discharges and total water consumption.
	ECL_6	Biodiversity	Respects the significant impacts of FCL's activities, products and services on biodiversity.
Employees and Society	ES_1	Training and Professional Development	Skills development programs and training for workers at FCL.
	ES_2	Occupational Health and Safety	Relating to the occupational health and safety of FCL's employees, promoting their physical and psychological well-being (risk identification and assessment; occupational health services; promotion of worker health, etc.)

Sustainability Topics			
Section	ID	Topic	Description
Employees and Society	ES_3	Employment	Quality of employment offered at FCL and ability to retain and attract new workers (benefits; hiring rate - ability to attract new workers; turnover rate - ability to retain its workers).
	ES_4	Diversity and Equal Opportunities	Diversity and equal opportunities as well as non-discrimination in FCL's governance bodies and employees (such as by age groups, gender, etc.).
	ES_5	Human Rights	Management of Human Rights at FCL: operations subjected to human rights assessment, besides ensuring compliance with human rights throughout the value chain; contracts and agreements with clauses relating to human rights; provide training to employees respecting human rights policies.
	ES_6	Community Engagement and Philanthropy	Importance of social responsibility and development of the local community for FCL, by carrying out of solidarity activities, donations to organizations, providing local community development programs, internships, etc. Also, the degree of importance for FCL in terms of environmental issues that have a direct impact on the local community.
Technology and Innovation	TI_1	Technological Innovation associated with New Product Development	The New Product Development process at FCL (technological innovation, digitization, automation, etc.).
	T1_2	Sustainable Products	How the concept of environmental sustainability is taken into account in the New Product Development activity at FCL (use of sustainable materials; life cycle assessment; recyclable materials, etc.).
Business Operations	BO_1	Ethics and Integrity	Transparency respecting decision-making processes, business operations and information management. Ensuring that employees follow FCL's values in their work and that they are vigilant in identifying potential concerns and confident in intervening in such situations.
	BO_2	Cyber Security and Data Protection	Protect FCL and third-party data from malicious attacks and misuse.
	BO_3	Product Quality and Safety	Ensure that FCL follows an effective quality management system and meets all product safety requirements.
	BO_4	Clients Relationship Management	Clients are, in general, one of the most important stakeholder groups, therefore it is crucial to maintain an ongoing interaction with them. The way FCL preserves this relationship, in order to understand customers' needs and provide the most appropriate solutions.
	BO_5	Supply Chain	Concerns FCL's supply chain management. Contributing to a more sustainable supply chain, besides ensuring compliance with environmental and social requirements by its suppliers. Thus, if the overall management is being carried out prudently.
	BO_6	Financial Performance	Direct economic value generated and distributed in FCL.
	BO_7	Governance	Application of ethical governance practices, contributing to an inclusive management model.

To enable FCL internal stakeholders to perform a quantitative assessment of the topics, it was necessary to define a classification method. Hence, to quantify the level of importance of the issues has been developed a ranking system. Concretely, as presented in Table 12, each topic will be ranked from a level of 1 to 5 according to its Frequency, Severity, Legal Implications and Cost.

Table 12 – Topics’ Ranking System

Ranking System					
Criteria	Frequency	Severity	Legal Implications	Cost	
Description	How often does the topic occur at FCL?	Which is the degree of stakeholder risk, either directly or indirectly?	Are there legal ramifications and regulations that apply to the topic?	How costly, from a financial perspective, is the topic for FCL?	
Level	1	Rarely	No risk	No legal ramifications and no costs	None
	2	Annually	Medium-low risk	Little legal ramifications and low costs	Medium-low
	3	Monthly	Medium risk	Some legal ramifications, including fines and lawsuits with average financial penalties	Medium
	4	Weekly	Medium-high risk	Medium-high legal ramifications, including fines and lawsuits with medium-high financial penalties	Medium-high
	5	Daily	Severe risk	High legal ramifications, including substantial fines and lawsuits with severe financial penalties	Significant

Considering that these four criteria reflect different degrees of significance to all organizations, perhaps it would be unfair to evaluate them in an equal manner. Thereby, in agreement with the company, were assigned distinct ponderations to these criteria (Table 13).

Table 13 – Ponderation value respecting Frequency, Severity, Legal Implications and Cost

Criteria	Ponderation
Frequency (F)	1
Severity (S)	1,5
Legal Implications (LI)	0,5
Cost (C)	1

As displayed in equation 2, the final score of each topic corresponds to the sum of the mean of the score assigned to frequency, severity, legal implications and cost, according to the respective ponderation factors. Therefore, topics can reach scores from 4 to 20.

$$\text{Total Topic Score} = \frac{\sum_1^{\text{Total IS}} (F \text{ score} \times 1 + S \text{ score} \times 1,5 + LI \text{ score} \times 0,5 + C \text{ score} \times 1)}{\text{Total of Internal Stakeholders}} \quad (2)$$

Furthermore, the pandemic context experienced in 2020 affected the entire society and, in particular, had a significant impact on every business. However, it did not only bring negative effects also brought awareness, learning and evolution respecting several different themes. Given this, the consequences of the pandemic in the business have been revealed to be indispensable content to address in the report.

Whereas firms that have materiality assessments as a regular practice will notice this through changes in the matrix. However, FCL is carrying out its first assessment and cannot perceive the effect directly on the matrix, consequently, a section respecting the pandemic has been added to the questionnaire.

Internal stakeholders were requested to identify and justify, among the topics in Table 11, which issues they consider that have undergone major changes in the degree of relevance with the onset of the pandemic. In other words, topics that have been revealed to be opportunities or that increased the degree of risk.

To summarize, the questionnaire was developed through the *Google Forms* tool and is segregated into a total of 6 sections. Firstly, there is an explanation of the goal of the assessment and clarification regarding the materiality matrix, besides an overall outline of the questionnaire. In the first 5 sections, the respondents must rank each topic according to its level of frequency, severity, legal implications and cost. Also, these sections have space to leave an observation respecting each topic, permitting comprehension of the IS perspective, hence, giving particular insights into FCL's activity. Additionally, there is one more section respecting the impact of the pandemic on FCL's business, where the respondents must identify and justify their answers. For more information consider Appendix 2, which presents an overview of this questionnaire.

#### *4.2.2.2 Informational Session*

The next step, after structuring the questionnaire, was to provide knowledge and awareness respecting the materiality assessment. Thus, providing an informational session respecting sustainability reporting, the materiality assessment and, in particular, the questionnaire remained crucial to the success of this process.

Considering that the selected IS have a weekly War Room Meeting (WRM), this revealed to be the perfect opportunity to gather all stakeholders in one room. Therefore, to perform the informational session providing insights respecting the materiality matrix was requested a portion of the WRM schedule. Additionally, to clarify the questionnaire practical examples of hypothetical responses considering other organizations were presented. For instance, Table 14 demonstrates an example of the task of ranking a topic, in this case, Technological Innovation associated with New Product Development, if hypothetically Apple internal stakeholders were to respond to this questionnaire.

Table 14 – Ranking Technological Innovation associated with New Product Development topic (Apple hypothetical example)

Apple – Technological Innovation associated with New Product Development		
Category	Level	Justification
Frequency	4	Apple is a trendsetter company, thus is constantly thinking of new products and technologies respecting smartphones, to remain one of the leading companies. Therefore, it presents a high-frequency level due to this continuous way of thinking.
Severity	5	Since innovation is strongly connected to Apple's brand image, not satisfying stakeholders' needs respecting this issue could negatively affect the business. As for clients, this can represent a high risk considering that they may lose interest in Apple's products if their requirements are not fulfilled (external stakeholders), ending up losing customers to other brands. This situation can reflect employee dissatisfaction, representing a high risk for external stakeholders as well.
Legal Implication	1	There is no legislation respecting this topic.
Cost	4	To meet the world's technological development, companies must invest in qualified labour, software, materials, etc.

For more information respecting the informational session and the examples given to FCL internal stakeholders, consider Appendix 3.

#### 4.2.3 Results Analysis – Questionnaire 1

Once the data collection process is completed it is necessary to proceed to the IS questionnaire responses analysis. Even though the deadline established to fill the questionnaire was of one week, at the due date, there was a lack in the number of *Google Forms* answers. Hence, the deadline was extended for one more week and, the total number of responses to the questionnaire was, nevertheless, 12 rather than the 14 internal stakeholders identified.

##### 4.2.3.1 Sustainability Fields Sections

The first step was to gather information according to the ranking system defined previously. Accordingly, the results of the topic scores are displayed in Table 41, presented in Appendix 4. Subsequently proceeded the statistical analysis phase, initiated by the parameters' mean, median and mode measurement, represented in Table 15. Considering that score values can be between 4 and 20, there appeared to be a data agglomeration given that all statistical parameters reach values close to 14. Furthermore, the maximum and minimum scores reached were 17.1 and 9.6, respectively, meaning that the highest and lowest scored topics are very far from the extremes of the axle.

Table 15 - Topic scores statistical parameters (mean, median and mode)

Statistical Parameters	
Mean	13,7
Median	14
Mode <sup>3</sup>	14

To corroborate the data agglomeration assumption, it was developed a Box Plot of the topic scores. As demonstrated in Figure 22, there is a predominantly accumulation of values at the 3rd section of the axle (orange area) that comprehends scores from 12 to 16. To be precise, more than half of the topics have scores between 14 and 15, according to Figure 41 in Appendix 4. Thus, this reflects as an obstacle to separate issues that represent more and less relevance for FCL internal stakeholders.

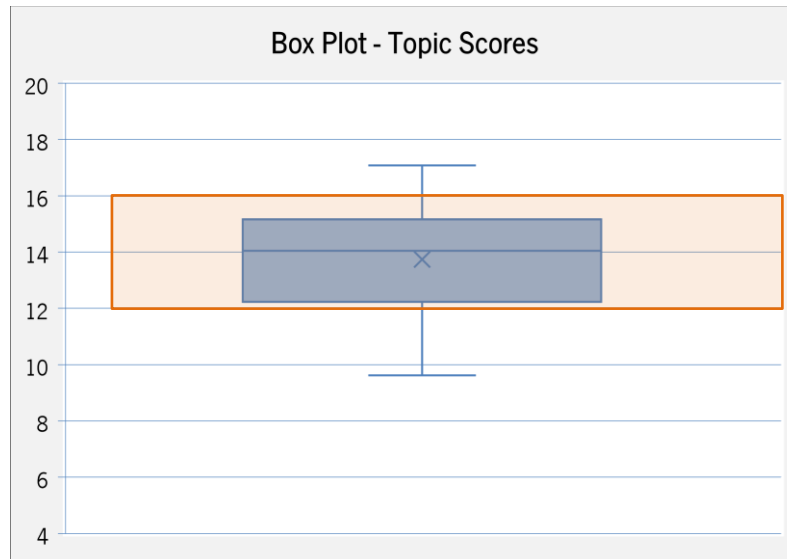


Figure 22 – Distribution of the Topic Scores obtained from Questionnaire 1

To understand the reason behind this agglomeration was necessary to analyse stakeholders' profiles. Hence, the statistical parameters - mean, median and mode - were also calculated for each stakeholder. Considering Table 16, it is possible to conclude that several stakeholders assigned high scores. More precisely, half of the respondents have a ranking score with an average higher than 3.5 and, 5 five of the 12 stakeholders present a ranking score median higher than 4.

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<sup>3</sup> The Statistical Mode was calculated considering the *Rounding Scores (Up)* column in Table 41, represented in Appendix 4 - Statistical Analysis: Internal Stakeholders responses to Questionnaire 1.



Table 16 - Mean, Median and Mode of the questionnaire responses

		Internal Stakeholders											
		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
Parameters	Mean	2,9	4,0	3,1	3,3	3,1	3,7	2,7	4,0	3,5	3,6	3,0	3,6
	Median	3	4	3	3	3	4	3	4,5	3	4	3	4
	Mode	2	5	5	2	3	4	3	5	5	4	3	4

Despite the results displayed above, these remain insufficient to conclude that FCL internal stakeholders demonstrated a notable positive perspective of the company's activities, as these are not considering the ponderation factors respecting each criterion. To take into consideration this aspect turned out to be interesting the analysis of the ranking values distribution in the four criteria. For this reason, have been developed four different box plots concerning the ranking distribution of Frequency, Severity, Legal Implications and Cost (Figure 42, Figure 43, Figure 44 and Figure 45, in Appendix 4, respectively). In particular, Frequency and Severity have similar diagrams that reveal an upper data agglomeration. For instance, Severity, among the others, has the highest mean (3.6) and a median of 4. Consequently, as the criterion with the highest ponderation factor (1.5), Severity will evidently have the largest influence on the overall topic score. And, since the data is predominantly concentrated between 3 and 5, representing the 2nd, 3rd and 4th quartiles, the topics will have medium-high final scores. In contrast, Legal Implication is the criterion with the lowest ponderation factor (0.5) and presents a more normal data distribution. At last, are Frequency and Cost with a ponderation factor of 1 and, as mentioned above, the Frequency box plot reveals an upper data agglomeration while the Cost box plot reflects a more centred data accumulation. Without balance between high and lower classifications, that bring differentiation, the sustainability topics reflect medium-high final scores.

Overall, the reasons presented reveal the adversity of differentiating topics that reflect more and less impact on FCL's activities. Due to this, it is possible to conclude that the results are not legitimate representative and that the questionnaire has not yet achieved its primary goal.

#### 4.2.3.2 Pandemic Impacts Section

The last section of the questionnaire addresses FCL internal stakeholders' considerations respecting the pandemic. As demonstrated by the bar chart represented in Figure 46 of Appendix 4, the topics that had more percentage of votes from the stakeholders were the ones displayed in the following table.

Table 17 - Top rated topics and justifications (Pandemic Impacts section)

Pandemic Impacts section: Top rated topics		
Topic	Percentage	Summary of justifications
Occupational Health and Safety	75%	Given the pandemic circumstances, the overall well-being and safety of all employees are constantly being challenged. Thus, to fight this unpredictable and undiscovered virus FCL had to develop new work paradigms and conditions.
Community Engagement and Philanthropy	58%	This pandemic brought more empathy to society. It became an opportunity to help the community affected by this pandemic crisis, health care institutions and workers that are often undervalued.
Cybersecurity and Data Protection	50%	The new work from home paradigm, imposed by the pandemic circumstances, raised awareness regarding this issue due to the risk of cyberattacks. FCL provided employees with technical support so they could work from home, implying maintaining the same quality regarding data protection and cybersecurity.
Financial Performance	42%	FCL had to suspend its activities for one month, due to the pandemic there was also a decrease in clients' orders, which reflected in a significant impact on FCL business.

#### 4.2.4 Process Readjustment

Considering the unclear information respecting FCL internal stakeholders concerns, the ideal solution was to repeat the questionnaire, excluding the Pandemic Impacts section. However, taking into account the difficulties of the previous assessment, the data collection process was readjusted.

One of the first actions was to reorganise the questionnaire to better visualize the topics ranking under each criterion (Frequency, Severity, Legal Implications and Cost). Contrasting with Questionnaire 1, whereon sections were structured based on the topic's field, these sections in Questionnaire 2 were structure by criteria. To better understand the structure of Questionnaire 2, consider Appendix 5.

FCL internal stakeholders needed to be informed of the previous questionnaire results to prevent the risk of repeating inaccuracy. In the WRM, these results were provided, besides an explanation of the over positive perspective that was adopted that made it impossible to compare issues. This session aimed to raise awareness and consciousness of the stakeholders' conduct towards the questionnaire.

Overall, these readjustments have the purpose of obtaining reliable information respecting FCL's activities.

#### 4.2.5 Results Analysis – Questionnaire 2

The questionnaire was repeated after the readjustments mentioned above had been completed. Once the deadline of answering the survey had been reached, was the phase to start gathering information. All

14 FCL internal stakeholders previously identified have contributed with their feedback for questionnaire 2.

At the analysis phase, it was possible to conclude that these recent results revealed to, once again, not be fully reasonable since this time the respondents adopted a pessimistic approach. As demonstrated in Table 42, displayed in Appendix 6, the minimum topic score was 6.0 while the maximum reached an extremely low number of 13.8, taking into consideration that the maximum topic score that can be reached is 20. One possibility would be to consider 14 as the maximum value of the axle but, either way, the results were once more concentrated, not permitting differentiation. The uneven distribution of the results is proven by the box plot displayed in Figure 23, where it is possible to observe a data agglomeration between scores of 10 and 12. To be more exact, almost half of the topics obtained scores between these values (for more information, consider Figure 50 in Appendix 6).

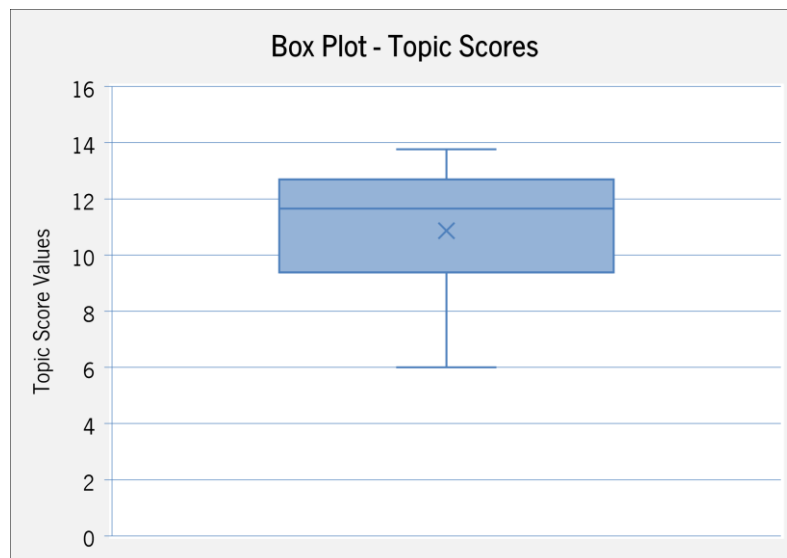


Figure 23 - Distribution of the Topic Scores obtained from Questionnaire 2

#### 4.2.6 Ranking topics – Group Discussion

The results obtained were displayed in a WRM and then ranked as a group to solve the problem of unreliable data without resorting to another Google Forms. This meeting intended to analyse which topics were accurately and inaccurately rated and, through group discussion, rank the ones considered unreliable.

When faced with the results at the WRM, FCL internal stakeholders reached the consensus of re-ranking the upper half of the scored topics, endorsing scores above 11.5. Thus, 11 topics which scores obtained

in the questionnaire did not reflect the real impact of FCL’s activities were identified. The identified topics are displayed bellow, as well as the scores obtained in the questionnaire.

- Air Emissions (13.8)
- Resources Management (11.7)
- Energy (13.0)
- Waste (12.4)
- Water and Effluents (13.2)
- Employee Development and Training (12.3)
- Occupational Health and Safety (11.7)
- Innovation (12.0)
- Cybersecurity and Data Protection (13.7)
- Product Quality and Safety (13.7)
- Customers (11.9)

Subsequently, FCL internal stakeholders were required to order the topics above respecting Frequency, Severity, Legal Implications and Cost. For each of these criteria, the process involved dialogue between participants with constant discussion of their different points of view to reach a consensus. After arranging them, while considering all opinions, the next step was to rank each topic from highest to lowest. For example, the process started with a participant voluntarily giving its opinion respecting a possible score for a specific topic and criterion; secondly, every participant is asked if it agrees or not with the score; if it is unanimous, then it is the final score of the topic to that specific criterion; if not, participants who do not agree with the score given must suggest another score and then, there is another round of validation to determine the majority opinion respecting the score.

4.2.7 Final Results

The outcomes of the group discussions, as well as from the questionnaire, are presented in Table 18. The results achieved reflect then the internal stakeholders’ vision on what is their perceived impact of the topics in FCL’s business activities.

Table 18 - Topic final scores

Final Topic Scores					
Topic	Mean				Score (1*F+1,5*S+0,5*L+1*C)
	Frequency	Severity	Legal Implications	Cost	
ECL_1	2,70	2,70	5,00	2,70	12,0
ECL_2	3,62	3,62	3,39	3,62	14,4
ECL_3	3,39	3,39	3,62	3,39	13,7
ECL_4	3,16	3,16	4,77	3,16	13,4
ECL_5	2,93	2,93	3,85	2,93	12,2
ECL_6	1,20	1,73	1,87	1,53	6,3

Final Topic Scores					
Topic	Mean				Score (1*F+1,5*S+ 0,5*LI+1*C)
	Frequency	Severity	Legal Implications	Cost	
ES_1	4,08	4,08	3,16	4,08	15,9
ES_2	3,85	3,85	4,31	3,85	15,6
ES_3	2,53	2,80	2,80	2,60	10,7
ES_4	2,20	2,27	2,53	1,93	8,8
ES_5	1,60	2,07	2,60	1,73	7,7
ES_6	2,07	1,80	2,00	1,67	7,4
TI_1	4,54	4,54	2,93	4,54	17,4
TI_2	2,07	2,87	2,33	2,27	9,8
BO_1	2,70	3,42	2,73	2,50	11,7
BO_2	3,74	5,00	4,08	5,00	18,3
BO_3	4,00	4,77	4,54	4,77	18,2
BO_4	3,87	4,31	2,70	4,31	16,0
BO_5	2,80	3,07	2,07	2,20	10,6
BO_6	3,00	3,40	2,13	2,33	11,5
BO_7	2,87	2,93	2,13	2,27	10,6

### 4.3 Materiality Matrix

Ultimately, the benchmark of the automotive sector has been concluded and, FCL internal stakeholders' feedback has been gathered. Thus, the next phase is to develop a Materiality Matrix to identify the overall material topics.

As previously mentioned, the vertical axle will reflect the results of the benchmark analysis and, the horizontal axle will present FCL internal stakeholders' feedback. For the benchmark, topics were quantified with a scale from 0 to 10 while the ranking system of FCL internal stakeholders entails a scale from 4 to 20. For the sake of simplicity and to better visualize the results, the scales were rearranged considering the following equations:

$$\text{Benchmark Score (VA}^4\text{)} = \frac{5 \times \text{score}}{10} \quad (3)$$

$$\text{IS' Feedback Score (HA}^5\text{)} = \frac{F \text{ score} \times 1 + S \text{ score} \times 1,5 + LI \text{ score} \times 0,5 + C \text{ score} \times 1}{4} \quad (4)$$

Thereby, the horizontal and vertical axis embody scales from 1 to 5 and 0 to 5, respectively. Hence, Table 43, in Appendix 7, displays the final topic scores included in the materiality matrix. Accordingly, FCL's materiality matrix was finally developed as demonstrated in Figure 24.

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<sup>4</sup> Vertical axle

<sup>5</sup> Horizontal axle

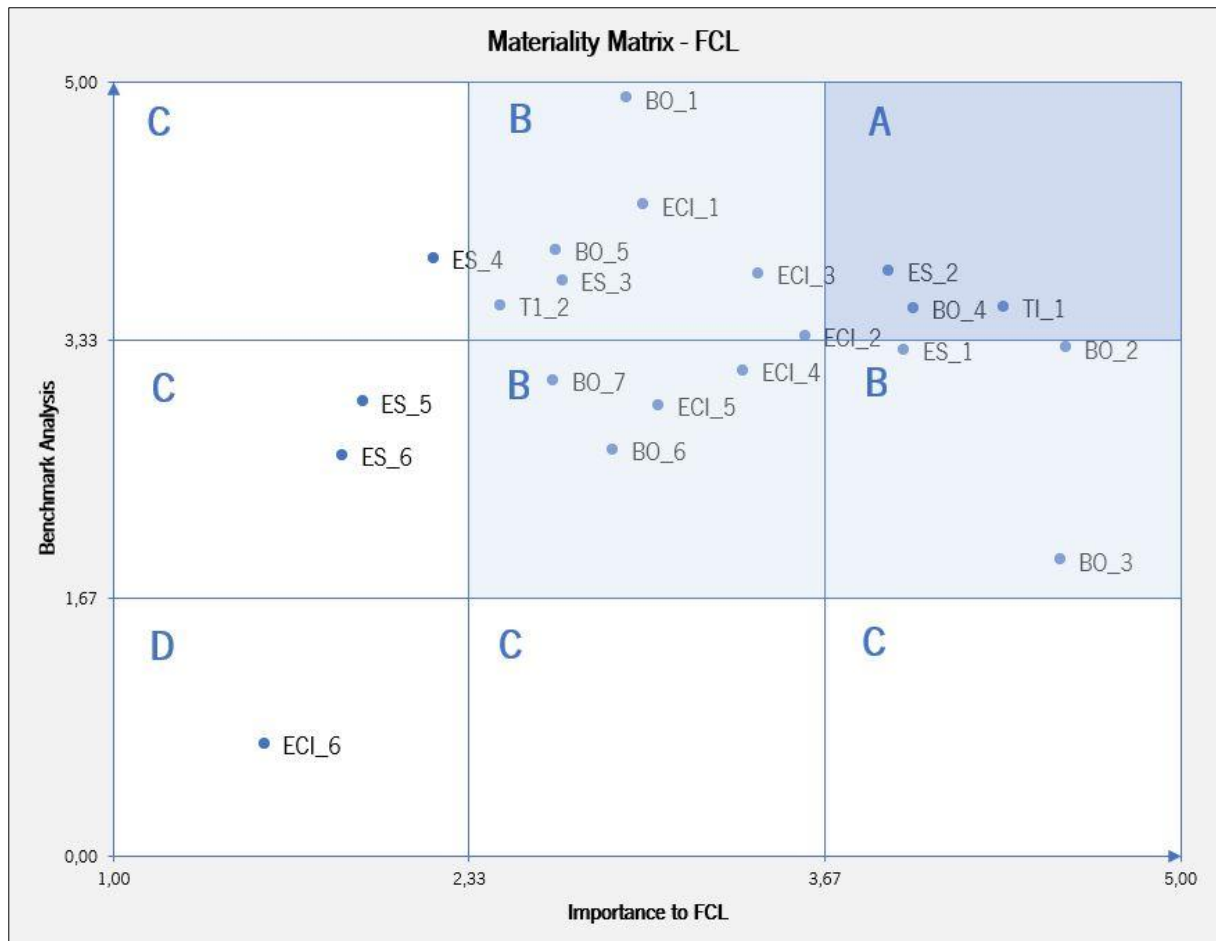


Figure 24 - FCL Materiality Matrix

Considering the materiality matrix displayed above, the next step was to identify material topics that must be addressed in FCL’s sustainability report. Evidently, all the topics exhibited have importance for the overall sustainability, nevertheless, the materiality matrix reflects FCL’s business interactions. Hence, along with the company, it was deemed that section A, represented in Figure 24, would reflect the topics with major importance and, therefore, are mandatory to disclose. Whereas section B would demonstrate relevant topics, considering that these have no obligatory character, FCL can select which ones to divulge in the report. Finally, sections C and D include topics that do not have to be disclosed in the sustainability report. Thereby, the material topics that will be disclosed in the FCL’s sustainability report are listed in Table 19.

Table 19 - FCL Material Topics

Material Topics	Section
Innovation	A
Occupational Health and Safety	A
Clients’ Relationship Management	A
Cybersecurity and data protection	B
Training and Professional Development	B

Material Topics	Section
Product Quality and safety	B
Resources Management	B
Energy	B
Waste Management	B
Water and Effluents	B
Air emissions	B
Quality of Employment	B
Supply Chain	B
Governance	B
Ethics and Integrity	B

Finally, the material topics have been selected whereby the data collection and reporting process of this issues can be started.

## 5. REPORTING STAGE

This chapter reflects the reporting phase concerning the data collection process for the GRI standards identified, considering the material topics, and the association of the reports' content with the SDGs. Therefore, firstly, it presents a detailed procedure of each GRI standard disclosed as well as the finding that will be reported. Subsequently, is explained a method for identification of the SDGs that FCL is contributing considering its support to the overall sustainability. Ultimately, this chapter presents a brief description of the report arrangement.

### 5.1 Sustainability KPI – GRI Disclosures

Once the material topics have been selected, it is necessary to identify which GRI standards will be disclosed. The categories determined for the materiality matrix derived from the automotive sector benchmark analysis which considered sustainability reports that follow different frameworks. Thereby, the material topics reflect several issues, which can or not be embodied by the GRI standards.

For this reason, the first step was to link the material issues with the guidelines to identify which must be disclosed in the sustainability report (Table 20). In particular, the remaining topics that did not fit any of the GRI guidelines were disclosed according to what FCL considered important and considering other sustainability reports' methods.

Table 20 - Linking FCL material topics with the GRI standards

Material Topic	GRI Standard
Innovation	-
Occupational Health and Safety	403 – Occupational Health and Safety 2018
Clients Relationship Management	-
Cybersecurity and data protection	-
Training and Professional Development	404 – Training and Education
Product Quality and Safety	-
Resources Management	-
Energy	302 – Energy 2016
Waste Management	306 – Waste 2020
Water and Effluents	303 – Water and Effluents 2018
Air emissions	305 – Emissions 2016
Quality of Employment	401 – Employment 2016
Supply Chain	102 – General Disclosures 2016 204 – Procurement Practices 2016
Governance	102 – General Disclosures 2016
Ethics and Integrity	102 – General Disclosures 2016

As previously mentioned, GRI provides management approach disclosures - GRI 103 - that enable an organization to explain how it manages the economic, environmental and social impacts related to



material topics. Thereby, this disclosure provides context for the information reported respecting the topic-specific standards of the economic, environmental and social series.

The primary methods used to obtain the topic's management information were semi-structured interviews with the respective department manager, as the first contact to explain the purpose of the sustainability report and to understand department procedures respecting specific topics. Furthermore, access to FCL's internal procedures documents concerning the material topics was provided. Regarding topic-specific information, after the first contact had been made, the specific responsible would be requested to fulfil an Excel to ease the compilation process, for example, consider GRI 403-9 prototype displayed in Figure 51 - Appendix 8. However, when information was not promptly organized by FCL's system, the person responsible for that specific information would submit the necessary documents for posterior arrangement. In any case, whenever questions aroused were scheduled meetings.

While receiving information respecting the guidelines, was elaborated a document that comprehends the GRI standards selected to disclose and its specific requirements along with the information obtained concerning FCL. This document will further facilitate the writing phase and the development of the GRI index.

Additionally, for information respecting the omission of guidelines consider Appendix 9, which explains the reason for excluding specific standards.

The subsequent chapters demonstrate the sources required to disclose GRI 102 and the Economic, Environmental and Social series, moreover, the outcomes of the topic-specific guidelines.

#### 5.1.1 102 - General Disclosures

The universal standard 102-General Disclosures provides an overview of the organization and how the report was conducted. In the following subchapters will be addressed the main communication channels and sources for obtaining the requested information by these guidelines.

##### *1. Organizational Profile*

Respecting the organizational profile standards, there are no optional disclosures, therefore, the totality of the guidelines must be reported. Nevertheless, the type of information required was simple to obtain, specifically, Table 21 demonstrates the sources necessary to answer the guidelines.

Table 21 - General Disclosures102, Organizational Profile: Information sources

Disclosure	Description	Source
102-1	Name of the organization	Fehst Group Webpage
102-2	Activities, brands, products, and services	Internal documentation
102-3	Location of headquarters	Fehst Group Webpage
102-4	Location of operations	Fehst Group Webpage
102-5	Ownership and legal form	Fehst Group Webpage
102-6	Markets served	Internal documentation
102-7	Scale of the organization	HR and Controlling departments
102-8	Information on employees and other workers	HR department
102-9	Supply chain	Purchasing department
102-10	Significant changes to the organization and its supply chain	Purchasing department
102-11	Precautionary Principle or approach	Controlling department
102-12	External initiatives	HR department
102-13	Membership of associations	HR department

## 2. Strategy

According to Strategy, the only disclosure reported was GRI 102-14: Statement from senior decision-maker. Thereby, was scheduled a meeting with the CEO aiming to perform a semi-structured interview, following the questions displayed below:

- How did Fehst Componentes Lda. emerged?
- What does it mean to be a company in the automotive sector?
- What will be FCL's differentiation factor? How will FCL stand out compared to its competitors?
- What is the organization's current mission?
- Which are the following steps respecting the environment and social responsibility at FCL?
- What values are crucial to transmit to FCL's employees?
- How was the unexpected pandemic situation handled? What was the real impact that this had on FCL? What were the learnings that came from this situation?
- Any final message that you would like to transmit to FCL stakeholders?

The interview was recorded for posterior writing of the statement and, when concluded, the final report was sent for CEO approval.

## 3. Ethics and Integrity

Concerning disclosure 102-16: Values, principles, standards, and norms of behaviour, the primary source of obtaining information was FCL's Code of Ethics and Conduct. This code applies to the Executive Committee, members of Senior Management and all employees. In particular, they all receive a printed copy of the Code of Ethics and Conduct and are required to sign a declaration of commitment to comply with the rules established by FCL.

*4. Governance*

Essentially, to disclose GRI 102-18: Governance structure, the Human Resources department was requested to provide internal documentation respecting FCL’s governance structure.

*5. Stakeholder Engagement*

To understand the process of stakeholder engagement, in the WRM was presented the list of stakeholder groups. Subsequently, the WRM group was required to select the stakeholders whom to engage for the sustainability report development - disclosure 102-40 and 102-42. The source of the remaining disclosures is presented in Table 22.

Table 22 - General Disclosures102, Stakeholder Engagement: Information sources

Disclosure	Description	Source
102-40	List of stakeholder groups	War Room Meeting
102-41	Collective bargaining agreements	HR department
102-42	Identifying and selecting stakeholders	War Room Meeting
102-43	Approach to stakeholder engagement	HR department, Purchasing department and Commercial manager
102-44	Key topics and concerns raised	Materiality Matrix

*6. Reporting Practice*

This section is the last to disclose above all standards since, as the title suggests, respects the reporting practice. More specifically, concerns the overall entities included in the reporting process, defined boundaries, material topics, reporting period and cycle, contact for questions and the GRI option of reporting selected. Furthermore, even though not applicable for FCL considering that this is its first sustainability report, there are disclosures respecting restatements of information, changes in reporting and the date of the most recent report.

5.1.2 200 – Economic

The economic series has the particularity of presenting one exclusively standard that will be reported – GRI 204-Procurement Practices. Considering the material topics that emerged from the matrix, this was the only one that resemble differences from FCL’s Annual Financial Report.

Therefore, to disclose FCL’s procurement practices, the main communication channel used was the Purchasing department. Given the simplicity of the information required, was scheduled a semi-structured interview, succeeded by a document fulfilling request. The outcomes of this process are followingly explained.

## 204 – Procurement Practices

This economic standard presents only on disclosure: GRI 204-1 Proportion of spending on local suppliers. Along with the company, local suppliers were defined to be national suppliers. Hence, the purchasing department was requested to provide information respecting FCL's suppliers, more specifically, discriminated by type and localization. Furthermore, FCL's total expenses for each supplier throughout the years was requested. Thereby, were obtained the results displayed in Table 23.

Table 23 - Disclosure 204-1 and Proportion of spending on local suppliers according to the type of supplier: Results

Disclosure		Year			
		2018	2019	2020	
204-1	Total supplier expenses (€)	1 493 327	1 724 138	2 251 129	
	National supplier expenses (€)	492 162	532 592	641 838	
	Proportion of spending on local suppliers (%)	33%	31%	29%	
Supplementary	BOM	Total expenses (€)	949 706	881 929	425 743
		Spending on local suppliers (%)	0,6%	0,5%	0,6%
	Non-production related	Total expenses (€)	507 460	436 027	442 690
		Spending on local suppliers (%)	88,7%	60,2%	82,8%
	Equipment	Total expenses (€)	36 161	406 182	1 382 695
		Spending on local suppliers (%)	100%	65,5%	19,7%

According to the results, less than half of the total expenses are assigned to national suppliers. The reason behind these findings is that Portuguese suppliers do not provide grind plastic and paints that FCL requires to produce its products. Despite this, the first step is consistently to actively search for suppliers in Portugal since it would have a positive impact socially and environmentally.

As demonstrated in Table 23, it was considered interesting to analyse the proportion spent on local suppliers according to their type. Therefore, BOM suppliers were already expected to be international given the reason explained previously. Generally, more than 80% of the total expenses of non-production related are assigned to local suppliers, except in 2019. In the reporting year, FCL has mostly invested in new equipment deriving from an international supplier.

### 5.1.3 300 – Environment

The standards of the 300 series selected to be reported were 302-Energy, 303-Water and Effluents, 305-Emissions, 306-Waste and 307-Environmental Compliance. Hence, the process of obtaining the information requested by these guidelines was mainly associated with constant communication with the environment responsible.

The primary method used to disclose the management approach respecting each topic was semi-structured interviews, followed by constant meetings with the environmental responsible at FCL.

Additionally, the detailed procedures concerning environmental management and, specifically, energy, waste, emissions and water, were examined. Predominately, to report the topic-specific disclosures, the records exchange process was vital. Essentially, the documents considered were the Environmental Licensee, Annual Environmental Reports, Execution and Progress Reports and Air, Water and Soil Emissions Report.

In the following chapters are disclosed the findings respecting the 300 series standards. Specifically for this series, an Excel has been developed that gathers information of the findings respecting energy, emissions and water that will facilitate this process in future reports (Figure 52 - Appendix 8).

*302 – Energy 2016*

In what concerns the management approach of the energy topic, besides the documents that have been mentioned, it was also considered FCL’s Energy Audit performed in 2018. The covered topic-specific disclosures were only GRI 302-1: Energy consumption within the organization and GRI 302-3: Energy intensity. The sources of energy considered in these disclosures are the ones that FCL can directly control. Furthermore, considering that FCL does not sell energy, only consumption is reported (Table 24).

Table 24 - Form of application of the different types of energy

Type of energy	Application
Electricity	Production process: driving force creation; lightning
Natural Gas	Production process: painting section; shower rooms and canteen
Diesel	Internal fleet
Thermal solar panels	Water heating at chrome plating

The primary methods used to obtain information were the monthly bills of electricity and natural gas and, additionally, diesel expenses. Given that these have different measurement units of the Gigajoules requested by the standard, it was necessary to proceed to the values’ conversion, considering the conversion factors presented in Table 25.

Table 25 - Energy conversion factors, in GJ

Energy Conversion Factors, in GJ				
Source of energy		Original unit	Conversion factor	Source
Electricity		kWh	0,0036 GJ/kWh	Convert Units (2021)
Fuels	Natural Gas	kWh		

Energy Conversion Factors, in GJ				
Source of energy		Original unit	Conversion factor	Source
Fuels	Diesel	Litres <sup>6</sup>	Density: 820 - 845 g/dm <sup>3</sup> = 832,5 g/dm <sup>3</sup>	Considering the Diesel Safety Data Form of the top 3 suppliers in Portugal: Repsol (2016), Galp (2011) and BP (2020)
			1 Kg Diesel = 42,3 - 43,3 MJ = 0,0428 GJ	Dispatch n.º 17313/2008 at the Portuguese Republic Journal - Diário da República (2008)

The next phase was to proceed to the measurement of FCL's total energy consumption and energy intensity, which are displayed in Table 26. The 10 thermal solar panels were implemented in 2019 and it was assumed that these collectors provide the same amount of energy every year. Furthermore, along with FCL, the denominator selected to quantify energy intensity was a thousand units produced.

Table 26 - Disclosures 302-1 and 302-3: Results

Disclosure			Year		
			2018	2019	2020
302-1	Electricity purchased for consumption	Electricity (GJ)	10 167,25	9 440,70	7 760,66
	Non-renewable fuel consumed	Natural Gas (GJ)	1 565,47	1 495,96	1 274,06
		Diesel (GJ)	147,80	201,28	167,70
	Renewable fuel consumed	Thermal solar panels (GJ)	-	45,20	45,20
Total Energy Consumption (GJ)			11 880,52	11 183,14	9 247,62
302-3	Thousand units produced		5 546	4 435	3 490
	Energy Intensity (GJ/thousand units produced)		2,14	2,52	2,65

In Table 26, it is possible to observe an increase in FCL's energy intensity. Even though the overall energy consumption decreased, due to the pandemic there was a reduction in orders and, consequently, the number of units produced decreased as well. Furthermore, electricity represents more than 80% of the total energy consumed. As FCL has electricity fixed counters at the chrome plating and UV painting section, the data collected from the counters were analysed to try to understand the motivations for the energy intensity increase. Accordingly, as presented in Table 27, chrome plating reveals to be the main source of electricity consumption at FCL, representing almost half of the total.

Table 27 - Electricity consumption and intensity: Chrome Plating section

Chrome Plating section	Year		
	2018	2019	2020
Total Electricity Consumption (GJ)	4 387,59	4 574,31	3 604,04
Percentage of Electricity Energy Consumption (%)	43%	48%	46%
Thousand chromed units	1 570	1 016	650
Electricity intensity (GJ/thousand units produced)	2,80	4,50	5,55

<sup>6</sup> Diesel litres were deduced considering the expenses and the average diesel price of the corresponding year (2018 – 1,318 €/L; 2019 – 1,400 €/L; 2020 – 1,440 €/L).

To better comprehend these results at the chrome plating section, a meeting with the process responsible was scheduled. Thereby, the identified justification for this increase was that since 2019, because of the orders' reduction, the section started working with two shifts and, occasionally, one shift, contrary to the previous years where it was working with three shifts per day. Due to this reduction in the number of shifts and, considering that chrome plating requires constant ventilation and exhaustion by virtue of the hazardous chemicals, this section's electricity intensity increased. As a result of these fixed electricity consumptions that do not fluctuate with production, the overall FCL's energy consumption increased.

*303 – Water and Effluents 2018*

The 303 GRI Standard has the particularity of having its specific management approach disclosures - GRI 303-1: Interactions with water as a shared resource and GRI 303-2: Management of water discharge-related impacts. In addition to the already mentioned methods, it was considered the AGERE's Utilization License for the Public Wastewater Drainage System. Regarding the topic-specific disclosures was only considered GRI 303-1: Water withdrawal.

In broad terms, FCL obtains water for industrial processes, irrigation of green spaces, cleaning activities, showers, toilets and canteen, from the Portuguese Water Supply System. Consequently, considering the guideline, the water withdrawal corresponds only to third-party freshwater. Thereby, water monthly bills are the used procedure to measure the total water withdrawal. Additionally, even though GRI standards do not require water intensity measurement, given FCL's case, where water is a primary resource for the industrial process, it was considered relevant to add this indicator. Similar to the energy topic, the denominator considered was a thousand units produced. Hence, these results are presented in Table 28.

Table 28 - Disclosure 303-1 and Water intensity: Results

Disclosure		Year		
		2018	2019	2020
<b>303-1</b>	Total Water Withdrawal (megalitres)	14,470	11,502	10,856
<b>Supplementary</b>	Thousand units produced	5 546	4 435	3 490
	Water Intensity (megalitres/thousand units produced)	2,61	2,59	3,11

Despite the total water withdrawal having diminished, the production also reduced. In Table 28, it is possible to observe an increase in the water intensity ratio in 2020. Considering that the chrome plating section is the principal water consumer at FCL and, since there has been a reduction in production, especially at chrome plating, it was predicted that water intensity would decrease. Similar to electricity, the previously mentioned indicators were calculated for the chrome plating section (Table 29).

Table 29 - Water withdrawal and intensity: Chrome Plating section

Chrome Plating section	Year		
	2018	2019	2020
Total Water Withdrawal (megalitres)	10,170	7,090	3,461
Percentage of Total Water Withdrawal (%)	70%	62%	32%
Thousand chromed units	1 570	1 016	650
Water intensity (megalitres/thousand chromed units)	6,48	6,98	5,33

The chrome plating section is expected to reflect the largest portion of FCL's water withdrawal, for more than 60%. Despite this, in 2020, this section merely reflected 32% of the total. Furthermore, the water intensity, considering chromed units, decreased in the latest year. Therefore, by observing the results displayed in Table 29, it is possible to deduce that there is a leak at FCL's facilities and, this leak is not located at the chrome plating section since it has demonstrated an efficiency improvement.

To confirm the leak hypothesis, FCL's environment responsible was requested to account for the increase of the general counter over several weekends, since the company is only operational during working days. The results of this analysis prove the leak assumption and, after several attempts to discover the source, it was found that the leakage derived from an old pipping.

### *305 – Emissions 2016*

The guidelines selected to disclose emissions were the GRI 305-1: Direct (Scope 1) GHG emissions, GRI 305-2: Energy indirect (Scope 2) GHG emissions and GRI 305-4: GHG emissions intensity. Along with these disclosures, was simultaneously considered the Greenhouse Gas Protocol (2019) to clarify the standard.

According to the GHG Protocol (2019), the first step is to determine inventory boundaries - organizational and operational. These boundaries determine which business operations and emissions will be accounted for in FCL's GHG inventory. Hence, organizational boundaries define the operations and facilities included in the inventory, whereas the operational boundaries categorize the emissions resulting either directly or indirectly from FCL's operations and facilities. Thereby, the protocol describes three different approaches for developing organizational boundaries:

- Equity share approach – an organization accounts for GHG emissions that are entirely or partially owned based on its share of equity in that operation.
- Operational control approach – an organization accounts for 100% of emissions from operations over which it or one of its subsidiaries has operational control. (Holding operational control does not imply that the organization necessarily has the power to make all decisions respecting an operation).



- Financial control approach – an organization accounts for 100% of emissions from operations over which it or one of its subsidiaries has financial control.

Respecting operational boundaries, these are specified by scopes that classify emissions according to the result from the organization’s operations and activities, directly or indirectly. The different scopes are:

- Scope 1 – direct emissions occur from sources owned or controlled by the company. Embodies emissions that result from stationary combustion, mobile combustion and fugitive emissions.
- Scope 2 – indirect emissions account for the generation of purchased energy, specifically, are considered indirect since they are a consequence of an organization’s activities, however, occur at sources owned and controlled by an outside entity (electricity utility). These emissions can comprehend different methods – location-based approach considers the average emission factors for the electricity grids that are providing electricity to the facility, reflecting average emissions intensities in the locations of electricity use; while the market-based approach considers the emission factor of the electricity supplier, therefore, is associated with specific choices of the consumer.
- Scope 3 – indirect emissions are a result of an organization’s operations but are not owned or controlled by the company.

Considering this, FCL decided to apply an operational approach and to report on scope 1 and 2 emissions, excluding scope 3 given that the company does not yet have the resources to account for them. Primarily, were identified the emission factors respecting scope 1 and 2, as presented in Table 30. In particular, respecting scope 2, it was decided to endorse the location-based approach since, in the latest years, FCL has been constantly changing its electricity supplier. Thus, was considered the average emission factor of the Portuguese electricity grid.

Table 30 - Emission factors, in tonCO<sub>2</sub>

Emission Factors, in tonCO <sub>2</sub>					
Scope		Emission factor		Source	
Scope 1	Stationary Combustion - Natural Gas	0,0641 tonCO <sub>2</sub> /GJ		Dispatch n.º 17313/2008 at the Portuguese Republic Journal - Diário da República (2008)	
	Mobile Combustion - Diesel	0,074 tonCO <sub>2</sub> /GJ			
Scope 2	Electricity	Location based approach	2018	0,307 x 10 <sup>3</sup> tonCO <sub>2</sub> /kWh	Portuguese specific electricity grid greenhouse gas emission factor - Carbon Footprint (2020)
			2019	0,253 x 10 <sup>3</sup> tonCO <sub>2</sub> /kWh	

Emission Factors, in tonCO <sub>2</sub>					
Scope		Emission factor			Source
Scope 2	Electricity	Location based approach	2020 <sup>7</sup>	0,253 x 10 <sup>-3</sup> tonCO <sub>2</sub> /kWh	Portuguese specific electricity grid greenhouse gas emission factor - Carbon Footprint (2020)

The production process at FCL has the particularity of using the dry ice blasting<sup>8</sup> process that consists of the projection of CO<sub>2</sub> for a cleaning activity prior to painting. Subsequently to the analysis of this method, it was discovered that the CO<sub>2</sub> applied in this technique derives from the carbon circular economy cycle – it is extracted from other industrial processes that release large quantities of CO<sub>2</sub> to the atmosphere. Therefore, the CO<sub>2</sub> associated with this operation was not accounted for in the scope 1 emissions.

Taking into account the identified emission sources and their emission factors, the main outcomes are presented in Table 31. Regarding emissions intensity, a thousand units produced was, once again, the selected denominator. Furthermore, the base year selected was 2018 to ensure the application of the location-based method, having in mind that this is FCL's first SR and considering the 3 years analysis perspective adopted. The following table reflects the updated results considering the location-based approach.

Table 31 - Disclosures 305-1, 305-2 and 305-4: Results

Disclosure			Year		
			2018	2019	2020
305-1	Stationary Combustion	Natural Gas (tonCO <sub>2</sub> )	100,3	95,9	81,7
	Mobile Combustion	Diesel (tonCO <sub>2</sub> )	10,9	14,9	12,4
	Total Scope 1 Emissions (tonCO <sub>2</sub> )		111,3	110,8	94,1
305-2	Electricity (tonCO <sub>2</sub> )		867,0	662,3	544,4
	Total Scope 2 Emissions (tonCO <sub>2</sub> )				
305-4	Total emissions (tonCO <sub>2</sub> )		978,3	773,1	658,5
	Thousand units produced		5 546	4 435	3 490
	Emissions intensity (tonCO <sub>2</sub> /thousand units produced)		0,176	0,174	0,183

As a consequence of scope 2 reflecting the main impact on the overall emissions, it was expected that these would reveal an increase, considering chapter 302 – Energy 2016. However, in 2019, the average emission factor of the Portuguese electricity grid presented a significant reduction (Table 30), explaining the decrease in the emissions intensity of this year.

<sup>7</sup> The same emission factor of 2019 since until October of 2021 it had not been published the electricity grid emission factor of 2020.

<sup>8</sup> For more information respecting this operation and its impact on the environment, consider Onofre et al. (Onofre et al., 2020).

In 2020, as explained and justified in chapter 302 – Energy 2016, electricity experienced a significant increase. Even though having an emission factor lower than in 2018, the reporting year obtained the emissions intensity highest value.

*306 – Waste 2020*

The GRI 306, similar to GRI 303, has the particularity of having its specific management approach disclosures – GRI 306-1: Waste generation and significant waste-related impacts and GRI 306-2: Management of significant waste-related impacts. Additionally, were disclosed all topic-specific standards – GRI 306-3: Waste generated, GRI 306-4: Waste diverted from disposal and GRI 306-5: Waste directed to disposal.

A third party manages the waste generated at FCL’s facilities. The environment responsible has the role of annually submitting for APA<sup>9</sup> an Integrated Waste Registration Map, Table 32 displays these records. Furthermore, in this category was also considered interesting to measure waste intensity.

Table 32 - Disclosure 306-3 and Waste intensity: Results

Disclosure		Year			
		2018	2019	2020	
<b>306-3</b>	Hazardous waste (t)	120,0	144,2	49,5	
	Non-hazardous waste (t)	64,7	75,8	43,1	
	Total waste generated (t)	184,8	220,0	92,6	
Thousand units produced		5 546	4 435	3 490	
<b>Supplementary</b>	Waste intensity (t/thousand units produced)	Hazardous waste	0,022	0,033	0,014
		Non-hazardous waste	0,012	0,017	0,012
		Total waste generated	0,033	0,050	0,027

The results reveal that the reporting year has experienced a decrease in the overall waste generated. The organization’s waste is mainly composed of hazardous substances that derive from the chrome plating process. Therefore, due to the reduction in chromed units that was already mentioned, it was expected that the whole waste generated would reduce as seen in 2020.

Subsequently, the 306-4 and 306-5 guidelines request a breakdown of the waste types according to disposal methods: diverted or directed. Thus, the entity responsible for managing the organization’s waste was requested to discriminate the disposal type of each residue, Table 33 reflects these results.

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<sup>9</sup> Agência Portuguesa do Ambiente - the entity responsible for the implementation of environmental policies in Portugal.

Table 33 - Disclosure 306-4 and 306-5: Results

Disclosure			Year		
			2018	2019	2020
306-4	Hazardous waste (t)	Recycling	1,70	4,53	1,31
	Non-hazardous waste (t)		64,74	75,78	43,07
306-5	Hazardous waste (t)	Incineration (energy recovery)	4,52	5,24	2,42
		Landfill	113,81	134,41	45,77

Overall, the totality of the non-hazardous waste generated is diverted to recycling processes. On the contrary, most of the hazardous waste is still disposed to landfill. The activities respecting waste management of directing or diverting waste from the disposal are operated by an external entity.

### *307 – Environmental Compliance 2016*

Despite the material topics not comprehending GRI 307, it was considered a pertinent standard since it concerns the overall environmental management of FCL. Given that the organization has ISO 14001: Environmental Management System certification, it was revealed relevant to explain this system. Furthermore, to mention that FCL has not committed any non-compliance with environmental laws or paid any substantial fines.

#### 5.1.4 400 – Social

Considering the social pillar of sustainability, the GRI standards that will be disclosed in FCL’s report are 401-Employment, 403-Occupational Health and Safety and 404-Training and Education.

The primary channel exploited to disclose these guidelines was the Human Resources department, in particular, to report GRI 401 and GRI 404. The first approach was conducting semi-structured interviews to comprehend the management process around these topics, followed by documents fulfilling requests and meetings to understand how the data has been compiled concerning topic-specific disclosures. The remaining standard, respecting OHS, required communication with the OHS responsible at FCL. Despite this, the method used to obtain information was similar to the previously described for the HR department. Furthermore, to disclose this information the detailed procedure respecting hazard identification, risk assessment and monitorization was considered.

The subsequent chapters present contextual information respecting these standards and, the findings to be disclosed in FCL’s sustainability report.

401 – Employment 2016

Respecting employment, the totality of the disclosures was reported. This embodies GRI 401-1: New employee hires and employee turnover, GRI 401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees and, GRI 402-3: Parental leave.

Firstly, the guidelines requested the organization’s new hires and turnover measurements, regarding numbers fluctuation and rate, specified by gender and age group. Thereby, considering equations 5 and 6, resulted the outcomes presented in Table 34.

$$\text{Annual New Hires Rate} = \frac{\text{Number of employees hired}}{\text{Annual average number of employees}} \times 100\% \tag{5}$$

$$\text{Annual Turnover Rate} = \frac{\text{Number of employees who left}}{\text{Annual average number of employees}} \times 100\% \tag{6}$$

Table 34 - Disclosure 401-1: Results

Disclosure	Age group						Gender				Total		
	<30		30-50		50<		Male		Female		N°	Rate	
	N°	Rate	N°	Rate	N°	Rate	N°	Rate	N°	Rate			
401-1	i. New employee hires	8	84%	3	9%	-	-	6	12%	5	15%	11	13%
	ii. Employee turnover	5	56%	4	12%	2	5%	7	14%	4	12%	11	13%

The results displayed reflect a balance, considering that the hiring and turnover rate are coincidentally both 13%. Furthermore, there are no significant differences respecting gender, on the contrary, people above 50 years old stand out for not having been hired in 2020. In particular, the youngest age group, bellow 30 years old, represents the highest hiring and turnover rate.

Additionally, considering GRI 401-2, the benefits that FCL provides to its temporary and part-time employees were reported, which are:

- Health services (occupational medicine included)
- Pharmacy discount protocol
- Income protection systems in disease situations
- *Fehst Saudável*: promotes labour gymnastics and occupational health
- Special offerings: baskets or merchandising as a small gesture of gratitude (special occasions)
- Parental leave

Lastly, disclosure 401-3 was only reported in the GRI index since it did not seem relevant to highlight in the report due to the low number of parental leaves taken at FCL, in 2020. Throughout the years there have not been numerous employees requesting parental leave, even though, all 82 FCL employees are

entitled to request this license. In particular, during the reporting year, only one male employee took parental leave.

*403 – Occupational Health and Safety 2018*

The OHS standard presents several specific guidelines respecting the management approach of this topic. Among these are GRI 403-1: Occupational health and safety management system; GRI 403-2: Hazard identification, risk assessment, and incident investigation; GRI 403-3: Occupational health services; GRI 403-4: Worker participation, consultation, and communication on occupational health and safety; GRI 403-5: Worker training on occupational health and safety; GRI 403-6: Promotion of worker health; lastly, GRI 403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships. To answer these guidelines multiple semi-structured interviews with FCL’s Occupational Health and Safety Superior Technician. were performed Furthermore, considering that the organization subcontracts a specialized entity to execute audits of its activities, this entity’s reports and methods were also analysed. Additionally, respecting the topic-specific disclosures, the ones reported are GRI 403-8: Workers covered by an occupational health and safety management system and GRI 403-9: Work-related injuries.

FCL has an Occupational Health and Safety Management System (OHSMS) applied to its 82 employees and more than 6 workers that are not employees but perform its services at FCL’s facilities – maintenance, cleaning and canteen activities. Therefore, this system covers a total of 88 workers, representing all forms of workers. The OHS responsible provided the results displayed in Table 35, respecting GRI 403-8.

Table 35 - Disclosure 403-8 a): Results

Disclosure		Number	Percentage	Total Workers
403-8	i. Employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by OHSMS	88	100%	88
	ii. Employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by OHSMS that has been internally audited	6	7%	
	iii. Employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by OHSMS that has been audited or certified by an external party	82	93%	

Subsequently, the OHS responsible was requested to provide the records respecting the number of recordable and high consequence work-related injuries, besides the number of fatalities that occurred due to work-related injuries at FCL. In particular, there have not been fatalities, hence, to calculate the

specific rates were only applied equations 7 and 8. Considering the total of hours worked at FCL, these rates were calculated based on 200 000 hours worked.

$$\text{Rate a) ii.} = \frac{N^{\circ} \text{ of high consequence work related injuries}}{N^{\circ} \text{ of hours worked}} \times 200\,000 \tag{7}$$

$$\text{Rate a) iii.} = \frac{N^{\circ} \text{ of recordable work related injuries}}{N^{\circ} \text{ of hours worked}} \times 200\,000 \tag{8}$$

Thereby, according to this method were obtained the results that are displayed in the following Table 36. Accordingly, it is possible to observe that FCL does not present a high risk of accident considering these records. Specifically, the main type of work-related injuries is associated with falls and surface impacts.

Table 36 - Disclosure 403-9 a) and b): Results

Disclosure			Year					
			2018		2019		2020	
			Number	Rate	Number	Rate	Number	Rate
403-9	a) Employees	i. Fatalities as a result of work-related injury	-	-	-	-	-	-
		ii. High-consequence work-related injuries (excluding fatalities)	1	1,40%	-	-	-	-
		iii. Recordable work-related injuries	5	7,00%	2	2,98%	3	5,12%
		iv. Main types of work-related injury	Multiple falls and surface impacts					
		v. Number of hours worked	142 833		134 420		117 276	
	b) Workers that are not employees	N/A, no accidents were respecting this type of workers						

Furthermore, the work-related hazards that pose a risk of high-consequence injury detected were mainly associated with chemical, machinery and tools handling, besides different kinds of falls. Hence, the specialized subcontracted entity is responsible for performing a Risk Assessment Matrix on each workstation once a year, or whenever there are changes in regulations or even when work-related accidents occur. Thereby, workstations are evaluated regarding different levels, such as exposure, defaults, probability and severity. After scoring each category, that result will be the risk level respecting a specific workstation. This assessment can turn out to be acceptable or not, resulting in critical, correcting, improving, controlled situations or even no intervention required. According to the acceptance level, FCL must develop an action plan to monitor, control and define goals to the identified risks.

**404 – Training and Education 2016**

The totality of the topic-specific disclosures respecting training and education were reported, more specifically, GRI 404-1: Average hours of training per year per employee, GRI 404-2: Programs for

upgrading employee skills and transition assistance programs and GRI 404-3: Percentage of employees receiving regular performance and career development reviews.

The first disclosure requires the average training hours per employee discriminated by gender and professional category. Hence, considering equation 9, the human resources department was requested to provide information respecting the training hours provided and the total number of employees differentiated in the demanded categories.

$$\text{Average training hours per employee} = \frac{\text{Total n}^\circ \text{ of training hours provided to employees}}{\text{Total n}^\circ \text{ of employees}} \quad (9)$$

The results are displayed in Table 37. Inevitably, given the pandemic circumstances, FCL was not able to provide as much training to its employees in 2020.

Table 37 - Disclosure 404-1: Results

Disclosure		Year				
		2018	2019	2020		
404-1	Average training hours per employee	i. Gender	Female	23,45	44,69	19,64
			Male	21,06	50,27	17,41
		ii. Professional Category	Operator	9,46	21,55	8,60
			Technical Operator (specialized)	21,10	47,14	10,07
			Engineering technician	51,60	76,12	28,38
			Administrative	14,23	36,70	30,01
			Middle Management	18,25	82,25	22,48
			Top Management	34,45	114,76	24,47

More specifically, considering GRI 404-2, the training provided to employees consists of programs associated with technical and soft skills, on job training and language courses (English, German, etc.). Moreover, the company provides an opportunities program for employees at the end of their active careers.

The final disclosure - GRI 404-3 (Table 38) - respects the percentage of employees that receive regular performance and career development reviews, once again discriminated by gender and professional category.



Table 38 - Disclosure 404-3: Results

Disclosure			Year	
			2020	
404-3	% Receiving regular performance and career development reviews	i. Gender	Female	85%
			Male	84%
		ii. Professional Category	Operator	83%
			Technical Operator (specialized)	91%
			Engineering technician	85%
			Administrative	82%
			Middle Management	60%
			Top Management	100%

Ideally, all employees should receive regular performance reviews. These results took into consideration the number of employees in December of 2020, but the assessment was conducted at the beginning of 2021. For that reason, some workers did not receive performance assessments because they are currently not working at FCL. Respecting the results displayed in Table 38, these reveal that there were no gender differences, however, middle management is a critical category to assess in the forthcoming year.

## 5.2 Sustainable Development Goals

Considering the mentioned rise of SDGs reporting and their recent partnership with GRI, it was reasonable for FCL to also report on these goals. However, given the superficial knowledge on this subject by FCL employees, performing an informative session was mandatory.

Despite GRI and SDGs having developed a procedure for reporting that covers the 17 goals and maps them against the standards and disclosures that apply for each (GRI, 2021e), it was considered important to find a different method that would require internal stakeholders' involvement, for them to be more conscious of this subject matter. Thereby, since the Triple-Layered Business Model Canvas tool covers the overall business impacts and benefits on sustainability, it proved to be a mechanism to identify FCL's contribution to the SDGs. Through this process, the engaged stakeholders will become more mindful of the broader repercussions of the company's activities and, hopefully, more interested in change.

Most importantly, before starting this process, at a WRM the TLBMC was introduced and explained, essentially was clarified the aim of the tool. Additionally, the SDGs and the advantages of their endorsement were also displayed at the meeting.


Thus, the following chapters respect the TLBMC development and posterior linkage to the SDGs, as well as internal stakeholders' contribution to the outcomes.

## 5.2.1 TLBMC – Environmental and Social Layers

The TLBMC, as previously mentioned, concerns the environmental, social and economic layer of sustainability. Whereas, FCL’s case will only consider the environmental and social layers, mainly because this report is not particularly focused on the economic field since it discloses one GRI standard respecting the economic series.

Bearing in mind the knowledge obtained through the interviews with the different department managers, the environmental and social layers were sketched. To ensure that all perspectives are taken into consideration, the sketched canvas were presented in a WRM to request the participants’ input and validation. The reason for displaying a sketched canvas in the meeting is because the time required to develop these two canvas with the 14 stakeholders would be extensive. Therefore, this method would ease the process while considering their intake. Overall, the outcomes of this meeting respecting the environmental and social layer are displayed in Figure 25 and Figure 26, respectively.

**Environmental Business Model Canvas - FCL**


  
Date: 18/05/2021

Supplies and out-sourcing	Production	Functional Value	End of life	Use phase
<ul style="list-style-type: none"> <li>• Energy</li> <li>• Water</li> <li>• Manufacturing equipment</li> <li>• Packaging materials</li> <li>• CO<sub>2</sub></li> </ul>	<ul style="list-style-type: none"> <li>• Plastic injection moulding</li> <li>• Automatic painting</li> <li>• Chrome plating</li> <li>• Surface and printing technologies</li> </ul>	3 489 503 units produced in 2020	<ul style="list-style-type: none"> <li>• Disassembly problems: product disposal</li> <li>• % of products that can be recycled: problem associated with painted surfaces</li> </ul>	Cleaning process
	<b>Materials</b>		<b>Distribution</b>	
	<ul style="list-style-type: none"> <li>• Plastic raw materials</li> <li>• Hazardous chemicals</li> <li>• Paints</li> </ul>		<ul style="list-style-type: none"> <li>• Returnable packaging: more CO<sub>2</sub> emissions for distribution</li> <li>• Logistic centers</li> </ul>	
Environmental Impacts		Environmental Benefits		
<ul style="list-style-type: none"> <li>• Water withdrawal and discharges</li> <li>• Energy and CO<sub>2</sub> emissions</li> <li>• Generating more plastic to the environment</li> <li>• Hazardous and non-hazardous waste</li> <li>• VOCs</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Management System</li> <li>• Monitoring and reporting waste, water withdrawal and discharges, energy and emissions</li> <li>• Energy Consumption Monitoring Plan: Energy efficiency</li> <li>• Energy-saving initiatives</li> <li>• Investment in solar panels</li> <li>• CO<sub>2</sub> cleaning process: circular carbon economy</li> <li>• Replacing Chromium VI with Chromium III Sulphate-based bath</li> <li>• Wastewater treatment in the installation</li> <li>• Resource management efficiency</li> <li>• Returnable packaging: less waste</li> <li>• Innovation project: Fehst Avantgarde Interiors</li> <li>• Process optimization</li> <li>• Suppliers' environmental check list</li> <li>• Awareness circle points: energy consumption and water</li> <li>• Publishing 1st Sustainability Report</li> </ul>		

Figure 25 - TLBMC - Environmental layer respecting FCL's activities

Local communities	Governance	Social Value	Societal Culture	End user
<ul style="list-style-type: none"> <li>• Employees</li> <li>• Suppliers</li> <li>• Partners</li> <li>• Clients</li> <li>• Universities</li> <li>• Official entities</li> <li>• Financial Institutions</li> </ul>	<ul style="list-style-type: none"> <li>• Transparent decision making</li> <li>• Ethical management</li> </ul>	<ul style="list-style-type: none"> <li>• Developing long term value to clients, offering a quality and innovative products</li> <li>• To produce in compliance with regional, national and European regulations on sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• Culture of cooperation with local organizations and universities</li> </ul>	<ul style="list-style-type: none"> <li>• Development of new products through innovation</li> </ul>
	<p style="text-align: center;"><b>Employees</b></p> <ul style="list-style-type: none"> <li>• High level of hiring rate</li> <li>• Investment in training and education</li> <li>• Local workforce</li> <li>• Career development</li> </ul>		<p style="text-align: center;"><b>Scale of Outreach</b></p> <ul style="list-style-type: none"> <li>• Increase local suppliers</li> <li>• Co-developing technology with universities</li> <li>• Improve long term cooperation with clients</li> </ul>	
<b>Social Impacts</b>		<b>Social Benefits</b>		
<ul style="list-style-type: none"> <li>• Health and safety: Covid-19</li> <li>• Industry 4.0 and its potential link to unemployment: replacing visual inspection (monotonous work) with automatic inspection</li> </ul>		<ul style="list-style-type: none"> <li>• Internships</li> <li>• Training and developing employees' skills</li> <li>• Health services (SEPRI)</li> <li>• Covid measures and awareness</li> <li>• Occupational Health and Safety System</li> <li>• Cooperating and sharing know-how with universities</li> <li>• Upgrade technological capabilities of our workers (Industry 4.0 training)</li> <li>• Job creation</li> </ul>		

Figure 26 - TLBMC - Social layer respecting FCL's activities

Furthermore, considering that the company does not adopt the traditional BMC, it was necessary to explain this tool and the most recent method directed for sustainability - TLBMC. Currently, FCL is familiarized with the mechanism to further endorsement for its sustainability strategy. Thereby, it is possible to have a much clearer and more general vision of the impacts of FCL's activities and the company's contribution to sustainability.

### 5.2.2 FCL contribution to the SDGs

The next phase consisted of the analysis of the SDGs specific targets for posterior linkage with the previously identified environmental and social benefits associated with FCL's activities. Primarily, considering the topics covered in the report and the outcomes of the TLBMC, were identified which of the 17 general goals the company has been contributing, which are:

- Goal 3 – Good health and well-being
- Goal 4 – Quality education
- Goal 6 – Clean water and sanitation
- Goal 7 – Affordable and clean energy
- Goal 8 – Decent work and economic growth

- Goal 9 – Industry, innovation and infrastructure
- Goal 12 – Responsible consumption and production

The internal stakeholders were requested to analyse the SDGs targets, specifically the ones respecting the goals identified previously, considering the results of the TLBMC assessment.

Subsequently, the targets of each of these goals were associated with FCL’s contribution to the overall sustainability, more specifically, to the environmental and social pillars. Hence, the outcomes presented in Table 39 were obtained.

Table 39 - FCL contribution to the SDGs

Layer	FCL's benefits to sustainability	Goal	Target	
Environmental	Environmental Management System	12 - Responsible consumption and production	<b>12.2</b> By 2030, achieve the sustainable management and efficient use of natural resources.	
	Monitoring and reporting discharges and wastewater treatment	6 - Clean water and sanitation	<b>6.3</b> By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.	
	Monitoring and reporting waste	12 - Responsible consumption and production	<b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	
	Energy efficiency	7 - Affordable and clean energy  9 - Industry, innovation and infrastructure	9 - Industry, innovation and infrastructure	<b>7.2</b> By 2030, increase substantially the share of renewable energy in the global energy mix. <b>7.3</b> By 2030, double the global rate of improvement in energy efficiency. <b>9.4</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
				<b>9.4</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
	Solar panels investment	9 - Industry, innovation and infrastructure	<b>9.4</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	
	CO <sub>2</sub> cleaning process	9 - Industry, innovation and infrastructure	<b>9.4</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	
	Replacing Chromium VI with Chromium III Sulphate-based bath	12 - Responsible consumption and production	<b>12.4</b> By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.	
	Resources management efficiency	12 - Responsible consumption and production	<b>12.2</b> By 2030, achieve the sustainable management and efficient use of natural resources.	
	Returnable packaging	12 - Responsible consumption and production	<b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	
Innovation Project: Fehst Avantgarde Interiors	12 - Responsible consumption and production	<b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.		

Layer	FCL's benefits to sustainability	Goal	Target
Environmental	Suppliers' environmental checklist	12 - Responsible consumption and production	<b>12.6</b> Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
	Publishing the first Sustainability Report	12 - Responsible consumption and production	<b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse. <b>12.6</b> Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
Social	Internships	4 - Quality education 8 - Decent work and economic growth	<b>4.4</b> By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship. <b>8.6</b> By 2020, substantially reduce the proportion of youth not in employment, education or training.
	Training and development of employees' skills		
	Health services	3 - Good health and well-being	<b>3.8</b> Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
	Covid-19 measures and awareness raised		
	Occupational Health and Safety System	3 - Good health and well-being	<b>3.9</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
	Cooperating and sharing know-how with universities	8 - Decent work and economic growth	<b>8.3</b> Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
	Upgrading technological capabilities of FCL workers	8 - Decent work and economic growth 9 - Industry, innovation and infrastructure	<b>8.2</b> Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors. <b>9.5</b> Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
Job creation	8 - Decent work and economic growth	<b>8.6</b> By 2020, substantially reduce the proportion of youth not in employment, education or training.	

To obtain the conclusions exhibited in the previous table (Table 39), once again, a prototype of FCL's contribution to the SDGs was displayed at another WRM. Subsequently, the participants contributed with their feedback and validation, considering their previous analysis of the targets.

### 5.3 Report Arrangement

Once the information has been collected, the writing of the findings phase begins. Accordingly, the sustainability report will encompass the contents displayed in Table 40.

Table 40 - Sustainability Report Contents associated with the GRI Standards, Material Topics and SDGs

FCL Sustainability Report Contents				
Section	Subsection	GRI Standards	Material Topics	SDGs association
Message from the CEO		102 (2) Strategy		
2020 Highlights	Covid-19 Outbreak			
	Industry 4.0			
	Replacing Cr VI with Cr III			
	Dry Ice Blasting – fully integrated			
Overview of Fehst Componentes	Scale of the organization	102 (1) Organizational Profile		
	Ethics and Integrity	102 (3) Ethics and Integrity		
	Governance Model	102 (4) Governance		
Stakeholder Engagement and Materiality	Stakeholders Communication Channels	102 (5) Stakeholder Engagement		
	Materiality Matrix			
Commitment to the SDGs				
Production and Responsible Sourcing	Manufacturing Technologies		Product Quality and Safety and Supply Chain	Goal 8, 9 and 12
	Supply Chain	102 (1) Organizational Profile 204 – Procurement Practices		
Innovation and Collaborations	Client Relationship Management		Innovation, Cybersecurity and Data Protection and Client Relationship Management	Goal 8 and 9
	Cybersecurity and Data Protection			
	Innovation Projects			
Our People	New hires and employee turnover	401 – Employment	Occupational Health and Safety, Employee Development and Training and Quality of Employment	Goal 3, 4, 8 and 9
	Training and professional development	404 – Training and Education		
	Academic Internships			
	Occupational Health and Safety	403 – Occupational Health and Safety		
Environment	Environmental Management System	307 – Environmental Compliance	Resources Management, Energy, Emissions, Water and Waste	Goal 3, 6, 7 and 12
	Resources Management			
	Energy	302 – Energy		
	Emissions	305 – Emissions		
	Water and Effluents	303 – Water and Effluents		
	Waste	306 - Waste		
Appendix	GRI Index About the Sustainability Report	102 (6) Reporting Practice		

Overall, the report will present six main sections respecting FCL and its sustainability approach and performance according to the GRI standards and, these sections are - Overview of Fehst Componentes, Stakeholder Engagement and Materiality, Production and Responsible Sourcing, Innovation and Collaborations, Our People and, lastly, Environment. In particular, the Innovation and Collaborations section has been included to embody material topics that are not covered by the GRI standards. Furthermore, reports typically start with a message from the CEO and, it was also noticed the movement, among the sustainability reports of the automotive sector, of presenting a section with the highlights of

the reporting year. Thereby, FCL decided to endorse this movement as well and to include a section directed to the SDGs contribution – Commitment to the SDGs.

Ultimately, for more information respecting the document that gathers all GRI guidelines content and report design, consider respectively Figure 53 and Figure 54, in Appendix 8. To analyse the final sustainability report content, consider Appendix 10. Additionally, Appendix 11 contains the final GRI Index that considers the pages of the FCL Sustainability Report 2020 presented in the previous appendix.

## 6. SUSTAINABILITY REPORTING PROCESS STANDARDIZATION

This phase is the result of knowledge gathered while developing and writing the report. Considering that sustainability reports must be published periodically, it is essential to establish a standardized method for future reports. Therefore, one of the stated aims of this dissertation is to facilitate this process for FCL upcoming reports taking into account the biennially reporting strategy adopted.

Hence, the following sections demonstrate the overall reporting procedure, having in mind the GRI Standards, through Business Process Model and Notation (BPMN).

### 6.1 Sustainability Reporting – General Process

To establish an overall sustainability reporting procedure a diagram that demonstrates an overview of the process enclosing 10 subprocesses was elaborated. This diagram is displayed in Figure 67 - Appendix 12.

Evidently, the first step before reporting is to review the guidelines. Furthermore, considering that the GRI is constantly perfecting and upgrading its standards, it is necessary to detect if recent standards have been published and, in this case, create a new process when appropriate. Subsequently, the data collection process with the Materiality Matrix development or updating initiates for identification of the material topics, and the GRI 102: General Disclosures, except the Reporting Practice section. These subprocesses can be performed simultaneously, as demonstrated in Figure 27.

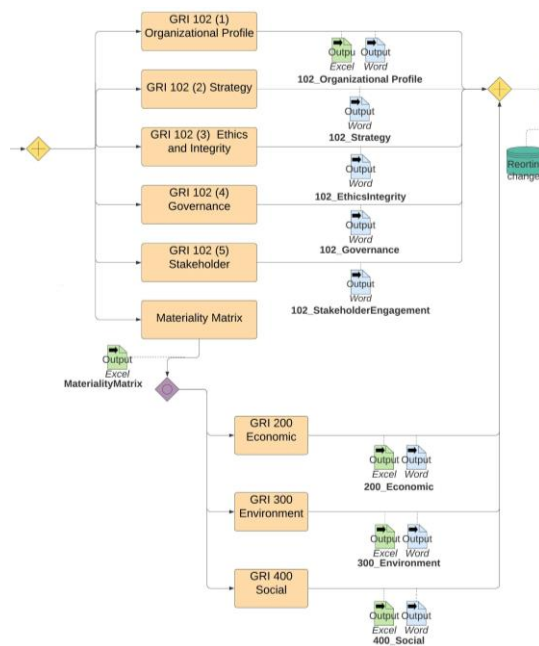


Figure 27 - Subprocesses dependency - SR general process excerpt



Once the material topics have been identified, it is possible to proceed to the succeeding subprocesses respecting the economic, environmental and social series disclosure. After disclosing these standards and the ones previously mentioned regarding GRI 102, the Reporting Practice guidelines, also embodied in GRI 102, can be disclosed as well.

While collecting data the sustainability reporting responsible will be documenting the specific guidelines in a file prepared for each standard. The final step consists of the organization and storage of these findings for further report writing.

#### 6.1.1 General Disclosures Process

The data collection process associated with the GRI 102 standards is one of the simplest to disclose. Whereas the first sustainability report elaboration, this procedure becomes easier since a major part of these guidelines reporting, generally, does not suffer alterations every year.

Among these guidelines, GRI 102 (1) Organizational Profile is the standard that requires communication with different sources of information. Thereby, as displayed in Figure 68 - Appendix 12, this was the example selected to demonstrate the data collection process of the General Disclosures standards.

#### 6.1.2 Materiality Assessment Process

As for the materiality process, FCL will have to decide if, in a future report, it is going to adopt the same benchmark procedure or invest in more resources and develop a questionnaire for external stakeholders as well.

Even though the topics that the matrix should cover have been selected for the first report, the sustainability reporting responsible must, in any case, investigate the automotive industry reports' trends. This analysis is always advisable, even in the case of FCL preferring to perform two questionnaires for both internal and external stakeholders. If the benchmark option remains the selected option, the analysis of the automotive sector reports is fundamental as seen in this first report. The following Figure 28 represents an excerpt of the materiality matrix process, specifically, respecting the two forms of external stakeholders' approach for materiality.

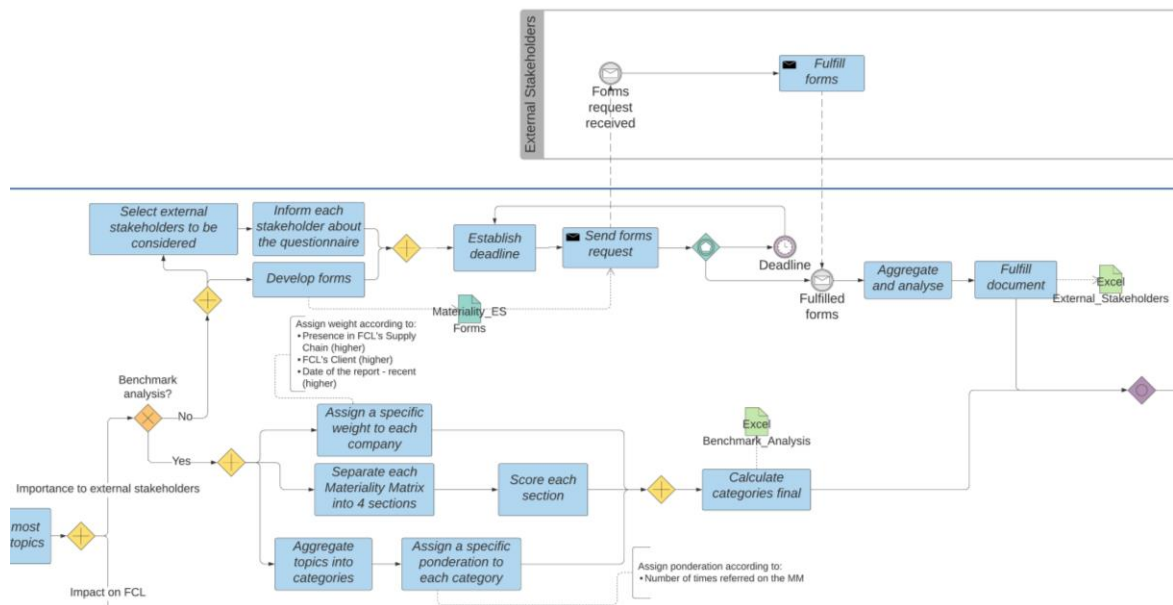


Figure 28 - Materiality matrix process excerpt

For more detailed information concerning this process consider Figure 69, in Appendix 12.

### 6.1.3 Topic-specific Disclosures Process

As previously mentioned, the topic-specific disclosures that the report will cover are dependent on the materiality results. Hence, a standard procedure considering the standards disclosed in this first report was created. For future reports, if obtained different material topics, then new processes must be developed concerning the other standards. Furthermore, considering GRI constant standards' upgrade and perfecting, if recent standards are published, these processes must be corrected as well.

In Appendix 12 – BPMNs of the Sustainability Reporting Process have been displayed the subprocesses concerning the economic (200), environment (300) and social (400) series, in Figure 70, Figure 71 and Figure 72, respectively.

## 7. CONCLUSION

This ending chapter aims to describe the overall process performed for sustainability reporting and the main challenges encountered while developing this dissertation. Ultimately, will be suggested future actions for the reporting process and, additionally, improvement measures that FCL can implement to enhance its sustainability performance.

### 7.1 Final Considerations

The intended goal for this project was to develop the company's first sustainability report considering the GRI Standards. Thus, evaluating the overall sustainability of the business' activities and, along with this, establishing a standard procedure for the materiality assessment process that would facilitate the reporting practice for SMEs.

Even though sustainability has become a concept of general knowledge among society, this was the organization's first contact with corporate sustainability and its first public commitment demonstration. Above all, it was essential to enlighten FCL workers concerning this issue. The first contact was with the War Room Meeting participants, including mainly department managers, to explain the aim of the Sustainability Report, consequently, the GRI Standards and, the overall importance and advantages of contributing to corporate social responsibility, especially in the automotive industry. For the other employees, the company's newsletter covered these topics with the purpose of everyone being aware and conscious of this activity.

Once everyone was on the same page and mindful of this report, the first step was to develop an alternative method to the materiality assessment suggested in the GRI Standards, which implies direct communication with external stakeholders and, consequently, a larger investment in resources. The selected alternative was to develop a benchmark analysis considering sustainability reports of the automotive sector. Given the lack of literature respecting this issue, it was necessary to create a methodology from scratch. In particular, the analysis considers the reports' materiality matrixes from other companies of the sector. The major challenge faced was that these matrixes follow completely different arrangements, as the GRI standards are essentially guidelines to disclose information and do not provide a definitive procedure or pathway for the implementation. Another critical issue detected was the lack of transparency respecting materiality assessments, companies publish their matrixes but do not explain in detail how those findings have been obtained. These challenges have made it difficult to compare reports, which should be one of the main goals of structuring a report – comparability.

To obtain internal stakeholders' feedback, for the horizontal axle of the matrix, a direct communication channel was selected – questionnaires. This process requires a detailed explanation to the participants of its objective as well as of the topics' evaluation method. Despite the awareness session respecting sustainability, not every participant will give the necessary importance to this theme. Thereby, the results from the first questionnaire were not conclusive. Perhaps, the reasons for these results can be associated with: unclear explanation of the objective; insufficient attention while answering the questionnaire, having the need to finish it straightaway; limited knowledge respecting the overall impacts of the company's activities on its different dimensions, having an exclusively in-depth perception of the impacts related to the department where the participant operates; most of the participants holding an optimistic and unrealistic perspective of the company's real impacts on the overall sustainability. Additionally, was noticed the participants' difficulty in complying with the deadline imposed resulting from oblivion.

FCL's materiality matrix was configured and, consequently, the material topics that the sustainability report must cover were obtained. However, some of the topics enclosed in this matrix are not covered by the GRI Standards and new procedures had to be created to obtain this information. Considering the company's matrix, the critical section that reflects the issues with the highest importance for the benchmark and internal stakeholders, includes topics, such as, Innovation, Occupational Health and Safety and Clients' Relationship Management. Only one of these is incorporated in the GRI guidelines, which is Occupational Health and Safety.

Considering the data collection process, most of the information required was not organized and stored in the organization's system as the guidelines demand. In most of the cases, it was necessary to analyse and aggregate data in an appropriate manner. In certain cases, FCL did not actually disclose the information. For example, concerning the environmental standards, the company was not accurately reporting the emissions resulting from its activity. Respecting the social series, the human resources department was not considering the indicators disclosed in GRI 401: Employment and GRI 404: Training and Education. With this sustainability reporting process, the organization acquired a greater knowledge on how to assess the impacts of its activities and, ultimately, there are currently structured documents for these indicators and the departments are prepared to provide the information required. The problems encountered during this process are predominately associated with failure to comply with the deadlines imposed to obtain the required data.

Subsequently, in terms of SDGs disclosing, contrary to what was desired, there was barely internal stakeholders' contribution to the findings, essentially, the WRM participants validated the outcomes. The reason behind this can be associated with the extensive and vast list of targets respecting these goals.

Overall, one of the main challenges encountered while developing this project is related to the Covid-19 pandemic. This required the reduction of on-site presence, compromising the direct contact with the company. Moreover, above all, the circumstances faced had an undoubtedly impact on the reports' results, considering the reductions in production, employees' absence and the company's closing period in 2020.

In conclusion, it is possible to deduce that the research question has been answered since were disclosed FCL's primary sustainability impacts on the surrounding in which it operates. Furthermore, the GRI framework was considered to disclose most of the information required. However, as mentioned previously, certain topics are not covered by these standards, meaning that the GRI should broaden its guidelines. The company has currently a standardized and organized procedure to develop future sustainability reports and, more importantly, FCL's workforce appears to be more committed and enthusiastic towards a more sustainable company.

## 7.2 Future Research

In the course of the investigation project, were identified several components that should be analysed for future improvements in sustainability performance and reporting. Hence, respecting progressions in reporting the following actions were identified:

- Assign a Sustainability Reporting Manager: This decision must be conscious of the time and effort required to develop the report. This requires the assignment of this task to a current employee or the hiring of a new employee.
- Endorse the UN Global Compact Network Portugal: Consequently, FCL can prove its commitment to achieving a more sustainable business. Moreover, this network will - organize and encourage companies to achieve the SDGs; contribute to the dissemination of knowledge about United Nations programs; encourage partnership and collaboration between Portuguese companies; bring competitive advantage; and, finally, provide support in sustainability reporting.
- Obtain external verification for future reports: This will provide assurance to the stakeholders analysing the report.

Lastly, concerning improvements in the overall sustainability performance, the feasibility of the proceedings appointed below should be investigated:

- Develop social parameters to be endorsed in the suppliers' checklist: Currently, the supplier selection process only considers economic and environmental factors. Thereby, to ensure ethical sourcing should be developed social parameters to assess suppliers.
- Initiate the Life Cycle Assessment (LCA) process: Broaden attention to the full footprint of FCL products, specifically, at the product development stage, the LCA framework should be considered to achieve more sustainable products. Additionally, in the future, FCL can obtain certification for ISO 14040: Environmental management – Life cycle assessment – Principles and framework. Furthermore, given the problem associated with vehicles' disposal in its end life stage, it is important to collaborate with OEMs on identifying methods to overcome this barrier.
- Monitor machines' energy use: While controlling the energy consumption of each machine, strategic actions and decisions can be taken to reduce electricity consumption and increase the overall efficiency.
- Monitor the totality of water discharges: At the moment, the company only monitors discharges from the chrome plating section and, through estimation, the painting section. However, to obtain accurate water consumption results, every water discharge should be monitored.
- Develop Environmental Performance Plans with realistic goals: One of FCL's main challenges is to achieve the goals previously defined considering the planned actions. Hence, it is very important that in the future this analysis is prepared with greater consciousness.
- Identify new disposal methods for hazardous waste: Considering the high percentage of hazardous waste that is directed for disposal, FCL should investigate with its waste recipients other methods of disposal.
- Develop a risk analysis respecting employment and industry 4.0: Perceive the future risks that might outcome from industry 4.0 and its impact on FCL's employees, as well as methods to overcome the identified risks.
- Assign benefits to productive and committed employees: To motivate its workforce, FCL can investigate methods for identifying productive sections and, consequently, assign benefits to these employees. Furthermore, for instance, so that production employees feel heard it would be

interesting to adopt the suggestion box approach and, when suggestions were implemented, assign benefits to the respective employee.

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# APPENDIX 1 – BENCHMARK ANALYSIS

## Phase 1 – Matrixes Sectioning

This phase respects the sectioning of the matrixes of the 13 sustainability reports and, as a means of demonstrating the method used, Figure 29 and Figure 30 represent the materiality matrixes of the TMG and Ford reports, respectively.

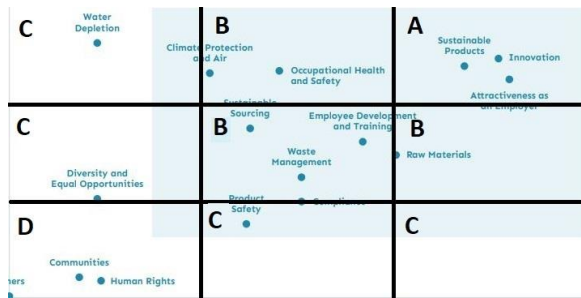


Figure 29 - TMG Materiality Matrix division

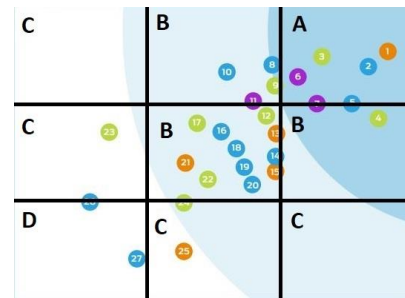


Figure 30 - Ford Materiality Matrix division

## Phase 2 – Assign topic score according to section

According to the established ponderations for each section, the process of measuring topics' scores initiated, as displayed in Figure 31, an excerpt of the excel sheet.

Company	1		2		3		4		5		Topics					
	Topics	Score	Topics	Score	Topics	Score	Topics	Score	Topics	Score						
Company	Attractiveness as an employee	A	1	Waste	A	1	Electrification and alternative fuels	A	1	Electrified vehicles	A	1	Autonomous and connected vehicles	A	1	Quality and safety products
	Innovation	A	1	GHG emissions	A	1	Change resilience strategy energy	B	0.7	Vehicle fuel economy and fuels	A	1	Low-carbon mobility solutions	A	1	Financial strength
	Sustainable products	A	1	Occupational health and safety	A	1	Customer satisfaction, vehicle quality and safety, operational management	A	1	Vehicle safety	A	1	Safety and working conditions	A	1	Quality and operational resilience
	Raw materials	B	0.7	Employee training and education	A	1	Capacity building and performance	A	1	Customer experience	A	1	Total quality and product safety	A	1	Safeguarding of the supply of products and services
	Employee development and training	B	0.7	Ethics and integrity	A	1	Responsible sourcing of raw materials	A	1	Employee health, safety and well-being	A	1	Ethics and compliance	A	1	Client satisfaction
	Waste management	B	0.7	Economic performance	A	1	Vehicle carbon footprint (fuel economy)	A	1	Research and innovation	A	1	Resources, materials and eco-design	B	0.7	Innovation applied to the development of new products
	Compliance	B	0.7	Energy	A	1	Government, regulation, policy and engagement	A	1	Business transparency and integrity	A	1	Attracting and retaining talent	A	1	Ethics and integrity business
	Occupational health and safety	B	0.7	Supply chain	A	1	Accountable and inclusive governance	A	1	Autonomous driving and connected vehicles	B	0.7	Energy and carbon efficiency of production	B	0.7	Comprehensive management of risk and opportunities
	Sustainable sourcing	B	0.7	Employment	A	1	Air quality	B	0.7	Mobility services and solutions	B	0.7	Partnership approach to R&D	B	0.7	Attracting expert talent
	Product safety	C	0.3	Community	A	1	Self-driving vehicles	B	0.7	Water management	B	0.7	Availability of replacement products	B	0.7	Health and safety at work
	Climate protection and air	B	0.7	Research and development	A	1	Human Rights	B	0.7	Waste management	B	0.7	Security of computer data	B	0.7	Regulatory compliance
	Human rights	D	0.1	Gender equality	A	1	Changing consumer preferences	B	0.7	Emissions from operations	B	0.7	Transportation and logistics	C	0.3	Professional training and development

Figure 31 - Print Screen Materiality Matrix Excel (Sheet 1): Scoring the topics according to position in the matrix

The different colours represent the different categories, where blue symbolizes Employees and Society, green Environmental and Climate Impact, yellow Technology and Innovation and orange Business Operations.

### Phase 3 – Assign topic score according to company’s influence in FCL value chain

At this phase, companies of the selected sustainability reports were classified according to their influence on FCL value chain (Figure 32). Subsequently, topics were ranked based on this ponderation and the one mentioned in phase 1, as displayed in Figure 33, an excerpt of this process.

Company	Maximum score	Weight	Considered	Final score
TMG 2019	10	0,5	5	
Simoldes 2018	10	2	20	
Ford 2020	10	0,5	5	
FCA 2019	10	0,5	5	
Valeo 2017	10	1	10	
Gestamp 2019	10	0,5	5	
PSA 2019	10	2	20	
Renault 2017	10	0,75	7,5	
Honda 2020	10	0,5	5	
Hyundai 2019	10	0,5	5	
Bosch 2019	10	2	20	
GF 2019	10	0,25	2,5	
Volkswagen 2019	10	2	20	

Figure 32 - Print Screen Materiality Matrix Excel (Sheet 2): Assigned weight according to company’s influence

Company	Topic	Description	Score	Weight	Final Score	Final score topic
TMG 2019	Environmental and climate impact	Raw materials	0,7	5	3,5	3,00
TMG 2019	Environmental and climate impact	Waste management	0,7	5	3,5	3,00
TMG 2019	Environmental and climate impact	Climate protection and air	0,7	5	3,5	3,00
TMG 2019	Environmental and climate impact	Water depletion	0,3	5	1,5	3,00
TMG 2019	Employees and society	Attractiveness as an employee	1,0	5	5,0	2,29
TMG 2019	Employees and society	Employee development and training	0,7	5	3,5	2,29
TMG 2019	Employees and society	Occupational health and safety	0,7	5	3,5	2,29
TMG 2019	Employees and society	Human rights	0,1	5	0,5	2,29
TMG 2019	Employees and society	Diversity and equal opportunities	0,3	5	1,5	2,29
TMG 2019	Employees and society	Communities	0,1	5	0,5	2,29
TMG 2019	Employees and society	Product safety	0,3	5	1,5	2,29
TMG 2019	Technology and innovation	Sustainable products	1,0	5	5,0	5,00
TMG 2019	Technology and innovation	Innovation	1,0	5	5,0	5,00
TMG 2019	Business operations	Compliance	0,7	5	3,5	3,50
TMG 2019	Business operations	Sustainable sourcing	0,7	5	3,5	3,50
Simoldes 2018	Environmental and climate impact	Waste	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	GHG emissions	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	Energy	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	Water	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	Air	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	Transport	1,0	20	20,0	16,00
Simoldes 2018	Environmental and climate impact	Spills	0,3	20	6,0	16,00
Simoldes 2018	Environmental and climate impact	Risks and opportunities due to climate change	0,7	20	14,0	16,00
Simoldes 2018	Environmental and climate impact	Consumption of chemicals	0,3	20	6,0	16,00
Simoldes 2018	Environmental and climate impact	Resource and materials efficiency	0,7	20	14,0	16,00
Simoldes 2018	Employees and society	Occupational health and safety	1,0	20	20,0	20,00

Figure 33 - Print Screen Materiality Matrix Excel (Sheet 3): Scoring topics according to section and company’s influence

### Phase 4 – Assign subcategory score according to frequency level in the matrixes

The differential level of the matrixes forced an aggregation of topics by subcategories since topics with different designations had equivalent ideas. In particular, topics that did not fit none of these subcategories and, did not constitute a substantial number to create a new subcategory, were excluded. Considering this and the level of frequency of these subcategories respecting the matrixes, it was assigned one last ponderation. This assigned weigh aims to emphasize topics that have been referred in more reports, reflecting a higher level of importance and consensus among the automotive industry.

Thus, Figure 34 represents an excel sheet example of the subcategories final scores included in the Employees and Society category. Furthermore, it should be noted that all weights assigned were approved by FCL.

Employees and society topics' scores								7,11
ID	Category	Subcategory	Company	Topic	Score	Benchmark subcategory final score	Benchmark category final score	
1	Employees	Employee development and training	TMG 2019	Employee development and training	3,500	6,543	7,821	
1	Employees	Employee development and training	Simoldes 2018	Employee training and education	20,000	6,543	7,821	
1	Employees	Employee development and training	Gestamp 2019	Professional training and development	1,500	6,543	7,821	
1	Employees	Employee development and training	Honda 2020	Expanding diversity and development of human resources	3,500	6,543	7,821	
1	Employees	Employee development and training	Volkswagen 2019	Training	20,000	6,543	7,821	
1	Employees	Employee development and training	Hyundai 2019	Developing human resources	3,500	6,543	7,821	
1	Employees	Employee development and training	Renault 2017	Skills management	5,250	6,543	7,821	
1	Employees	Diversity and equal opportunities	TMG 2019	Diversity and equal opportunities	1,500	7,725	7,821	
1	Employees	Diversity and equal opportunities	Simoldes 2018	Gender equality	20,000	7,725	7,821	
1	Employees	Diversity and equal opportunities	Valeo 2017	Promoting diversity	7,000	7,725	7,821	
1	Employees	Diversity and equal opportunities	Gestamp 2019	Equality and Non-discrimination	1,500	7,725	7,821	
1	Employees	Diversity and equal opportunities	PSA 2019	Diversity and equal opportunity	14,000	7,725	7,821	
1	Employees	Diversity and equal opportunities	Renault 2017	Diversity and equal opportunities	5,250	7,725	7,821	
1	Employees	Diversity and equal opportunities	GF 2019	Employee diversity and well-being	2,000	7,725	7,821	
1	Employees	Diversity and equal opportunities	Volkswagen 2019	Diversity and equality	20,000	7,725	7,821	
1	Employees	Diversity and equal opportunities	Bosch 2019	Diversity	6,000	7,725	7,821	
1	Employees	Occupational Health and Safety	TMG 2019	Occupational health and safety	3,500	7,563	7,821	
1	Employees	Occupational Health and Safety	Simoldes 2018	Occupational health and safety	20,000	7,563	7,821	
1	Employees	Occupational Health and Safety	Ford 2020	Employee wellness, health and safety	3,500	7,563	7,821	
1	Employees	Occupational Health and Safety	FCA 2019	Employee health, safety and well-being	5,000	7,563	7,821	
1	Employees	Occupational Health and Safety	Valeo 2017	Safety and working conditions	10,000	7,563	7,821	
1	Employees	Occupational Health and Safety	Gestamp 2019	Health and safety at work	5,000	7,563	7,821	
1	Employees	Occupational Health and Safety	PSA 2019	Health, safety and well-being in the workplace	14,000	7,563	7,821	
1	Employees	Occupational Health and Safety	Renault 2017	Employee health & safety and work environment	2,250	7,563	7,821	
1	Employees	Occupational Health and Safety	Honda 2020	Ensuring occupational health and safety	3,500	7,563	7,821	
1	Employees	Occupational Health and Safety	Hyundai 2019	Health and safety in the workplace	1,500	7,563	7,821	
1	Employees	Occupational Health and Safety	Bosch 2019	Occupational health	14,000	7,563	7,821	

Figure 34 - Print Screen Materiality Matrix Excel (Sheet 5): Scoring topics of the Employees and Society Category, according to section, company's influence and frequency level



## APPENDIX 2 – INTERNAL STAKEHOLDERS QUESTIONNAIRE 1<sup>10</sup>

### Materialidade - Relatório de Sustentabilidade Fehst Componentes 2020

O objetivo deste inquérito é identificar os tópicos sociais, ambientais e económicos importantes para os Stakeholders Internos da FCL, de forma a elaborar a Matriz Materialidade. Com esta matriz pretendemos identificar os tópicos materiais a abordar no Relatório de Sustentabilidade da FCL, isto é, identificar tópicos relevantes, aqueles considerados importantes por refletirem os impactos (positivos ou negativos) para a organização ou influenciarem as decisões dos stakeholders, devendo portanto, ser incluídos no referido relatório (Exemplo Figura - Matriz Materialidade Nestlé).

A Matriz Materialidade é composta por dois eixos:

Eixo Horizontal (x) – Importância para a FCL, como atividade empresarial (Stakeholders Internos)

Eixo Vertical (y) – Importância para os Stakeholders Externos

A finalidade deste inquérito é obter resultados para quantificar os tópicos relativamente ao eixo horizontal, avaliando-os de acordo com o impacto que estes apresentam para o negócio da FCL, apresentando-se como possíveis riscos ou oportunidades. Isto é, tópicos que apresentam repercussões no negócio, tanto positivas como negativas.

Para além disto, tendo em conta que é a primeira vez que está a ser elaborada uma Matriz Materialidade na FCL e, não sendo possível identificar o impacto da pandemia na evolução da mesma, incluiu-se neste inquérito uma última questão sobre os tópicos que sofreram maiores alterações com a pandemia.

Este inquérito encontra-se dividido em cinco secções: Impacto Ambiental, Trabalhadores e Sociedade, Tecnologia e Inovação, Operações de Negócio e Impacto da Pandemia. Nas quatro primeiras secções será necessário quantificar cada tópico relativamente à frequência, grau de risco, legislação e custo.

Apelamos a uma resposta consciente e ponderada de todas as questões, de forma a obter resultados fidedignos e conclusivos. Qualquer dúvida podem enviar para o meu email: [ecorreia@fehstgroup.com](mailto:ecorreia@fehstgroup.com).

Bom trabalho!

Exemplo - Matriz Materialidade Nestlé 2014

Figure 35 - Introduction of Questionnaire 1

### 1. Impacto Ambiental

Nesta secção serão avaliados oito tópicos relativamente ao Impacto Ambiental das atividades da FCL, sendo estes:

1. Emissões Atmosféricas
2. Gestão de Recursos e Materiais
3. Energia
4. Resíduos
5. Água
6. Biodiversidade
7. Substâncias Perigosas/Químicos

Estes tópicos serão avaliados de 1 a 5, da seguinte forma:

\*Frequência: Com que frequência ocorre o tópico na FCL?  
(1 - Raramente; 3- Mensalmente; 5 - Diariamente)

\*\*Grau de risco: Que risco apresenta para os stakeholders internos e/ou externos da FCL?  
(1 - Nenhum risco; 3- Médio risco; 5 - Elevado risco)

\*\*\*Legislação: Existem requisitos legais relativamente a este tópico?  
(1 - Apresenta nenhum requisito legal, grau baixo de complicações legais; 3 - Apresenta alguns requisitos legais, grau médio de complicações legais; 5 - Apresenta bastantes requisitos legais, grau elevado de complicações legais)

\*\*\*\*Custo: Qual o nível de custo que este tópico apresenta para a FCL?  
(1 - Baixo custo associado; 3 - Médio custo associado; 5 - Elevado custo associado)

Figure 36 - Section outline - Environmental and Climate Impact example

<sup>10</sup> Even though FCL employees are familiarized with English terms, the questionnaire was performed in Portuguese for better comprehension of all participants.

**5. Água \***

Relativo à gestão e controlo dos recursos hídricos na FCL: captação de água, controlo do volume e qualidade da água das descargas e consumo total de água.

	1	2	3	4	5
Frequência*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grau de risco**	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legislação***	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Custo****	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Observação/Comentário relativo ao tópico: Água

Texto de resposta longa

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Figure 37 - Ranking topic - Water and Effluents example

**5. Impacto da Pandemia**

A Pandemia afetou toda a sociedade, contudo não apresentou apenas impactos negativos, também trouxe aprendizagem e evolução relativamente a diversos tópicos. Assim sendo, nesta secção, pretende-se avaliar o impacto que a pandemia teve na Fehst Componentes, ou seja, quais os tópicos sofreram alterações significativas no grau de importância/relevância para a FCL.

**Tópicos que sofreram alterações significativas com o surgimento da Pandemia \***

Identifique os tópicos que considera terem sofrido maiores alterações no grau de importância/relevância com o surgimento da Pandemia, ou seja, os tópicos onde podem ter surgido oportunidades ou tópicos que aumentaram o seu grau de risco.

- Emissões atmosféricas (Impacto Ambiental)
- Gestão de Recursos e Materiais (Impacto Ambiental)
- Energia (Impacto Ambiental)
- Resíduos (Impacto Ambiental)
- Água (Impacto Ambiental)
- Biodiversidade (Impacto Ambiental)
- Substâncias perigosas/Químicos (Impacto Ambiental)
- Formação e Capacitação dos Trabalhadores (Trabalhadores e Sociedade)
- Saúde e Segurança do Trabalho (Trabalhadores e Sociedade)
- Emprego (Trabalhadores e Sociedade)
- Diversidade e Igualdade de Oportunidades (Trabalhadores e Sociedade)
- Direitos Humanos (Trabalhadores e Sociedade)
- Envolvimento com a Comunidade Local e Filantropia (Trabalhadores e Sociedade)

- Inovação Tecnológica associada ao Desenvolvimento de Novos Produtos (Tecnologia e Inovação)
- Produtos Sustentáveis (Tecnologia e Inovação)
- Ética e Integridade (Operações de Negócio)
- Cyber Segurança e Proteção de Dados (Operações de Negócio)
- Qualidade e Segurança do Produto (Operações de Negócio)
- Envolvimento/Feedback dos Clientes (Operações de Negócio)
- Cadeia de Abastecimento (Operações de Negócio)
- Desempenho Económico (Operações de Negócio)
- Governança (Operações de Negócio)
- Cumprimento de Requisitos Legais (Operações de Negócio)
- Gestão de Risco (Operações de Negócio)
- Nenhum
- Outra opção...

**Justifique/Fundamente as opções escolhidas \***

De acordo com a resposta da pergunta anterior, refira se o impacto do/s tópico/s escolhido/s foi um risco ou oportunidade e fundamente a sua resposta.

Texto de resposta longa

---

Figure 38 - Pandemic Impact Section

APPENDIX 3 – INTERNAL STAKEHOLDERS INFORMATIONAL SESSION

The presentation given to FCL internal stakeholders was performed in Portuguese and is displayed in the following figures.

**INQUÉRITO STAKEHOLDERS INTERNOS FCL**  
Fehst Componentes Lda.

**OBJETIVO DO INQUÉRITO**

- Elaborar Matriz Materialidade
- Identificar tópicos relevantes, isto é, aqueles considerados importantes por refletirem os impactos (positivos ou negativos) econômicos, ambientais e sociais da organização ou influenciarem as decisões dos stakeholders, devendo portanto, ser incluídos no Relatório de Sustentabilidade.

**O QUE É A MATRIZ MATERIALIDADE?**

Eixo vertical - Importância para os Stakeholders Externos

Eixo horizontal - Importância/ Impacto para a FCL, como atividade empresarial (Stakeholders Internos)

Máxima importância: obrigatório referir no relatório

**EXEMPLOS - MATRIZ MATERIALIDADE**

TMG

Unilever

**ENQUANTO STAKEHOLDER INTERNO DA FCL, QUAL O MEU PAPEL NESTE INQUÉRITO?**

- Avaliar os tópicos de acordo com o impacto que estes apresentam para o negócio da FCL, apresentando-se como possíveis riscos ou oportunidades. Tópicos que apresentam repercussões no negócio, tanto positivas como negativas.
- Quantificar o eixo horizontal da Matriz Materialidade
- Tópicos:
  - Impacto Ambiental
  - Trabalhadores e Sociedade
  - Tecnologia e Inovação
  - Operações de Negócio

**ENQUANTO STAKEHOLDER INTERNO DA FCL, QUAL O MEU PAPEL NESTE INQUÉRITO?**

AVALIAR CADA TÓPICO (1-5)

**FREQUÊNCIA**

Com que frequência ocorre o tópico na FCL?

1 - Raramente  
3 - Mensalmente  
5 - Diariamente

**GRAU DE RISCO**

Que risco apresenta para os stakeholders internos e/ou externos da FCL?

1 - Nenhum risco  
3 - Médio risco  
5 - Elevado risco

Figure 39 - Informational Session PowerPoint (excerpt 1)

## ENQUANTO STAKEHOLDER INTERNO DA FCL, QUAL O MEU PAPEL NESTE INQUÉRITO?

**AVALIAR CADA TÓPICO (1-5)**

**LEGISLAÇÃO**

Existem requisitos legais relativamente a este tópico?  
 1 - Apresenta nenhum requisito legal, grau baixo de complicações legais  
 3 - Apresenta alguns requisitos legais, grau médio de complicações legais  
 5 - Apresenta bastantes requisitos legais, grau elevado de complicações legais

**CUSTO**

Qual o nível de custo que este tópico apresenta para a FCL?  
 1 - Baixo custo associado  
 3 - Custo médio associado  
 5 - Elevado custo associado

### EXEMPLOS PRÁTICOS

**FREQUÊNCIA: 4 (MÉDIA/ALTA)**  
 A Apple está constantemente a criar tendências, tentando estar sempre à frente, no que diz respeito à inovação de smartphones. Frequência alta, uma vez que é um pensamento constante da empresa.

**GRAU DE RISCO: 5 (ALTO)**  
 Sendo a inovação uma das imagens de marca da Apple, apresentaria risco elevado relativamente aos clientes (stakeholders externos), que poderia perder para outras marcas e, consequentemente, perder trabalhadores (stakeholders internos) que poderiam estar insatisfeitos com a performance da empresa.

**LEGISLAÇÃO: 1 (NENHUM)**  
 Não há legislação relativamente a este tópico.

**CUSTO: 4 (MÉDIO/ALTO)**  
 Necessário investir em profissionais qualificados, bem como investir em novos materiais, softwares....



**Inovação Tecnológica associada ao Desenvolvimento de Novos Produtos**


### EXEMPLOS PRÁTICOS

**FREQUÊNCIA: 5 (ALTA)**  
 Constantemente estão a ser gerados novos dados, com o uso da aplicação do Facebook.

**GRAU DE RISCO: 5 (ALTO)**  
 O usuários da plataforma (stakeholders externos) ficariam infelizes e revoltados ao ver a sua informação a ser partilhada para outros fins, enquanto que os trabalhadores da empresa (stakeholders internos) podem ficar descontentes por questões éticas e decidir sair.

**LEGISLAÇÃO: 4 (ALGUNS/BASTANTES REQUISITOS LEGAIS)**  
 Existem bastantes requisitos legais relativamente a este aspeto, a própria empresa já teve problemas nesta área.

**CUSTO: 4 (MÉDIO/ALTO)**  
 Necessário assegurar softwares bem protegidos, contra o ataque e uso impróprio da informação.



**Cyber Segurança e Proteção de Dados**

### EXEMPLOS PRÁTICOS

**FREQUÊNCIA: 5 (ALTA)**  
 Saúde e Segurança dos Trabalhadores está constantemente em risco.

**GRAU DE RISCO: 5 (ALTO)**  
 Os profissionais de saúde (stakeholders internos) podem contrair o vírus a qualquer momento, caso não estejam devidamente protegidos, e propagar o vírus para o resto da comunidade (stakeholders externos).


**LEGISLAÇÃO: 2 (POUCOS/ALGUNS REQUISITOS LEGAIS)**  
 Existem poucos requisitos legais relativamente a este tópico.

**CUSTO: 4 (MÉDIO/ALTO)**  
 Necessário comprar Equipamento de Proteção Individual apresenta um custo elevado, assegurar que este equipamento é utilizado no espaço temporal definido.

### MATRIZ MATERIALIDADE: IMPACTO DA PANDEMIA

**Hospitais: Cuidados Intensivos - Covid**

**Saúde e Segurança dos Trabalhadores**



## OBRIGADA PELA ATENÇÃO!

Fehst Componentes Lda.

Figure 40 - Informational Session PowerPoint (excerpt 2)

# APPENDIX 4 - STATISTICAL ANALYSIS: INTERNAL STAKEHOLDERS RESPONSES TO QUESTIONNAIRE 1

Table 41 - Topic Scores: Results from the IS Questionnaire 1

Topic Scores						
Topic	Mean				Score (1*F+1,5*S+ 0,5*LI+1*C)	Rounding Score (Up)
	Frequency	Severity	Legal Implications	Cost		
ECl_1	3,6	3,8	4,5	3,8	15,3	15
ECl_2	3,4	3,4	3,2	3,5	13,6	14
ECl_3	3,7	3,2	3,7	3,9	14,2	14
ECl_4	4,1	3,8	4,5	3,9	15,9	16
ECl_5	3,8	3,7	4,1	3,9	15,3	15
ECl_6	2,3	2,7	3,3	2,5	10,4	10
ES_1	3,6	3,6	2,7	3,7	13,7	14
ES_2	4,3	3,7	3,6	3,5	15,0	15
ES_3	3,3	4,2	2,4	4,1	14,8	15
ES_4	3,3	2,8	2,6	2,6	11,3	11
ES_5	3,6	3,1	3,3	2,2	12,0	12
ES_6	3,3	2,2	2,1	2,1	9,6	10
TI_1	3,6	3,8	2,6	4,0	14,6	15
TI_2	3,1	3,0	3,3	3,3	12,5	13
BO_1	4,2	3,8	3,1	2,9	14,4	14
BO_2	4,4	4,6	3,9	3,8	17,1	17
BO_3	4,3	4,4	4,3	3,8	16,8	17
BO_4	3,4	4,3	2,1	3,1	14,0	14
BO_5	2,8	3,3	2,8	2,6	11,6	12
BO_6	3,0	3,4	2,2	3,2	12,5	12
BO_7	3,6	4,0	2,6	3,0	13,9	14

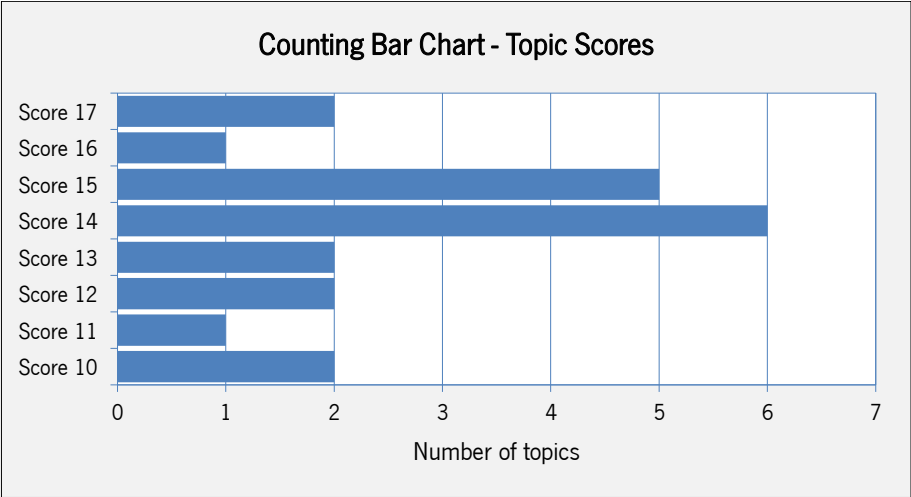


Figure 41 - Counting Bar Chart - Topic Scores from Questionnaire 1

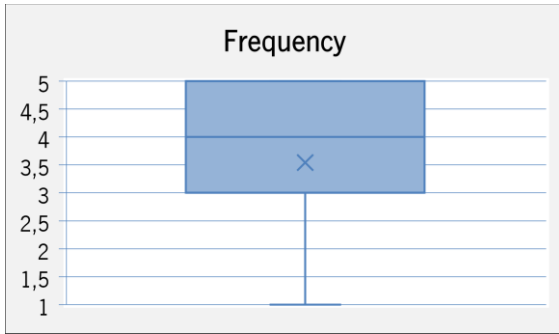


Figure 42 - Box Plot of the scores given to Frequency

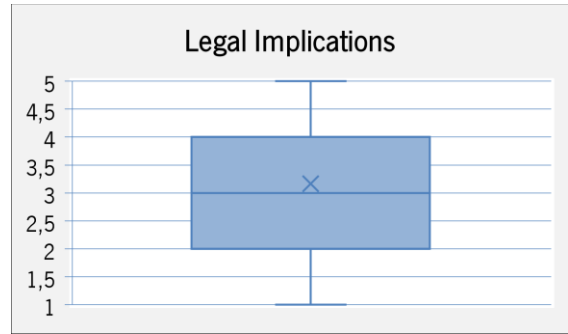


Figure 44 - Box Plot of the scores given to Legal Implications

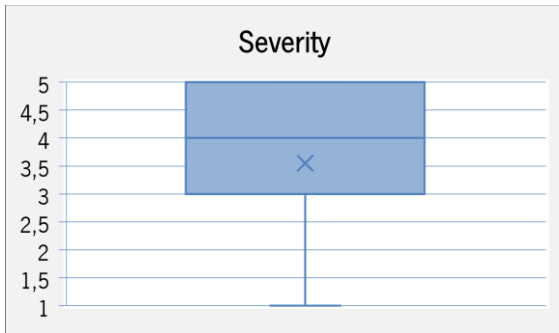


Figure 43 - Box Plot of the scores given to Severity

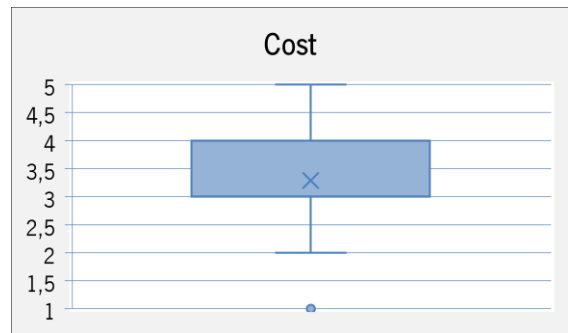


Figure 45 - Box Plot of the scores given to Cost

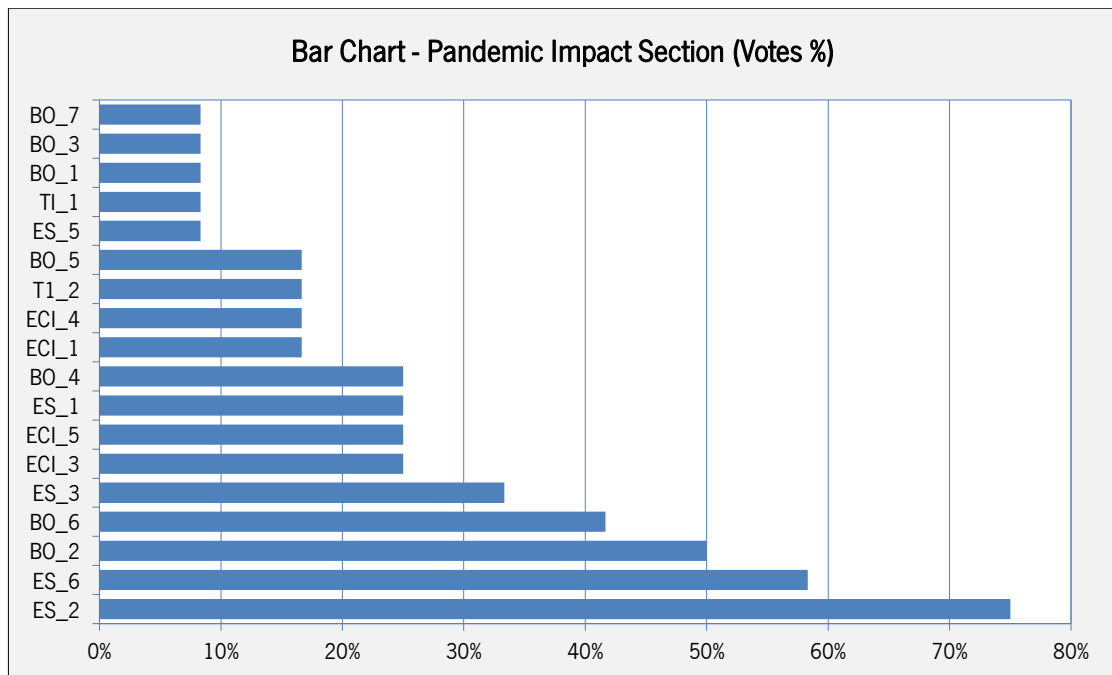


Figure 46 - Voting results of the topics that experienced positive or/and negative impacts with the Pandemic<sup>11</sup>

<sup>11</sup> The Bar Chart only displays the topics that received at least one vote.

## APPENDIX 5 - INTERNAL STAKEHOLDERS QUESTIONNAIRE 2<sup>12</sup>

### Materialidade - Relatório de Sustentabilidade Fehst Componentes 2020

O objetivo deste inquérito é identificar os tópicos sociais, ambientais e económicos importantes para os Stakeholders Internos da FCL, de forma a elaborar a Matriz Materialidade. Com esta matriz pretendemos identificar os tópicos materiais a abordar no Relatório de Sustentabilidade da FCL, isto é, identificar tópicos relevantes, aqueles considerados importantes por refletirem os impactos (positivos ou negativos) para a organização ou influenciarem as decisões dos stakeholders, devendo portanto, ser incluídos no referido relatório (Exemplo Figura - Matriz Materialidade Nestlé).

A Matriz Materialidade é composta por dois eixos:

Eixo Horizontal (x) – Importância para a FCL, como atividade empresarial (Stakeholders Internos)  
Eixo Vertical (y) – Importância para os Stakeholders Externos

A finalidade deste inquérito é obter resultados para quantificar os tópicos relativamente ao eixo horizontal, avaliando-os de acordo com o impacto que estes apresentam para o negócio da FCL, apresentando-se como possíveis riscos ou oportunidades. Isto é, tópicos que apresentam repercussões no negócio, tanto positivas como negativas.

Este inquérito encontra-se dividido em quatro secções: Frequência, Grau de Risco, Legislação, Custo. Em cada secção será necessário quantificar cada tópico (Impacto Ambiental, Trabalhadores e Sociedade, Tecnologia e Inovação, Operações de Negócio) relativamente ao parâmetro da secção.

Apelamos a uma resposta consciente e ponderada de todas as questões, de forma a obter resultados fidedignos e conclusivos. Qualquer dúvida podem enviar para o meu email: ecorrelia@fehstgroup.com.

Bom trabalho!

Exemplo - Matriz Materialidade Nestlé 2014

Figure 47 - Introduction of Questionnaire 2

## Frequência

Nesta secção serão avaliados todos os tópicos, relativamente ao parâmetro Frequência:

Com que frequência ocorre o tópico e é discutido no processos de tomada de decisão da FCL?

1 - Nunca  
3- Mensalmente  
5 - Diariamente

-----IMPACTO AMBIENTAL-----

**EMISSÕES ATMOSFÉRICAS** - Relativo à gestão de emissões atmosféricas na FCL: emissões de Gases de Efeito de Estufa Diretas - fontes pertencentes e controladas pela FCL; e Indiretas - causadas pelo consumo de energia elétrica em atividades controladas pela FCL. Inclui também outro tipo de emissões atmosféricas: NOx; Compostos Orgânicos Voláteis - COV; Material Particulado - MP;

**GESTÃO DE RECURSOS** - Relativo à gestão eficiente dos recursos e materiais na FCL (otimização/eficiência dos recursos e materiais, ter em conta o princípio da economia circular, etc.);

**ENERGIA** - Relativo ao consumo energético e respetivo controlo na FCL;

**GESTÃO RESÍDUOS** - Relativo à gestão de resíduos na FCL: destinados para disposição final (aterro, incineração, etc.) e não destinados para disposição final (reciclagem, reaproveitamento e reutilização);

**ÁGUA** - Relativo à gestão e controlo dos recursos hídricos na FCL: captação de água, controlo do volume e qualidade da água das descargas e consumo total de água;

**BIODIVERSIDADE** - Relativo a impactos significativos diretos das atividades, produtos e serviços da FCL na biodiversidade.

Figure 48 - Section outline - Frequency example, in particular, Environmental Impact

<sup>12</sup> Even though FCL employees are familiarized with English terms, the questionnaire was performed in Portuguese for better comprehension of all participants.

**FREQUÊNCIA \***

Com que frequência ocorre o tópico e é discutido no processos de tomada de decisão da FCL? (1 - Nunca; 3- Mensalmente; 5 - Diariamente)

	1	2	3	4	5
Emissões Atmo...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gestão de Recu...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gestão de Resí...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Água	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 49 - Ranking Frequency - Environmental Impact example



## APPENDIX 6 - STATISTICAL ANALYSIS: INTERNAL STAKEHOLDERS RESPONSES TO QUESTIONNAIRE 2

Table 42 - Topic Scores: Results from the IS Questionnaire 2

Topic Scores						
Topic	Mean				Score (1*F+1,5*S+ 0,5*LI+1*C)	Rounding Score (Up)
	Frequency	Severity	Legal Implications	Cost		
ECl_1	3,0	3,6	4,5	3,5	14,1	14
ECl_2	3,1	3,0	2,7	2,8	11,7	12
ECl_3	2,9	3,2	2,8	3,9	13,1	13
ECl_4	2,7	2,9	3,9	3,0	12,0	12
ECl_5	2,9	3,4	3,2	3,5	13,1	13
ECl_6	1,3	1,9	1,9	1,6	6,6	7
ES_1	3,4	3,4	2,6	2,9	12,6	13
ES_2	3,1	2,9	3,2	2,8	11,8	12
ES_3	2,4	2,9	2,7	2,6	10,7	11
ES_4	2,2	2,1	2,5	1,9	8,5	9
ES_5	1,5	1,9	2,6	1,7	7,3	7
ES_6	2,1	1,7	1,9	1,7	7,3	7
TI_1	3,1	3,2	2,4	3,1	12,3	12
TI_2	2,2	3,1	2,5	2,5	10,6	11
BO_1	2,4	2,2	2,6	2,0	9,0	9
BO_2	3,4	3,5	3,4	3,3	13,6	14
BO_3	3,7	3,4	3,4	3,4	13,8	14
BO_4	3,4	3,1	2,1	2,4	11,6	12
BO_5	2,8	2,8	1,9	2,1	10,0	10
BO_6	2,9	3,1	1,9	2,3	10,9	11
BO_7	2,8	2,8	2,1	2,2	10,2	10

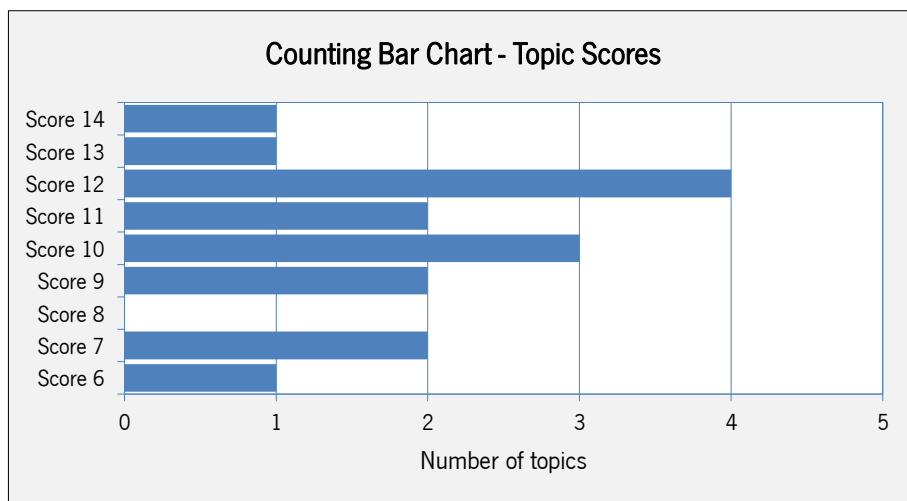


Figure 50 - Counting Bar Chart - Topic Scores from Questionnaire 2

## APPENDIX 7 - MATERIALITY MATRIX: FINAL SCORES

Table 43 - Materiality Matrix: final topic scores

Final Scores			
ID	Topic	Horizontal axle score	Vertical axle score
ECL_1	Air Emissions	2,99	4,21
ECL_2	Resources Management	3,59	3,36
ECL_3	Energy	3,42	3,77
ECL_4	Waste	3,36	3,14
ECL_5	Water and Effluents	3,05	2,91
ECL_6	Biodiversity	1,57	0,73
ES_1	Training and Education	3,97	3,27
ES_2	Occupational Health and Safety	3,91	3,78
ES_3	Employment	2,68	3,72
ES_4	Diversity and Equal Opportunities	2,20	3,86
ES_5	Human Rights	1,93	2,94
ES_6	Community Engagement and Philanthropy	1,86	2,59
TI_1	Innovation	4,34	3,55
T1_2	Sustainable Products	2,45	3,56
BO_1	Ethics and Integrity	2,92	4,90
BO_2	Cyber Security and Data Protection	4,57	3,29
BO_3	Product Quality and Safety	4,55	1,91
BO_4	Clients Relationship Management	4,00	3,54
BO_5	Supply Chain	2,66	3,92
BO_6	Financial Performance	2,88	2,63
BO_7	Governance	2,65	3,08

# APPENDIX 8 – SUPPLEMENTARY DOCUMENTS FOR REPORTING

**Norm 403-9: Work-related injuries**

**Requirements**

i. For all employees:  
 ii. The number and rate of fatalities as a result of work-related injury;  
 iii. The number and rate of high-consequence work-related injuries (excluding fatalities);  
 iv. The number and rate of recordable work-related injuries;  
 v. The main types of work-related injury;  
 vi. The number of hours worked.  
 For all workers who are not employees but whose work and/or workplace is controlled by the organization:  
 vii. The number and rate of fatalities as a result of work-related injury;  
 viii. The number and rate of high-consequence work-related injuries (excluding fatalities);  
 ix. The number and rate of recordable work-related injuries;  
 x. The main types of work-related injury;  
 xi. The number of hours worked.  
 For work-related hazards that pose a risk of high-consequence injury, including:  
 xii. How these hazards have been determined;  
 xiii. Which of these hazards have caused or contributed to high-consequence injuries during the reporting period;  
 xiv. Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls;  
 xv. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded;  
 xvi. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

a(i) Number of fatalities as a result of work-related injury			a(ii) Rate of fatalities as a result of work-related injury					
2018			2019			2020		
Female	Male	Total	Female	Male	Total	Female	Male	Total

b(i) Number of high-consequence work-related injuries (excluding fatalities)			b(ii) Rate of high-consequence work-related injuries (excluding fatalities)					
2018			2019			2020		
Female	Male	Total	Female	Male	Total	Female	Male	Total

c(i) Number of recordable work-related injuries			c(ii) Rate of recordable work-related injuries					
2018			2019			2020		
Female	Male	Total	Female	Male	Total	Female	Male	Total

d(i) The main types of work-related injury		
2018	2019	2020

**e. Have been calculated based on hours worked (200 000 or 1 000 000)** 200 000

**f. Have been calculated based on hours worked (200 000 or 1 000 000)** 200 000

**c. The work-related hazards that pose a risk of high-consequence injury**

i. How these hazards have been determined:

ii. Which of these hazards have caused or contributed to high-consequence injuries during 2020? N/A

iii. Actions taken or underway to eliminate these hazards and minimize risks:

d. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls:

f. Whether and, if so, why any workers have been excluded from this disclosure:

g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used:

Figure 51 - Document fulfilling request (GRI 403-9 example)

**Environment Performance Indicators 2020**

Type	Methodology	Month												Total	
		jan	feb	mar	apr	may	jun	jul	aug	sept	oct	nov	dec		
Electricity	Chrome Plating (kWh)	Fixed counter	108 754,00	91 890,00	87 869,00	38 246,00	90 875,00	76 554,00	87 011,00	45 521,00	96 899,00	98 924,00	98 056,00	80 524,00	1 001 123,00
	UV Painting (kWh)	Fixed counter	15 043,00	13 145,00	9 560,00	NC	10 287,00	9 826,00	11 164,00	7 402,00	16 965,00	6 461,00	13 302,00	12 854,00	126 009,00
Natural Gas	Total Electricity (kWh)	Bill	301 768,00	219 634,00	115 869,00	98 676,00	179 169,00	168 010,00	145 049,00	159 084,00	206 398,00	232 128,00	221 854,00	108 100,00	2 155 739,00
	Total Electricity (GJ)	1 kWh = 0,0036 GJ	1 086,36	790,68	417,13	355,23	645,01	604,84	522,18	572,70	743,03	835,66	798,67	389,16	7 760,66
Natural Gas	Electricity - emissions (tonCO2)	Location based approach - Emission factor from portuguese electric grid 2020: kgCO2/kWh *Currently using the same as 2019	76,21	55,47	29,26	24,92	45,25	42,43	36,63	40,18	52,13	58,62	56,03	27,30	544,43
	Natural Gas (kWh)	Bill	73 375,00	32 269,00	26 151,00	7 798,00	19 490,00	18 687,00	12 844,00	6 121,00	20 243,00	39 361,00	43 284,00	54 283,00	353 906,00
Natural Gas	Natural Gas (GJ)	1 kWh = 0,0036 GJ	264,15	116,17	94,14	28,07	70,16	67,27	46,24	22,04	72,87	141,70	155,82	195,42	1 274,06
	Natural Gas (tonCO2)	1 GJ = 64,1 kgCO2	16,93	7,45	6,03	1,80	4,50	4,31	2,96	1,41	4,67	9,08	9,99	12,53	81,67
Diesel (€)	Total expencies		383,20	275,40	115,06	215,77	592,64	549,16	466,00	782,18	970,45	975,11	588,54	864,13	6 777,64
	Average price diesel 2020: 1l = 1,44 €		266,11	191,25	79,90	149,84	411,56	381,36	323,61	543,18	673,92	677,16	408,71	600,09	4 706,69
Diesel (kg)	Density = 820 - 845 g/dm3 = 832,5; Consider: Bepisol BP Galp		221,54	159,22	66,52	124,74	342,62	317,48	269,41	452,20	561,04	563,74	340,25	499,58	3 918,32
	42,1 - 43,3 Mj/kg Diesel = 42,8		9,48	6,81	2,85	5,34	14,66	13,59	11,53	19,35	24,01	24,13	14,56	21,38	167,70
Diesel (tonCO2)	1 GJ = 74 kgCO2		0,70	0,50	0,21	0,40	1,09	1,01	0,85	1,43	1,78	1,79	1,08	1,58	12,41
	Solar panels (GJ)														45,20
Total Energy consumption	Total energy - without solar panels (GJ)		1 572,05	1 066,07	577,79	508,05	1 057,79	989,59	837,82	1 046,94	1 376,95	1 541,10	1 294,75	1 084,15	12 953,05
	Direct emissions - Scope 1 (tonCO2)		15,40	7,00	5,44	2,01	5,13	4,87	3,54	2,87	6,07	9,89	9,85	12,62	84,68
Total emissions	Indirect emissions - Scope 2 (tonCO2)		76,21	55,47	29,26	24,92	45,25	42,43	36,63	40,18	52,13	58,62	56,03	27,30	544,43
	Water withdrawal CP (m3)	Fixed counter	240	303	287	124	346	320	360	140	378	392	335	236	3 461
Water withdrawal	Total water withdrawal (m3)	Bill	663	705	561	423	755	888	956	823	1 263	1 277	1 369	1 173	10 856
	Discharges CP (m3)	ETARI' Software	83	165	166	50	283	277	226	156	300	326	366	290	2 688
Discharges	Discharges painting (m3)	Com base no volume dos 2 tanques associados à cabine de pintura Venjakob	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,50	2 754,00

Note: Others 2020  
 CO2 pre-cleaning (tonCO2) 96,751

Figure 52 - Environment Performance Indicators Excel

## Sustainability Report 2020: Standards

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## 102 – General Disclosures

### 1. Organizational Profile

#### 102-1: Name of the organization

a. Name of the organization: Fehst Componentes, Ltd. (FCL)

#### 102-2: Activities, brands, products and services

a. A description of the organization's activities: Our aim is to be recognized as one of the best solution partners for plastic components. We offer complete solutions for mechanical and aesthetic modules.

b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets: We are specialized in producing plastic interior decorative components, such as centre stack HMI panels, steering wheel switches, roof switch modules, door switch modules and other switches and controls. Besides this, we are capable of providing these products painted or chromed.

#### 102-3: Location of Headquarters

a. Location of the organization's headquarters:

Rua Max Grundig, 9  
Ferreiros  
4705-820 BRAGA

#### 102-4: Location of Operations

a. Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report: Only Portugal.

#### 102-5: Ownership and legal form

a. Nature of ownership and legal form: Limited Responsibility (Ltd.)

#### 102-6: Markets served

a. Markets served, including:

- i. geographic locations where products and services are offered: Europe
- ii. sectors served: Automotive sector

iii. types of customers and beneficiaries: OEMs, Tier 1, Tier 2 and Non-automotive

#### 102-7: Scale of the organization

a. Scale of the organization, including:

i. total number of employees: 82 employees.

ii. total number of operations: 1

iii. net sales (for private sector organizations) or net revenues (for public sector organizations): 4 150 825 €

iv. total capitalization (for private sector organizations) broken down in terms of debt and equity:

Total capitalization = 9 751 670 €  
Equity = 3 713 611 €  
Non-current liabilities = 6 038 059 €

v. quantity of products or services provided: 3 489 503 units produced.

#### 102-8: Information on employees and other workers

a. Total number of employees by employment contract (permanent and temporary), by gender: 33 females and 49 males, all employees are in permanent condition.

b. Total number of employees by employment contract (permanent and temporary), by region: N/A

c. Total number of employees by employment type (full-time and part-time), by gender: All 82 employees are under full-time contracts.

d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees: N/A

e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries): N/A

f. An explanation of how the data have been compiled, including any assumptions made: Data regarding employees is gathered and constantly updated by FCL's Human Resources Department (values presented as of 31.12.2020).

#### 102-9: Supply chain

a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services:

All suppliers are based in Europe.

Regarding our types of suppliers, with the increase of digitalization, connectivity and automation, FCL has invested in new equipment, accounting for 60% of total expenses.

#### 102-10: Significant changes to the organization and its supply chain

a. Significant changes to the organization's size, structure, ownership, or supply chain, including:

i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions: None.

ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations): None.

iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination: FCL continually evaluates suppliers based upon proximity to operational centres, quality, cost, environmental performance, etc. Very few changes happened in FCL's supply chain, only added two new suppliers in 2020.

#### 102-11: Precautionary Principle or approach

a. Whether and how the organization applies the Precautionary Principle or approach: Although the company does not directly apply the Precautionary Principle, there is a risk-based thinking.

#### 102-12: External Initiatives

a. A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses: Although not a subscriber yet, FCL endorses the United Nations Global Compact and the 2030 Agenda, especially the 17 Sustainable Development Goals.

#### 102-13: Membership of associations

a. A list of the main memberships of industry or other associations, and national or international advocacy organizations: AFIA - Associação de Fabricantes para a Indústria Automóvel; AHK - Câmara de Comércio e Indústria Luso-Alemã; MOBINOV - Cluster Automóvel.

Figure 53 - Sustainability Report GRI Standards, 102 General Disclosures: Organizational Profile (example)



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Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 1

### MESSAGE FROM THE CEO

Dear readers,

**Photo**

Fehst Components, Ltd. (FCL) was founded in 1995 with origin as a management bureau of Grundfos Components. At that stage we had to compete with the price, flexibility and agility of their first major client at the time, Grundfos Grundfos. Our goal as our only client, the most important key factor to ensure our company's sustainability was the pursuit to acquire new customers. This was accomplished through diversification of activity in terms of technology portfolio, engagement and market sourcing. Since then, we have kept evolving and learning and FCL soon became one of the most important automotive suppliers in Portugal.

Our current focus is our business model transformation, driven by the demands of continuous technological innovation that the automotive sector demands, by developing our activities both at process and product level. FCL aims to be a reference supplier in the European market of integrated solutions for aesthetic modules, by complying with high efficiency and quality standards. Thus, through innovation is the only way to meet the challenges of global competition. By partnering and strong cooperation with Elveco Electronics, an affiliated company of Fehst Group, with consolidated know-how in electronics, we will soon further widen our ability range, enabling the integration of electronic and lighting functionalities in our decorative components.

Regarding our environmental impact, the industry as a whole will help us improve to a more sustainable and efficient production. By using instant information, monitoring our processes and detecting problems or improvement opportunities, becomes easier, allowing an agile and efficient implementation of specific action plans. The automated solutions will contribute to an efficient resource management, helping us achieve energy efficiency, reduce emissions, waste and noise. On top of that, we keep raising awareness in our employees regarding their environmental practices, both at the workplace and home. Our mission is not only achieve a more agile, transparent and proactive internal process production but to get involved with our suppliers and reduce the overall environmental impact.

Our mission is to develop and manufacture components with high added value for the automotive interior and other industries, with technologies and processes in the most modern state of the art.

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 2

Fully committed to this new digitalized and automated world, our main goal at this moment is to invest in research, development and innovation through cooperation. Regarding Product Development, we aim to provide a robust and reliable product, with the goal focus on efficient manufacturing processes. Consequently, to provide long-lasting solutions, we can help our customers also improve their sustainability. FCL will consistently do efforts to present more environment-friendly materials that can present the same product performance, but always leaving our clients' final decision. Still, we are focused on reducing our environmental impact through the product and process design, besides continuous improvement of operations.

As for our people, we want to show that this is a company that invests in the future. Together with the restructuring of the organization, we want to develop our employees. Although entirely conscious of the problems that may emerge with industry 4.0, developing our employees' skills is crucial. By promoting open and honest communication amongst our workers, we will be solving together and making FCL grow. Furthermore, providing a healthy workplace environment is very important, so that our employees feel motivated and capable of doing their jobs. Unusually, a positive relation and communication with our workforce will only bring benefits. If our workers come to the end of the big and long, "today's unfulfilled" managed to do everything that "tomorrow" misdirection cannot be accomplished with money. At FCL, we live for the satisfaction to achieve the envisioned transformations. This is our way to win and attract new clients.

This pandemic has brought a lot of uncertainty, but also demonstrated our powerful as can be when we work together. FCL's response to covid-19 was agile and without the help and discipline of our workforce, we would not be able to handle this as well as we did. These challenging times have shown us that we must be prepared, leaving how to turn this into new opportunities and identifying new ways of working and managing our business.

Overall at FCL, we pursue to master the technologies we embrace, applying the best solution in the market. In order to achieve that, we need to cooperate and keep very close communication with our clients, to understand their needs, and meet the needs of the future. We are long-term cooperators through the respect and trust of our internal and external stakeholders, enabling us to contribute with our know-how and achieve better solutions.

Even though we recognize that we have a long journey of improvements to achieve sustainability, we are proud of where we stand today. Transforming overall sustainability is an ongoing process, publishing this report is one of the first steps that shows our commitment to become more transparent and accountable of our impacts in the world.

Hatto Fehst

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 3

### HIGHLIGHTS 2020

#### INDUSTRY 4.0

(Write here)

PAPERLESS COMPANY

FULL PRODUCTION

(Write here) (Write here)

NEW ERP SYSTEM

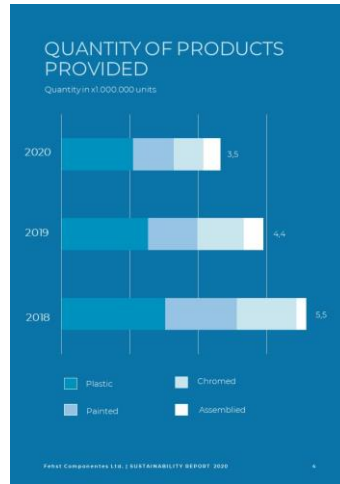
(Write here)

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 4

### OVERVIEW OF FEHST COMPONENTS

(Write here)

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 5



### STAKEHOLDER ENGAGEMENT AND MATERIALITY

Stakeholders' Communication Channels

(Write here)

**Employees** (Write here)

**Clients** (Write here)

**R&D Partners and Universities** (Write here)

**Suppliers** (Write here)

**Community** (Write here)

**Official Entities** (Write here)

**Financial Institutions** (Write here)

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 8

### ENVIRONMENT

(Write here)

**MATERIAL TOPICS:** Resources Management, Energy, Emissions, Water, Waste

Fehst Components Ltd. | SUSTAINABILITY REPORT 2020 8

Figure 54 - Layout examples of FCL's Sustainability Report

## APPENDIX 9 - GRI STANDARDS: EXPLANATIONS FOR OMISSION

Table 44 - Explanation for omission of GRI Standards

GRI Standard	Disclosure	Explanation for omission
<b>302 Energy</b>	302-2 Energy consumption outside of the organization	At the moment, FCL has not started yet to account on energy outside of its installations.
	302-4 Reduction of energy consumption	There were no specific reductions of initiatives calculated in 2020.
	302-5 Reductions in energy requirements of products and services	
<b>303 Water and Effluents</b>	303-4 Water discharge	At FCL facilities there is still only one discharge counter at the chrome plating ETAR and, it is possible to calculate painting discharges considering the water that enters the process. However, the rest of the discharges are not measured. Due to this, it is impossible to measure FCL's water discharges and, therefore, the overall water consumption.
	303- 5 Water consumption	
<b>305 Emissions</b>	305-3 Other indirect (Scope 3) GHG emissions	FCL does not account for emissions outside of the organization, only from sources that can directly control.
	305-5 Reduction of GHG emissions	Have not been implemented initiatives for GHG emissions reduction.
	305-6 Emissions of ozone-depleting substances (ODS)	FCL does not include or require the use of ozone-depleting substances in its processes.
	305-7 Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	The procedure to account for VOC emissions is still lacking in accuracy.
<b>403 Occupational Health and Safety</b>	403-10 Work-related ill health	FCL does not monitor records related to work illnesses and, with regard to fatalities, it has never happened at its premises.

## APPENDIX 10 – FCL SUSTAINABILITY REPORT 2020

### Fehst Componentes Ltd. Sustainability Report 2020 – Structure

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## Message from the CEO

### GRI: 102 (2) Strategy

Dear readers,

Fehst Componentes, Lda (FCL) was founded in 1995 with origin on a management buyout of Grundig Componentes. At that stage, we had to compete with the prices, flexibility and agility of the far east market. Having at the 1st starting years Grundig Car Audio as our only client, the most important key factor to ensure the sustainability of our company was the pursuit to acquire for new customers. This was consolidated through diversification of activities in terms of technology portfolio enlargement and market widening. Since then, we have kept evolving and learning. FCL soon became one of the most important automotive suppliers in Portugal.

**Mission:** To develop and manufacture components with high added value for the automotive interior and other industries, with technologies and processes in the most modern state of the art.

Our current focus is our business model transformation, driven by the demands of continuous technological innovation that the automotive sector demands, by developing our activities both at the process and product level. FCL aims to be a reference supplier in the European market of integrated solutions for aesthetic modules by complying with high efficiency and quality standards. Thus, focusing on innovation is the only way to meet the challenges of global competition. By partnering and strong cooperation with Enancer Eletronica, an affiliated company of Fehst Group, with consolidated know-how in electronics, we will soon further widen our ability range, enabling the integration of electronic and lighting functionalities in our decorative components.

Regarding our environmental impact, the Industry 4.0 era will also help us improve to more sustainable and efficient production. By having instant information, monitoring our processes and detecting problems or improvement opportunities become easier by allowing an agile and efficient implementation of specific action plans. The automated workflows will contribute to efficient resource management, helping us achieve energy efficiency, besides diminishing waste and losses. On top of that, we keep raising awareness to our employees about their environmental practices at the workplace and home. Our ambition is to achieve more agility, transparency and proactiveness at our internal processes production but we also want to get involved with our suppliers and, therefore, reduce the overall environmental impact.

Fully committed to this new digitalized and automated world, our main goal at this moment is to invest in research, development and innovation through cooperation. Regarding Product Development, we aim to provide robust and reliable products with a

merged focus on efficient manufacturing processes. Consequently, to provide long-lasting solutions, we can help our customers also improve their sustainability. FCL will consistently be making efforts to present more environment-friendly materials that can provide the same product performance. Though, this will always be leaving our clients' final decision. Still, we focus on reducing our environmental impact through the product and process design, besides the continuous improvement of operations.

As for our people, we want to show that this is a company that invests in the future. Together with the restructuring of the organization, we want to develop our employees. Although entirely conscious of the problems that may emerge with Industry 4.0, developing our employees' skills is crucial. By promoting open and honest communication amongst our workers, we will be evolving together and making FCL grow. Furthermore, providing a healthy workplace environment is very important, so that our employees feel motivated and capable of doing their jobs. Undoubtedly, a positive relation and communication with our workforce will only bring benefits. If our workers come to the end of the day and say - "Today I was fulfilled, I managed to do everything that I had planned" - this satisfaction won't be accomplished with money. At FCL, we live for the satisfaction to achieve the envisioned transformations and, this is our way to retain and attract new talents.

This pandemic has brought a lot of uncertainty but also demonstrated how powerful we can be when we work together. FCL's response to Covid-19 was agile and, without the help and discipline of our workforce, we would not be able to handle this as well as we did. These challenging times have shown us that we must be prepared to learn how to turn risks into new opportunities and identify new ways of working and managing our business.

Overall, at FCL, we pursue to master the technologies we embrace, providing the best solution in the market. In order to achieve that, we need to cooperate and keep very close communication with our clients to understand market trends and meet the needs of the future. We envision long-term cooperation through the respect and trust of our internal and external stakeholders, enabling us to contribute with our know-how and achieve better solutions.

Even though we recognize that we have a long journey of improvements to achieve sustainability, we are proud of where we stand today. Transformation towards sustainability is an ongoing process. Publishing this report is one of the first steps that shows our commitment to become more transparent and accountable for our impacts in the world.



## 2020 Highlights

### Covid-19 Outbreak

In 2020 we witnessed an overall decrease in our orders. The situation surrounding this pandemic is dynamic and rapidly evolving, so we had to be agile and adjust our processes to this change. During this phase, FCL's main priority was to ensure the health, safety and well-being of all employees.

In the first instance, one of the decisions made, to protect our workers, was a difficult but necessary one: temporarily suspend our activities (April-May). Then, we developed a return to work plan that fulfilled all safety requirements regarding Covid-19, so that our workers would feel safe in our installations. Among these introduced actions were temperature scans, also provided hand sanitiser throughout our facilities and Personal Protective Equipment (PPE), implemented social distancing measures, and established different shifts with fewer people for lunch breaks. To diminish the risk of spreading the virus and secure that the message of these measures was being transmitted, throughout 2020, FCL performed several covid-awareness circle points with all employees. Besides this, we provided technical support to our workers to introduce the work from home paradigm, also implemented the Microsoft Teams platform to ease the communication process.

After this year, mental health has been an issue addressed more than ever. This pandemic brought special awareness surrounding this topic. For this reason, FCL is already developing Mental Health Programs to ensure that our employees feel supported in their workplace.

Our hearts go to everyone affected by the coronavirus crisis. At FCL, we are extremely grateful to all health care professionals and appreciate the work they have done while putting their lives at risk. To support them in any way we could, we donated Personal Protective Equipment (PPE) to the Guimarães Hospital.

### Industry 4.0

Currently facing the 4th Industrial Revolution, where digitalization and connectivity are changing the industrial reality, FCL is focused on the future. As a result, we invested in a technological and organizational transformation project, where the goal is to reinforce our position in the market. Together with Bosch Consulting, by implementing lean methodologies, FCL will ensure a standard and clear information flow. This condition is crucial to secure connectivity and digitalization among processes involving people and machines.

#### New ERP System – Primavera

The goal is to provide functional informatics tools that include all processes and support FCL's strategy and development. The Primavera ecosystem implemented enables the registration of more data records for further analysis. Therefore, by easing this data collection mechanism, it is possible to monitor processes. Consequently, we are able to reduce scrap and implement improvement measures.

3

### Pull Production

In 2020, we started developing a project with Bosch Consulting to implement a Pull Production System at FCL. To do that, we must standardize our processes, introduce the Kanban methodology and invest in Milk Runs. Having a Pull system means that FCL will start to have a production system based on actual demand and not on forecast. Allowing FCL to produce and deliver Just In Time, avoiding overstocking. This concept will help us quickly adapt to changes in the work process that may occur, increase productivity and improve flow efficiency. Besides this, FCL will be able to reduce waste throughout all processes and, consequently, achieve a greener production.

This project is expected to start implementation in 2021. We are confident that this change will provide multiple benefits to FCL.

### Paperless Company

FCL is committed to this digitalization era. By now, several workflows have been digitalized and, paper use is no longer necessary. Besides this, we are trying to reduce and eliminate, when possible, our paper consumption. At FCL, we were able to reduce our paper use in 2020, up to 56% when comparing with 2018. Even though this may seem a small step and meaningless for a manufacturing company, this brings several advantages. Not only this represents a decrease as an environmental impact but also increases storage space on our facilities. Also, once sharing information became easier, this reflected in more organization within the company and an overall increase in productivity and efficiency.

### Replacing Chromium VI with Chromium III

This year we were able to switch our Chromium VI bath to Chromium III Sulphate-based bath, providing the same mechanical properties as before. With this transformation, FCL is not only reducing its environmental impact but also not putting workers in danger since Chromium III is a less hazardous substance when compared to Chromium VI.

### Dry Ice Blasting – Fully Integrated

In 2020, we were also capable of fully integrating Dry Ice Blasting into our production processes. This process consists of projecting solid carbon dioxide particles onto a surface as means of eliminating stains and contaminants, leaving the surface ready for painting. This method is proven to be a much more efficient and environmentally responsible cleaning mechanism of contaminated surfaces, bringing several advantages, such as:

- **Reused CO<sub>2</sub>** from other industries, so there is no release of more CO<sub>2</sub> (Carbon Circular Economy – no contribution to the greenhouse effect)
- **Does not create by-products** because the only residue formed is the one removed from the surface
- **No water is needed** in this cleaning method, **neither solvents**
- **Contributes to less scrap** because this method is more efficient
- The process is **quicker** than the previous one

4

## Overview of Fehst Componentes

GRI: 102 (1) Organizational Profile; 102 (3) Ethics and Integrity; 102 (4) Governance

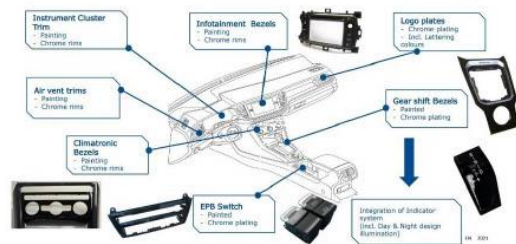
Fehst Group is a family-owned industrial group based in Braga, Portugal and covers different businesses by incorporating: Fehst Componentes, Lda. (FCL) - manufacturing car interior decorative components; Enancer Electrónica S.A. - developing technological automation solutions for smart homes and smart hotels under the brand ONLY Smart Buildings; Siroco - developing and building industrial automation solutions and equipment.

FCL is the largest company under the Fehst Group, founded in 1995 from a management buyout of Grundig Componentes, and has its focus on the automotive sector. With more than 25 years of experience, FCL has become one of the most important automotive components suppliers in Portugal. In fact, 44% of FCL's sales in 2020 came from exportation to other countries in Europe, supplying one of the major Original Equipment Manufacturers: Volkswagen Group (Volkswagen, Audi, Seat).

We focus on continuous improvement, project management and quality planning, following the norms and requirements of the automotive industry. To ensure this commitment to improvement and evolution, FCL has several certifications and accreditations, such as ISO 14001:2015 Environmental Management System, ISO 9001:2015 Quality Management Systems, IATF 16949:2016 Quality in the automotive sector and TISAX (Trusted Information Security Assessment Exchange).

### Scale of the Organization

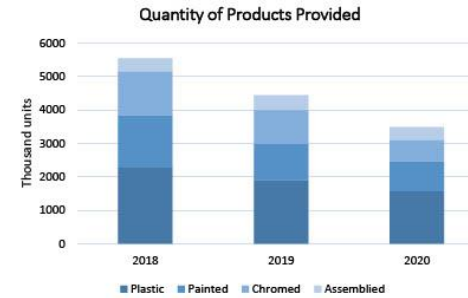
#### Product Scope



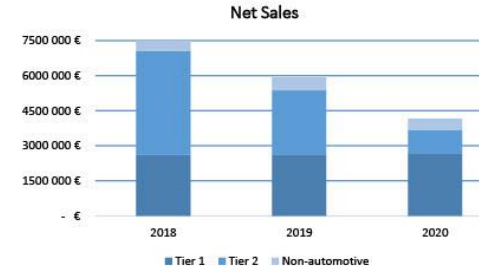
Our aim is to be recognized as one of the best solution partners for plastic components. We offer complete solutions for mechanical and aesthetic modules.

At FCL, we are specialized in producing plastic interior decorative components, such as centre stack HMI panels, steering wheel switches, roof switch modules, door switch

modules and other switches and controls. Besides this, we are capable of providing these products painted or chromed.



At this moment, our goal is to develop long-term relationships with customers. While committing ourselves to offer not only industrial products but also advice for creative solutions within our sphere of competencies.



	2018	2019	2020
<b>Total Capitalization</b>	6 904 181 €	5 390 088 €	9 751 670 €
<b>Equity</b>	6 471 428 €	4 932 943 €	3 713 611 €
<b>Non-current liabilities</b>	432 753 €	457 145 €	6 038 059 €

This year was intensively marked by the emerge of the pandemic. This situation reflected not only on the suspension of our activities but of our clients' as well. The return to

activity was neither gradual nor progressive but has been being characterized by advances and setbacks. This stop was not exclusive to the automotive sector but was transversal to almost all sectors.

As the results show, FCL's net sales have been decreasing from year to year. Unfortunately, in 2020, we witnessed a 29% rupture in net sales. These results are explained not only by the Covid-19 situation but also by the discontinuation of one of FCL's main projects, which ended abruptly in the previous year.

Besides this, 2020 was a year marked by a high level of investments in technologies and resources. These were crucial for FCL to remain competitive in the Tier 1 suppliers of the automotive sector.

Despite the global prospects not looking very positive, FCL was assigned a project with a new client. The start of the Standard Operating Procedure (SOP) is scheduled for the beginning of 2022. This project is envisioned to bring several benefits and advantages for FCL.

**Ethics and Integrity**

FCL has a Code of Ethics and Conduct applicable to the Executive Committee, members of Senior Management and all employees. They all receive a printed copy of the Code of Ethics and Conduct and are required to sign a declaration of commitment to comply with the rules established by FCL. This Code of Ethics and Conduct bases on mainly six values:

**Legality, Responsibility, and Independency:**

Ensure compliance with internal and legal regulations. Integrity, transparency, and justice are fundamental for achieving credibility and trust in FCL's business practices.

**Equality:**

FCL does not comply with any inequality behaviour regarding gender, mother language, ethnicity, origin, religion, political ideologies and economic or social situation.

**Professional duties:**

FCL's employees must comply with all professional duties established by Labour Laws and the ones contractually linked. Such as secrecy and confidentiality of information and know-how, loyalty, anti-competitive behaviour and integrity.

**Solidarity and Cooperation:**

Potentiate and develop critical spirit among all levels of the organization.

**Conflict of Interests:**

Communicate to the administration whenever any process of decision or analysis brings, directly or indirectly, a conflict of interests.

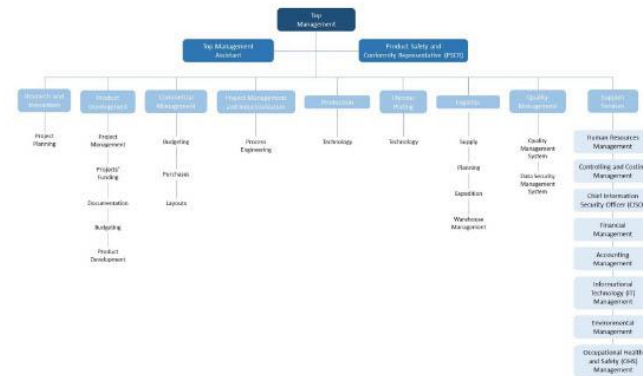
**Corruption Prevention:**

The quality of FCL's products is the key to our success, so we do not comply with any corruption practices. This practice can reflect in fines to FCL and penalty sanctions to the employees involved.

**Governance Model**

FCL's governance supports our daily business activity, enabling us to be in this sustainable growth journey. We have a clear commitment to take responsibility, complying with regulations and behaving ethically while creating value and respecting the interests of stakeholders.

The Board of Directors is composed mainly by department managers and is responsible for the management and strategic direction of FCL. For this reason, there are weekly War Room Meetings (WRM) with these members to communicate the current situation of matters respecting different departments and, through cooperation it is possible to achieve better problem solving and more responsible decision making. Thus, every member is aware of FCL's overall status and active in the company's strategy.



## Stakeholder Engagement and Materiality

GRI: 102 (5) Stakeholder Engagement

### Stakeholders' communication channels

FCL recognizes that effective communication channels between internal and external stakeholders provide a better relationship and are the key to achieve a brighter future. By maintaining a continuous dialogue with our stakeholders, we are one step closer to proactively identify and address key issues. Understanding stakeholders' expectations and their concerns is very important and, consequently, to become a successful company, we should keep integrating them into our processes and solutions. In that sense, one of FCL's goals is to optimize these communication channels.

By publishing this Sustainability Report, FCL is creating a new communication channel transversal to all stakeholders. The report will provide transparency about our goals and strategy, also a better understanding of our position regarding economic, environmental and social matters. We are committed to publishing this report biennially and hope this will be a tool that will ease discussion and improvement among all fields.

Employees: Employee Satisfaction Surveys, Meetings and Events, Circle Points, Occupational Health and Safety Committee, Work-related Education and Training, Newsletter, Code of Ethics and Conduct, Intranet, Performance Evaluation.

Clients: Meetings and Events, Periodic Evaluation of Performance.

R&D Partners and Universities: Internships, Meetings and Events.

Suppliers: Meetings and Events, Periodic Evaluation of Performance.

Community: Social Contribution Programs, Recruitment.

Official Entities: Environmental Licensing (RAA), Inspections and Audits.

Financial Institutions: Meetings and Contracts.

### Materiality Matrix

For FCL, this is not only the year of our first Sustainability Report but, consequently, 2020 was the first time developing a Materiality Matrix. This process was revealed to be very important and enriching for our management activities by raising discussion about several topics that could go unnoticed. After all, like any other organization, FCL's activities have both positive and negative impacts on overall sustainability. The Materiality Matrix turned out to be a tool that is decidedly going to be used in the future decision-making process since it helps determine and prioritize topics. Regarding the development of the matrix, it was considered a Benchmark Analysis and Internal Stakeholders' feedback.

The Benchmark Analysis was developed through sustainability reports of different companies in the automotive sector and their respective material topics. Among these companies are some of our clients, which were given a higher ponderation when comparing with others that are not present on FCL's supply chain.

Internal stakeholders considered for this year's report were only Department Managers and the CEO. Firstly, were selected a various number of economic, environmental and social topics. These were then prioritized according to the GRI standards and the analysis of other sustainability reports of the automotive industry. After this, the stakeholders were inquired about the topics selected through questionnaires. Also, were held group discussions to ensure that everyone was on the same page regarding the interpretation of the topic. Furthermore, the validation of the material matrix was done in several meetings with the selected stakeholders so that this matrix would be reliable and could reflect our priorities.

FCL is planning to be able to expand this questionnaire to more internal stakeholders in a future sustainability report. Nevertheless, to develop this matrix was considered the following internal stakeholders:

- CEO: Hatto Fehst
- Research and Innovation managed by Ana Moreira and João Coelho
- Research and Development managed by Alexandre Ferreira
- Purchasing managed by Hernani Eira
- Project Management and Industrialization managed by Susana Gomes
- Production managed by Normando Freitas
  - o Plastics managed by Inês Silva
  - o Chrome Plating managed by José Pedro Costa
- Total Quality Management Euridice Lourenço
- Information Technology (IT) managed by Marcelo Ribeiro and António Oliveira
- Logistics managed by Paulo Monteiro
- Human Resources managed by Marisa Pereira
- Controlling and Costing managed by António Pedro Teixeira
- Environment managed by Tiago Barbosa



Even though all topics presented on the Materiality Matrix are relevant for global sustainability and have substantial importance to FCL, the outcome of this analysis represents the topics addressed in this report. The ones that stand out with more importance are:

- Innovation
- Occupational Health and Safety
- Clients' Relationship Management

Besides this, the report also includes the following topics:

- Cybersecurity and data protection
- Training and Professional Development
- Product Quality and safety
- Resources Management
- Energy
- Waste
- Water
- Air emissions
- Quality of Employment
- Supply Chain
- Governance

## - Ethics and Integrity

### Pandemic's Impact on Material Topics

The coronavirus crisis had an evident impact on every business. It is impossible to observe the actual impact that the pandemic had on the process of prioritizing key issues since this is the first time that FCL develops a Materiality Matrix. To overcome this barrier, we added another section to the questionnaire. We asked the internal stakeholders which topics suffered a considerable impact with the emerge of the pandemic, both positive or negative, risk or opportunity. The topics raised from this survey were the following:

#### Occupational Health and Safety

Given the current circumstances, the overall well-being and safety of all employees are constantly being challenged. Thus, to fight this unpredictable and undiscovered virus we had to develop new work paradigms and conditions.

#### Community Engagement and Philanthropy

This pandemic brought more empathy among all people. At FCL, we have always tried to help communities as much as we could. But this year raised even more awareness respecting this subject. It became an opportunity to help the community affected by this pandemic crisis, health care institutions and workers that are often undervalued.

#### Cybersecurity and Data Protection

The new work from home paradigm, imposed by the pandemic circumstances, raised awareness regarding this issue. FCL provided employees with technical support so they could work from home, implying maintaining the same quality regarding data protection and cybersecurity.

#### Financial Performance

The fact that we had to suspend our activities for a month while witnessing a decrease in our clients' orders, these events reflected in a significant impact on FCL's financial performance.

## Commitment to the Sustainable Development Goals

The Sustainable Development Goals were conceived in 2015 by the United Nations to “provide a shared blueprint for peace and prosperity for people and the planet, now and into the future”. These goals and targets of the 2030 Agenda address a range of social needs while tackling climate change and environmental protection.



FCL recognizes the role that, as a company, we have to contribute to a better future and the power we have to address worldwide challenges. The thorough analysis of identifying which targets FCL is contributing raised awareness about new plans to implement, in the future, to achieve other goals and targets. We have identified eight priority goals that align with FCL’s current strategy.

GOOD HEALTH AND WELL-BEING		
Goal	Target	Our Impact
 <p>3 GOOD HEALTH AND WELL-BEING</p> <p><i>Ensure healthy lives and promote well-being for all at all ages</i></p>	<p>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all.</p>	<ul style="list-style-type: none"> <li>- Sepri Medical and Healthcare Services, also implementing the Mental Health Program in 2021</li> <li>- Covid-19 measures to reduce the risk of spreading the virus</li> <li>- <i>Fehst Saudável</i> Program that promotes labour gymnastics and occupational health</li> <li>- Pharmacy Protocol</li> </ul>
	<p>3.9 By 2030, substantially reduce the number of deaths and illnesses from</p>	<ul style="list-style-type: none"> <li>- Separating and monitoring hazardous waste</li> </ul>

	<p>hazardous chemicals and air, water and soil pollution and contamination.</p>	<ul style="list-style-type: none"> <li>- Switching for more environment-friendly substances: replacing Chrome VI with a Chrome III Sulphate-based bath</li> <li>- Providing chemical handling training and personal protective equipment</li> <li>- Monitoring wastewater and complying with the value limits imposed</li> </ul>
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QUALITY AND EDUCATION		
Goal	Target	Our Impact



*Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

- Partnering with universities, besides providing internships and students projects
- Investing in the best training for our employees’ development

CLEAN WATER AND SANITATION		
Goal	Target	Our Impact



*Ensure availability and sustainable management of water and sanitation for all*

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

- Monitoring water withdrawal and wastewater
- Water use awareness circle points
- FCL has a Wastewater Treatment System

AFFORDABLE AND CLEAN ENERGY		
Goal	Target	Our Impact

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.

- Investment in solar panels (save around 1 977 GJ/year)



Ensure access to affordable, reliable, sustainable and modern energy for all

- 7.3 By 2030, double the global rate of improvement in energy efficiency.
- Energy Consumption Monitoring Plan (monitoring each machine)
- Energy Consumption Rationalization Plan
- Investing in more efficient technologies

**DECENT WORK AND ECONOMIC GROWTH**

Goal	Target	Our Impact
		<ul style="list-style-type: none"> <li>- Changing from push to pull production (stock reduction, increase productivity, improve flow efficiency, waste reduction)</li> <li>- Improvements on FCL's logistics performance</li> <li>- Practicing SMED (reductions in overall cycle time and setup times)</li> <li>- Investing in new technologies (Primavera Software, equipment...)</li> <li>- Investing in qualified human resources</li> <li>- Investing in training and development of FCL's employees regarding industry 4.0</li> </ul>
	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors.	
	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.	<ul style="list-style-type: none"> <li>- Cooperation with universities through innovation projects and internships</li> <li>- Investment in training and development of our employees</li> </ul>



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**INDUSTRY, INNOVATION AND INFRASTRUCTURE**

Goal	Target	Our Impact
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them	<ul style="list-style-type: none"> <li>- Implementation of a new Primavera Software (digitalization)</li> </ul>



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
- 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- Dry Ice Blasting (Circular Carbon Economy)
- Constantly improving and optimizing FCL's production processes
- Investment in the *Fehst Avantgarde Interiors* innovation project
- Investing in new technologies (Primavera Software, equipment...)
- Investing in qualified human resources
- Investing in training and development of FCL's employees regarding industry 4.0

**RESPONSIBLE CONSUMPTION AND PRODUCTION**

Goal	Target	Our Impact
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources.	<ul style="list-style-type: none"> <li>- ISO 14001: Environmental Management System</li> <li>- Digitalization and connectivity bring more efficiency and instant data to optimize processes</li> </ul>
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	<ul style="list-style-type: none"> <li>- 3R policy</li> <li>- ISO 14001: Environmental Management System</li> </ul>
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.	<ul style="list-style-type: none"> <li>- Publishing FCL's 1<sup>st</sup> Sustainability Report (commitment to transparency regarding our impacts)</li> <li>- Requiring suppliers to submit an environmental checklist</li> </ul>



Ensure sustainable consumption and production patterns

## Production and Responsible Sourcing

**GRI:** 102 (1) Organizational Profile; 204 – Procurement Practices

**Material topics:** Product Quality and Safety; Supply Chain.

**SDG:** 8 – Decent Work and Economic Growth; 9 – Industry, Innovation and Infrastructure; 12 – Responsible Consumption and Production.

The automotive industry is constantly being challenged since it is innovation-driven. For that reason, and to comply with the high efficiency and quality standards, FCL must keep going towards a zero-defect production. Also, FCL must provide technologies and processes in the most modern state of the art. Ensuring the best production practices we can give is not the only thing. We have to safeguard the quality of raw materials and all supplied services. That is the only way to produce plastic automotive parts that meet client's expectations.

Throughout the years, FCL has been developing know-how, tools and methodologies that help us achieve continuous improvement and adapt to market trends.

### Manufacturing technologies

The emerge of industry 4.0 brought digitalization, connectivity and automation. It provided better control of our processes, contributing to sustainable production. At FCL, we aim at providing the best-fitted solutions to our clients. We are focused on producing precision parts with high-level requirements of mechanical function and aesthetical finishing. To do that, we have to be equipped with top-level manufacturing technologies.

#### Plastic Injection Moulding:

The injection moulding cell automation level can vary according to specific project parameters to offer an optimum economic solution.

- Electric injection moulding 20 - 500 t
- 2K injection moulding 75 - 500 t
- 3K injection moulding 100 t

#### Automatic Painting:

Our flat-bed spray painting lines are installed in controlled environment rooms, allowing for high-level quality surface finishes. Besides this, we have extensive teamwork experience with the main paint material suppliers nominated by OEMs, so that we can provide the best solutions. At FCL, we offer our expertise in the design of masking systems or painting jigs for efficient processing according to project specifications.

- Flatbed for the conventional curing paint system
- Flatbed for UV curing: mono-cure
- Dry Ice Blasting (CO<sub>2</sub> pre-cleaning process)
- Waterborne paint systems

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- Partial painting surfaces with a masking system

#### Chrome Plating:

Our galvanic chrome plating line is equipped with state-of-the-art process controls and environmental protection systems and is capable of fulfilling all OEM requirements.

- Chrome VI
- Chrome III with Sulphate-based bath (2020)
- Chrome III with Chloride-based bath (testing)

#### Surface and Printing Technologies:

- Laser Etching for day and night design with automatic positioning
- Pad Printing
- Screen printing

#### Automatic Assembly Lines:

We have the expertise and capability of setting up assembly lines with varying sizes, complexity and levels of automation – from manual workstations to fully integrated stand-alone assembly cells. As a system supplier, we aim to deliver complex assemblies with zero defects. Therefore, our assembly lines have fool-proof safeguards and hi-tech inspection processes with vision and laser systems we developed through partnerships with research institutions.

- Thorough inspections with vision and laser systems
- Fool detection systems

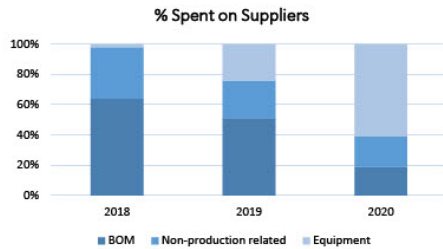
Our main goal is to provide products that meet client's specifications and expectations. At FCL, we are constantly seeking improvement measures to present quality products and, at the same time, reduce waste and scrap. Overall, our final product has not a significant impact on the vehicles' safety. Even though this is true, we design our components to ease the assembly process and safeguard the safety of the workers in charge of this task.

### Supply Chain

Our procurement network ensures that our production facilities have materials of the requisite quality, in the required quantities and predicted time. Only by doing so, we can provide the best products and solutions to our clients.

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Even though we would like to have more national suppliers in our network, Portuguese suppliers do not provide grind plastic and paints that we require to produce our products. We are actively searching for suppliers in Portugal since it would have a positive impact socially and environmentally. Unfortunately, in 2020 we have only spent 29% on national suppliers. Regarding our types of suppliers, with the increase of digitalization, connectivity and automation, FCL has invested in new equipment, accounting for 60% of total expenses.

Mainly, ensuring a proper supplier selection and evaluation system throughout the year is very important. It guarantees that we can provide our products at the right time and quantity, with the expected quality.

#### Supplier Selection Criteria

To achieve total quality, we must ensure that we chose the best suppliers. FCL has a multidisciplinary team that integrates the Engineering, Production and Purchasing Departments. They have the responsibility to decide to make or buy. This team, when analysing suppliers, focuses mostly on technique specifications, cost and the capacity available at FCL. If the decision of supply is made, certain criteria must be analysed when choosing one supplier over another:

- Cost is the main differentiator factor
- ISO 9001:2015 Quality Management System certification or implementation plan
- ISO 14001:2015 Environmental Management System certification or fulfilment of FCL's Environmental Check List
- Interaction with Local Suppliers is privileged
- Financial Stability
- Complexity Level of product, material or service
- Production Capacity
- Technology required

- If applicable, Lab Accreditation of ISO/IEC 17025

#### Supplier Evaluation

At FCL, we are committed to preserving our supplier's relationship. Working together is the only way for both of us to improve. To ensure that suppliers are fulfilling our requirements, we developed a Supplier Assessment mechanism and, only relevant suppliers are submitted to this evaluation once a year. Are considered relevant those who affect product's quality, such as BOM, transport, calibration, metrology/tests and maintenance services. This supplier evaluation consists of analysing the following Key Performance Indicators:

- Service level: compliance with on-time deliveries and the amount programmed, besides delivery of all documents needed and certifications
- Quality: defects per unit provided
- Product: minimum order quantity and lead time
- Cooperation Potential: to cooperate in the implementation of improvement plans and joint product development
- Environment: results from the environmental checklist

Types of suppliers' classification		
Type	Approval	Score
A	<b>Approved Supplier</b>	>= 90
B	<b>Approved Supplier</b> (Submission of an Action Plan)	70 - 90
C	<b>Non-approved Supplier</b> (not considered to future purchases, Submission of an Action Plan and, after 6 months maximum, must be done a reevaluation)	=< 70

Even though FCL currently does not have specific social requirements to select and/or evaluate suppliers, this is one of the aspects that we know we must improve. Aware of this, we are thinking about how we can overcome this barrier and implement these requirements in the future.

### Innovation and Collaborations

**Material topics:** Innovation; Cybersecurity and Data Protection; Client Relationship Management.

**SDG:** 8 – Decent Work and Economic Growth; 9 – Industry, Innovation and Infrastructure.

Currently, the automotive industry is on the verge of an unprecedented transformation featuring the new concept of connected, shared, autonomous and electrified vehicles. Therefore, FCL is focused on investing in research, development and innovation through cooperation. Understanding our clients' expectations is crucial to deliver the best fitted solutions in the market. Thus, focusing on innovation is the only way to meet the challenges of global competition.

### Client Relationship Management

Our clients are one of our most important stakeholders and, it is crucial for the sustainability of our business to maintain an ongoing interaction with them. It will help us understand their needs and leave up to their expectations by providing the best-fitted solutions. Therefore, the trust of our clients in the quality of our products is one of our main priorities.

Thus, our goal is to be the best supplier in the market. To achieve that, we developed a Client's Satisfaction Assessment System. FCL does this assessment once a month and, in the War Rooms Strategy Meetings, these results are shared and analysed. If the assessment turns out to be negative and not attending to clients' expectations, project leaders, together with their teams, must develop an action plan and inform clients.

The clients' satisfaction assessment is very important for FCL. Even when our scores turn out to be positive, we take into consideration the feedback received. We want to keep improving and are never settling for less than the best. Thus, we are constantly seeking ways for upgrading our methodologies.



Currently, FCL's strategy focuses on investing in innovation projects, so guaranteeing that our clients will support and buy our product is essential for our business. Partnering with our clients and keeping a constant dialogue is the only way forward.

### Cybersecurity and Data Protection

At FCL, we are conscious that data security is a key success factor in the automotive industry. Simultaneously aware of the problems that may arise with the increase of digitalization, we want to ensure our clients that we are a trustworthy company and that their information is secure at FCL.

As a company of the automotive sector, we must prove to our clients, at regular intervals, whether we comply with standardised and specific requirements respecting information security. Besides this, by implementing a Research and Development department oriented towards innovation, it is crucial to have responsible data handling to remain competitive in this industry. Therefore, in 2019 we obtained the TISAX (Trusted Information Security Assessment Exchange) certification, providing credibility and liability to our commitment to information security and data protection. FCL must respond to an assessment level of 2 and, in the latest audit performed in 2020, we obtained a maturity level of 2,89 from a maximum of 3.

With the implementation of an Information Security System, we can monitor, evaluate and improve the efficiency of our services, operations and resources. Our IT team ensures confidentiality, integrity and availability of all stored, transmitted and processed information. Besides this, FCL provides training surrounding this topic to new employees and whenever new policies are implemented.

FCL undertakes a Data Compliance Risk Assessment since an efficient framework is crucial to ensure that the future potential impact on the business is recognized, assessed, managed and/or mitigated. Through our Information Security Policy, we can

guarantee the prosperity of our business. By reducing security risks and preventing incidents, therefore diminishing the overall impact.

Effective data governance requires the presence of fitting data handling culture at the organization. We have already implemented a network segmentation and started to document every process surrounding data protection and security. Data protection in our installations is as important as cybersecurity. We have enlarged the concept of restricted areas to more spaces, also moved our data centre to a securer area with proper climate control. Besides this, currently, our printers require a password. We have acquired paper shredders, also started an expiration password concept.



The concept of a reliable and perfect security system does not exist since cyberattacks have become increasingly sophisticated. For this reason, monitoring and constantly evaluating our processes is vital for ensuring data security and protection continuous improvement and, consequently, the success of our business.

#### Innovation Projects

The automotive interiors design is the vehicle's interface with passengers and is currently considered a "third living space". Interiors design plays a crucial role in performance, aesthetics, style and, consequently, on vehicles' sales.

Currently, polymeric materials predominate in the automotive interiors in components such as dashboards, consoles, central panels, door panels, pillars and seats. Regarding this type of component, design, comfort and safety are current requirements. In fact, integrated designs, seamless, emotional, with new decorative patterns, lighting solutions, besides the integration of tactile and haptic functionalities in HMI are particular requirements to which are added easy personalization and customization for car interiors. Furthermore, developing sustainable solutions, choosing natural and

sustainable materials that can reduce VOC emissions and producing lightweight components are also included in the automotive trends. With the emerge of the coronavirus pandemic, self-cleaning or easy-cleaning surfaces became one of the newest requirements.

Overall, aesthetics and quality, colour and lighting, texture and touch, sensations and innovation are important aspects to consider while designing automotive interiors components. The future of mobility will continue to change passenger and driver's experiences. Hence FCL is focused on developing new technologies that fulfil market trends and customers' needs.

#### FEHST AVANTGARDE INTERIORS – Advanced Polymeric Components with Functional and Decorative Surfaces (2020-2023)

In 2020, FCL started developing the *Fehst Avantgarde Interiors* Project, with an eligible investment of 2 390 467,81€. The project aims at developing technological solutions. To create skills for the development and production of injected polymeric components for the interior of the next generation of automotive vehicles. It will incorporate some of the requirements of the newest market trends, such as decorative and functional aesthetic surfaces. Not only that, but we will be using cutting-edge technologies while addressing cost reduction issues and environmental impacts.

This project will take 35 months to conclude, having its due date on June 2023. FCL is partnering with two institutions of the scientific and technological system, specialized in the field of polymers' science and engineering and optical physics of materials: UMinho and PIEP.

The focus of this project will be on four main challenges: interchangeable patterns with different designs, partial chrome plating, integration of electronic features and integration of light conductors and lighting systems.

#### Interchangeable patterns with different designs:

Injection moulded components with surfaces with new patterns, easily interchangeable, and without the need for painting, reducing finishing processes and providing new aesthetic solutions.

#### Partial chrome plating:

Injection moulded components with a combination of different finishes in the same part, with surfaces with selective finishes (chrome, high gloss, matte, backlighting).

#### Integration of electronic features:

Injection moulded components tactile and haptic surfaces with feedback control, going beyond current functional IMD technologies, and adopting post-moulding printing technologies that allow functional surfaces with various types of aesthetic finishing.

**Integration of light conductors and lighting systems:**

Injection moulded components with embedded light guides, by using in-mould assembly technologies, endogenize the competencies and capabilities for the design and production of polymeric light guides.

The ambition is to integrate these technologies into a production process aimed at reducing costs. In the end, will be presented a prototype through the development, production and validation of an innovative and demonstrative product: an aesthetic and functional door frieze.

The *Fehst Avantgarde Interiors* project is the result of FCL's strategy and its commitment to innovation, culminating in enriching us with different know-how to reach new markets. The success of this project will provide FCL with the possibility of entering new business deals, besides possible partnerships with major international clients.

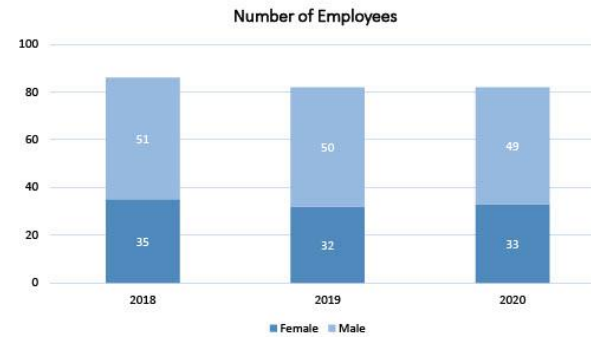
**Our People**

**GRI:** 401 – Employment; 403 – Occupational Health and Safety; 404 – Training and Education

**Material topics:** Occupational Health and Safety; Employee Development and Training; Quality of Employment.

**SDG:** 3 – Good Health and Well-being; 4 – Quality Education; 8 – Decent work and Economic Growth; 9 – Industry, Innovation and Infrastructure.

At FCL, we acknowledge that motivated workers dictate the success of our future. Employees are one of our top resources, so investing in their well-being is fundamental. Therefore, we seek to provide challenging job positions with attractive overall remunerations, good working conditions, a safe and healthy environment, besides providing possible benefits to our employees. When hiring, we chose individuals with specific professional skills. Then, we try to support them so that they can accomplish their self-development goals. The long-term performance and motivation of our workforce are the basis for FCL's competitiveness and prosperity and, this is the only way to ensure that.



Not only is important to acknowledge and preserve talent but also to be able to attract new talents. More than ever, people value a company's morals and its practices regarding employees' careers. Even though we are continuously working and improving our actions by encouraging dialogue to achieve employees' expectations, FCL is aware that there is room for improvement regarding this topic.

Currently, at FCL, all employees are under permanent contracts and at full-time, our workforce is compound by 82 workers. To these workers, FCL provides some benefits. Such as health services (occupational medicine included), pharmacy discount protocol,

income protection systems in disease situations, developed *Fehst Saudável* to promote labour gymnastics and occupational health. Besides this, on special occasions, FCL offers baskets or merchandising as a small gesture of gratitude. Furthermore, according to Portuguese law, all workers have the opportunity to enjoy parental leave regardless of their gender.

Every two years, FCL conducts an employee satisfaction survey to analyse and assess if our workers feel comfortable in their work environment and, consequently, if FCL is achieving their expectations. With the aim of finding specific improvement potential in the company. This survey evaluates ten dimensions: corporate image/strategy, knowledge of company's policies, communication, teamwork, leadership, work conditions, recognition, autonomy and participation, job responsibilities and overall level of satisfaction.

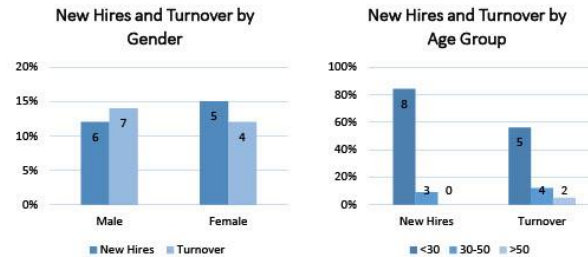
Our last survey was in 2019 and, even though it is anonymous and confidential, only 62% of the employees fulfilled the questionnaire. Despite being insignificant, when comparing with the previous survey, corporate image and job responsibilities were the dimensions that presented a decrease. On the contrary, communication and recognition were the highlighted dimensions.

After interpreting these results, we acknowledged that we must improve on communicating the company strategy for the future. In addition, regarding job responsibilities, we are already developing practical guides for each job position. Ensuring that our workers are aware of their obligations and the role they have in the company.

#### New Hires and Employee Turnover

The automotive industry is facing tremendous changes, wherewith the emerge of industry 4.0 connectivity and digitalization must be met. FCL is focused on innovation and on achieving a greener future. At this moment, we want to recruit skilled people that can help us accomplish these goals. That way, FCL can be prepared to respond to future market changes.

Regarding our recruitment process, FCL identifies a necessity. Then, the Human Resources Department determines the characteristics of the job (activity, time, cost, urgency, etc.) and analyses whether it is internal or external recruitment. After this, the HR department seeks, interviews, analyses and then, hires people it feels are best for the position's needs. To ensure that the best recruit is selected to meet the job requirements, workers are selected based on their skills, experience and competence. Once the person has been selected, there is a reception and integration process, so the new employee feels welcomed. Finally, the HR department evaluates if the person recruited needs training to execute its functions. In the end, we evaluate the employee's performance to verify if the necessity identified was suppressed.



In 2020, the overall hiring rate was 13% (11 workers) and, the turnover rate was coincidentally 13% (11 workers). In particular, the main reasons for turnover are associated with termination or suspension of employment contracts, dismissals, among other reasons.

Furthermore, there were no discrepancies detected respecting gender. However, the age group below 30 years old represents the highest rate of new hires and turnover at the same time.

#### Training and Professional Development

Beyond recruiting, FCL wants to train and develop its workforce. With our eyes on the future and focus on innovation, we work to ensure that we can meet the changes and needs established by the automotive sector. Therefore, FCL keeps finding ways to secure that we can accomplish market needs and trends to remain competitive. We can only achieve that through the skills development of our current professionals.

Developing our people is crucial to achieving sustainable success. Therefore, we commit to support our employees and strengthen their know-how during their careers at FCL. We accomplish that through customized training and professional development activities, enabling our workers to apply those abilities to improve performance. At FCL, employees get to have training to develop technical and soft skills, also language courses (English, German, etc.) and on job training. Additionally, FCL has an opportunity program for employees at the end of their active careers.

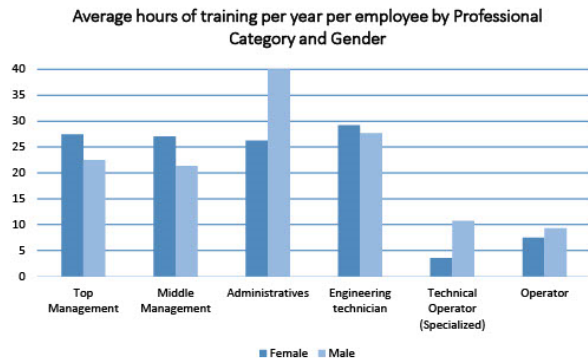
Every year, Middle Management and the Human Resources Department identify training needs. Not only with the help of the Performance Assessment System but also through the Learning Needs Assessment Form results and Professional Training Requisition Records. After considering these inputs, HR must determine all aspects regarding the course: contents, goals, target workers, duration, place to proceed training, pedagogic and evaluative methodology. The next step is the HR Department and the Top Management approve the Training Plan. Subsequently, trainers are selected

and, if there is not intern response capacity, FCL must resort to accredited external entities. At the end of the course, is proceeded an evaluation to the trainers. In addition, trainees fulfil a satisfaction evaluation form and must perform a learning assessment.

At FCL, we aim to provide practical support to help our workers face their daily challenges by providing tailored training to meet their needs. Especially with this new era of digitalization and connectivity, we have been yielding courses surrounding these topics to provide our employees with the tools they need to guarantee they feel secure doing their tasks. Among these courses are Industry 4.0 and Business Competitiveness - Technological Demonstrator, Industry 4.0 in the Plastic Sector, Digital Vision and Digital RoadMap.

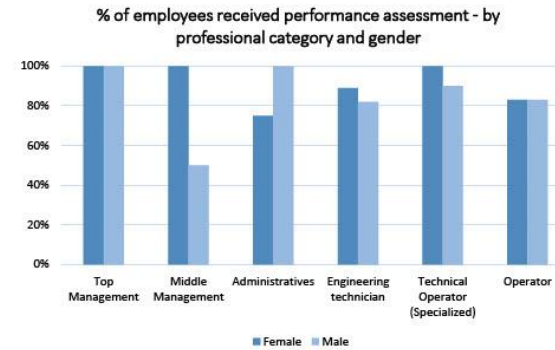
Given the circumstances of 2020, FCL was not able to provide the hours of training planned. Our goal is to keep the performance of 2019 and provide as much training as possible. Unfortunately, we ended up providing 1501 hours of training, equivalent to 18,31 hours per employee.

Average hours of training per year per employee		
2018	2019	2020
22,02	48,12	18,31



The Performance Assessment System is crucial for FCL, not only to identify training needs that must be fulfilled but also to give promotions, to manage contract renewal cases and functional transfers within the organization. This assessment process aims to evaluate employees' hard and soft skills, as well as their punctuality, assiduity and ethical behaviour. Then, the results from these forms must be disclosed to the

employees individually by the respective head manager. During this interview, employees can discuss the evaluation given to their performance, also identify what must be improved and examine mechanisms to achieve that.

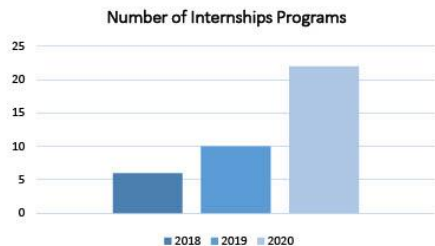


Regarding 2020, 84% of FCL's employees received Performance Assessment. The total number of employees considered were the ones working in December of 2020, while the assessment was conducted at the beginning of 2021. For that reason, some workers did not receive performance assessments because they are currently not working at FCL.

Considering the subjectivity related to the assessment process, FCL was concerned about ensuring fairness. Thus, aware that there is space for improvements, we will start in 2021 carrying out training for the workers responsible for this task. In this way, FCL will be able to provide mechanisms and tools to these employees, so that an equal, impartial and standardized assessment can be ensured throughout the years.

#### Academic Internships

Given that FCL's strategy is focused on innovation and developing new products, investing in training is crucial. Also, partnering with local universities is very important. It ends up being a symbiosis relationship where both entities involved benefit. Not only because we get to have fresh ideas and work with areas where we do not have as much expertise, but also for students. Most of them are experiencing their first direct contact with a company, allowing them to get work experience.



Internship programs have been increasing at FCL, ranging from Summer Internships, Curricular and Professional Internships, also University Projects. Through this experience, we have the opportunity to attract new professionals with different perspectives that can enrich our business.

#### Occupational Health and Safety

Ensuring the health and safety of our employees is one of our top priorities, as revealed on the materiality matrix. A healthy and safe environment is proven to be a key factor to a motivated and committed workforce and, consequently, to become a successful and thriving company. Therefore, FCL is devoted to complying with health and safety laws and regulations.

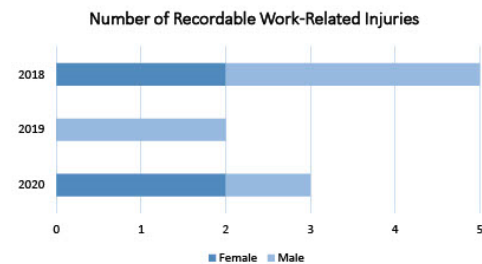
At FCL, we have an Occupational Health and Safety Superior Technician responsible for dealing with all aspects surrounding this topic and communicating with *Catim* – an external entity incumbent of performing audits of FCL’s activities.

As a manufacturing company, risks can come in several forms, such as chemical, machinery and tools handling. Besides this, different kinds of falls can occur. It is crucial to enhance a preventive posture when it comes to occupational health and safety. Therefore, FCL is constantly providing training to employees and ensuring that they have suitable Personal Protective Equipment. As already has been mentioned, FCL implemented the *Fehst Saudável* program to promote labour gymnastics. Additionally, FCL provides a Pharmacy Discount Protocol and Medical and Healthcare Services.

FCL must perform workstations’ risks assessment once a year. Besides, whenever there are changes in regulations or when work-related accidents occur. To develop a Risk Assessment Matrix, workstations are evaluated regarding different levels, such as exposure, defaults, probability and severity. After scoring each category, we will have the risk level respecting a specific workstation. This assessment can turn out to be acceptable or not, resulting in:

- Critical situation
- Correcting situation
- Improving situation
- Controlled situation
- No intervention is needed

Then, according to the acceptance level, FCL must develop an action plan to monitor, control and define goals to the identified risks.



Hopefully, FCL has not had any work fatalities and has only had one high consequence work related injury in 2018. But we have witnessed a few recordable work-related injuries throughout the years. Currently, with only 3 recordable work-related injuries the rate is of 5,12.

More than keeping our employees safe concerning manufacturing work risks, this year was marked by the rise of a global pandemic. Through these times, our main priority was and still is to ensure the safety of our employees. We implemented measures that prevented the risk of spreading the virus. Also, covid-19 brought special awareness to mental health issues. FCL wants to support its workforce in every way possible. For that reason, we are planning on implementing in 2021 a Mental Health Program provided by our Medical and Healthcare Services – *Seperi*.

## Environment

**GRI:** 302 – Energy; 303 – Water and Effluents; 305 – Emissions; 306 – Waste; 307 – Environmental Compliance

**Material topics:** Resources Management; Energy; Emissions; Water; Waste.

**SDG:** 3 – Good Health and Well-being; 6 – Clean Water and Sanitation; 7 – Affordable and Clean Energy; 12 – responsible Consumption and Production.

For FCL, protecting the environment is an obligation given the current circumstances and the state of our planet. Changes must be done now so we can give a better future for generations to come. To ensure we overcome all the environmental challenges the planet is facing, we are also challenging our business by constantly rethinking our industrial processes. We are making a positive contribution to the world by implementing changes in our processes so we can reduce our emissions, water and energy consumption, besides managing our resources efficiently. Even though we are aware that we have space for improvements, at FCL, we are committed to this journey of achieving a successful future not only for our company but for the world.

### Environmental Management System

FCL is an ISO 14001:2015 certificated company, which is an international certification for Environmental Management Systems. This certification represents our commitment to enhancing our environmental performance and achieving our objectives. At FCL, we are constantly identifying and monitoring possible environmental issues associated with our industrial processes. We strive to comply with not only national regulations but also the ones imposed by our clients. Besides this, we have our voluntary environmental standards. Besides, as a certified company, FCL must have control procedures of documents and records that include the requirements of the Environmental License. Also, FCL has its own Environmental Department that sets all goals and targets regarding environmental matters. Then, according to the identified needs, it is required to monitor all processes that feature environmental risks and detect any deviations from the global planning.

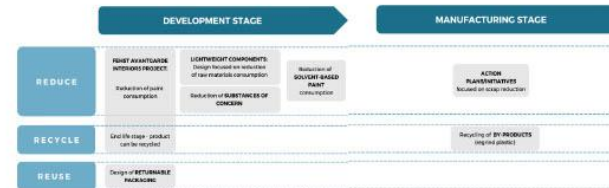
FCL develops Annual Environmental Reports (RAA) internally and, every two years, FCL must develop Execution and Progress Reports (REP) that need to be verified by an external entity.

Regarding FCL compliance with environmental regulations, in the last years, we have not committed any non-compliance with environmental laws or paid any substantial fines/sanctions.

### Resources Management

The current challenges the earth is facing, from the increase of resource extraction to consequently resource depletion, urges the need of managing natural resources efficiently. At FCL, we can prevent this issue by rational use of water, energy and raw

materials. Throughout our design and manufacturing process, we are focused on carrying out resource management more efficiently. Regarding raw materials, the 3R's Principle is in the spotlight of our strategy – reduce, reuse and recycle.



### Reduce

When developing new products, we keep in mind the “design focused on reduction” perspective. One of the main goals of the automotive industry is to reduce the overall weight of the vehicle, resulting in a significant improvement in fuel efficiency. Therefore, we keep challenging ourselves in producing lighter components, which means that this practice will reflect on less consumption of raw materials. Besides this, we keep finding ways to reduce the consumption of substances of concern by replacing them with more environment-friendly materials.

At the manufacturing stage, we keep developing new solutions and ways of optimizing our processes. We make them more efficient by implementing improvement initiatives to achieve one of our main goals - scrap reduction. By doing so, FCL is contributing to waste generation reduction.

One of the challenges of our innovation project – *Fehst Avantgarde Interiors* – is focused on presenting components with surfaces with new patterns, easily interchangeable and without the need for painting, reducing finishing processes and paint consumption.

### Recycling

Beyond what has already been mentioned about the *Fehst Avantgarde Interiors* project, there is another benefit to respecting recycling. When the product reaches the final stage of the life cycle, since it does not require painting, can be forwarded to recycling. In addition, regarding recycling practices, FCL recycles by-products, specifically regrind plastic of our injection moulding process, whenever possible and authorized by clients.

### Reuse

FCL implements the returnable packaging mechanism and, at the product development stage, the layout of these packaging is designed. This method reveals to be more sustainable than single-use packaging. Thus, we contribute to less waste generation. In



2020, we were able to save 20 777 packages from disposal by using this method repeatedly. Which represented 79% of the overall packaging used.

FCL is aware of the importance of the circular economy. Even though we are not where we want to be regarding circular measures, we are committed to developing actions plans and improvements.

### Energy

FCL is constantly seeking solutions to become a more responsible energy consumer, we are aware that energy consumption affects the communities and the overall wealth of the environment. In that sense and as an intensive energy consumer, settling measures and goals is one of our priorities to achieve higher and higher energy efficiency and consequently reduce our impacts on the environment.

In 2017 after an energy audit, Energy Intensive Consumption Management System (SGCIE - Sistema de Gestão dos Consumos Intensivos de Energia) declared FCL as an intensive energy consumer because the overall energy consumption on our facilities was above 500 tep. Consequently, FCL must periodically carry out energy audits. These will be focusing on the conditions of energy use and promote the increase of energy efficiency, including the use of renewable energy sources. Also, FCL must develop four Execution and Progress Reports over eight years to analyse the progress of FCL reaching its goals of becoming a more energy-efficient company.

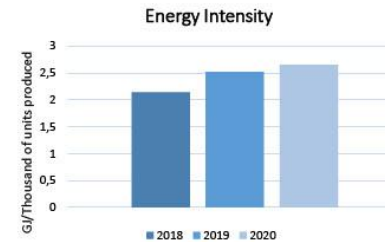
As a result of these audits and reports, FCL developed a plan with several energy-saving initiatives, where most of which have already been implemented to this day. Within these implemented measures are:

- transitioning to LED lamps
- presence sensors in some office areas
- awareness-raising actions for energy rational use
- reduction and control of compressed air leaks
- installation of speed variators
- installation of solar panels to water heating process (saving 46 GJ/year)

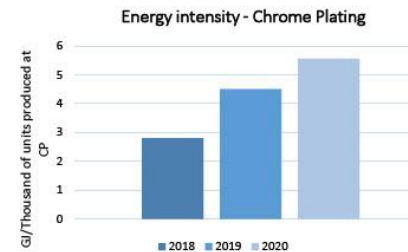
One of FCL's goals is to implement more automated processes and, since electricity accounts for 94% of total energy consumption on our facilities, it becomes very important to track and monitor all energy consumption sources. By now, we only monitor energy consumption on our chrome plating facilities and on our UV Painting section. The next step is to be able to identify the amount of energy consumed on each machine, so FCL can be able to develop an Energy Consumption Rationalization Plan and grow into a more energy-efficient company.

Furthermore, to reduce our footprint, we are aware that seeking renewable energy opportunities is the key. Therefore, FCL is going to invest in more solar panels in 2021, which will save around 1 977 GJ/year. Nevertheless, approximately 40% of the mix, provided by our energy supplier, is composed of renewables.

Energy consumption (GJ)	2018	2019	2020
	11 880	11 183	9 247



Even though changes have already been implemented, the results regarding energy consumption are not where FCL wants to be at the moment. Our chrome plating facilities account for approximately 44% of the total energy consumed at FCL. Since we stopped working with three shifts, this reflected in an overall increase in energy intensity. In 2019, we started working with two work shifts and, currently, there are days where we work with only one work shift at chrome plating. Therefore, even though our production reduced, we still have fixed energy sources that keep our installations safe. FCL must ensure constant ventilation and exhaustion since we work with hazardous chemicals. This situation is not permitting us to reach our energy efficiency goals.



Energy efficiency is one of our priorities right now. We are conscious that we can improve and are committed to doing so. Hopefully, with the measures that we designed for the succeeding years, we expect to reach the goal of becoming a more energy-efficient company.

### Emissions

Climate change must be addressed since problems such as extreme weather events and rising sea levels keep increasing and are predicted to only get worse. Now, it is more important than ever to start thinking about how we can tackle this problem, in fact, not acting on this issue is no longer an option.

At FCL, we are aware of the climate crisis the planet is facing, also conscious that every small step counts to reduce our environmental footprint. Even though FCL did not sign the Paris Agreement, we are committed to this global movement of limiting global temperature rise to 1.5 °C above pre-industrial levels.

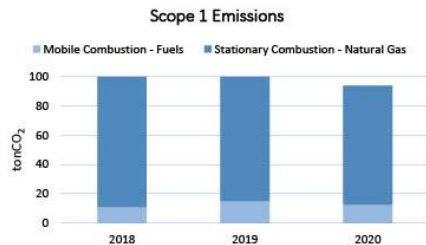
Although FCL is only at the beginning of its decarbonization journey, we are fully committed to reducing our carbon footprint. To accomplish that, we are continuously identifying problems and carrying out development programs, by investing in renewables and ways to become more energy efficient.

#### GHG Emissions

FCL must develop an Execution and Progress Report every two years. One of the topics included in this report is our emissions to the atmosphere. Regarding GHG emissions, these were determined following the GHG Protocol. In this report, only Scope 1 and Scope 2 emissions will be presented.

#### Scope 1

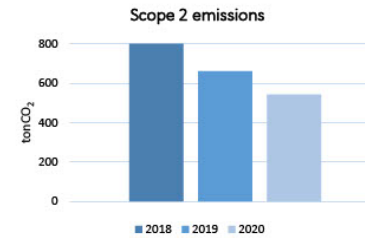
Scope 1 - direct emissions - stand for emissions that come from sources owned or controlled by FCL (mobile and stationary combustion).



Respecting this topic, FCL has a particularity regarding Scope 1 Process Emissions since in 2020 we have fully integrated Dry Ice Blasting in our processes. As explained before, this cleaning mechanism requires the projection of CO<sub>2</sub>. Despite the fact of CO<sub>2</sub> being emitted, it was not considered to FCL's Scope 1 emissions, simply because the CO<sub>2</sub> used comes from Carbon Circular Economy - meaning that comes from other industrial processes that release large quantities of CO<sub>2</sub> to the atmosphere. For that reason, FCL will not be contributing to the emission of more GHG but finding propose to the ones that would be already emitted.

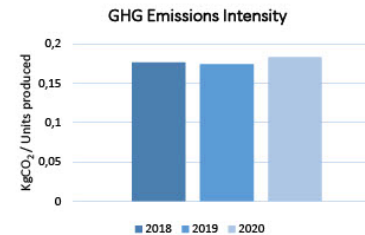
#### Scope 2

Scope 2 – indirect emissions – stand for the emissions from the generation of purchased energy. To account for Scope 2 emissions the method chosen was the location-based approach, thus average emissions factors of Portugal's electricity grid were used.



#### GHG Emissions Intensity

In 2020, FCL increased its GHG emissions intensity since most of the emissions are linked to electricity consumption. As has been explained before, we witnessed a significant reduction in our orders, but we have fixed sources of electricity that must keep working, especially at chrome plating.



## Water and Effluents

Water use has been growing globally at more than twice the rate of population increase in the last century. Even though water is essential to life on our planet, climate change scenarios predict that Portugal can have scarcity problems by 2040. At FCL, we are aware of this issue and, we are conscious that we can be better. For this reason, FCL aims to be responsible for managing this finite resource and is continuously seeking improvement measures.

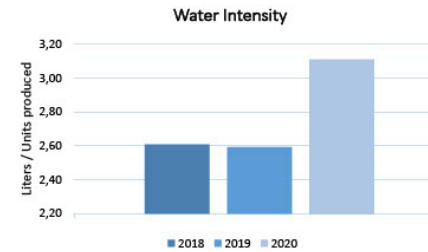
FCL obtains water from Portugal's Water Supply System for industrial processes, irrigation of green spaces, cleaning activities, showers, toilets and canteen.

Regarding water withdrawn used in our industrial processes, the majority accounts for our chrome plating facilities. Nevertheless, our painting and injection sections also require water use - both have a closed circuit where water is recycled. Before being discharged into the municipal collectors with the rest of industrial and domestic used water, contaminated water from chrome plating, with oils and chemicals, has its own Wastewater Treatment on the installation. Also, FCL reused this treated water for cleaning and equipment maintenance operations.

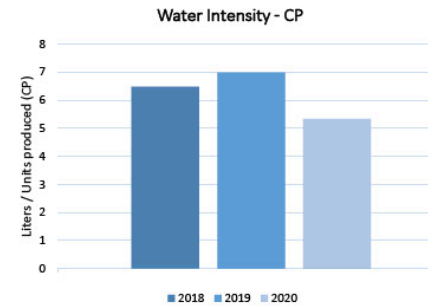
We use our water bills as a mechanism to account for the total water withdrawal. Nevertheless, there is a fixed counter on our chrome plating section to monitor its consumption precisely. Twice a year, FCL must monitor the discharged water of the chrome plating process to ensure compliance with the limits imposed by AGERE. Besides this, every discharge coming from our painting section is controlled before going to the municipal collector.

Water withdrawal (megalitres)	2018	2019	2020
	14,470	11,502	10,858

In 2020 we witnessed a significant reduction in FCL's overall production. Since our chrome plating activity usually accounts for approximately 65% of the total water withdrawn, it should have decreased as our orders decreased. Despite this, the water intensity ratio presented a significant increase.



When presented with this massive increase, we monitored our water withdrawal at chrome plating since it is the process that has the most water consumption at FCL. Contrary to the previous years, in 2020, only 32% of the total water withdrawn accounted for our chrome plating activity.



Furthermore, the water intensity, considering chromed units, decreased in the latest year. Meaning that this massive increase in the water intensity ratio is not related to this activity. In fact, our chrome plating process presented an increase in efficiency this year.

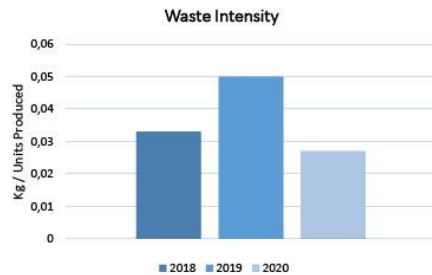
Therefore, it is possible to deduce that there is a leak at FCL's facilities and, this leak is not located at the chrome plating section since it has demonstrated an efficiency improvement. To confirm the leak hypothesis, FCL's environment responsible was requested to account for the increase of the general counter over several weekends, since the company is only operational during working days. The results of this analysis prove the leak assumption and, after several attempts to discover the source, it was found that the leakage derived from an old pipping.

## Waste

At FCL, we aim to keep improving our materials selection and product design through consideration for longevity, durability and the impact that our materials have on the environment.

In the year under review, when comparing with 2019, FCL drastically reduced the amount of waste generated. Regardless of our production reduction in 2020, FCL also reduced its waste intensity ratio. Therefore, we have created less waste per unit produced, more precisely 47% less than in 2019. Besides this, when comparing with the previous year, the percentage of hazardous substances in the total waste mix decreased 13%.

Total waste generated	2018	2019	2020
Total waste (t)	184,761	219,966	92,569
% of hazardous waste	65%	66%	53%
% of non-hazardous waste	35%	34%	47%

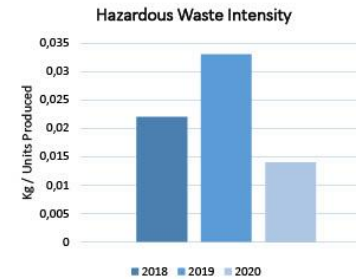


Waste generated at FCL is cautiously collected and split by type, stored in eco-points and then dispatched to the respective licensed waste disposal operators. FCL does a quantitative estimation of the waste generated and fills the e-GAR with this information. Then, when the waste arrives at the third party, the values estimated must be approved and verified. After this, the precise data of the waste generated on FCL's installations is submitted to the Regional Waste Information System (SRIR).

Sludges, filters, painting residues, metallic and plastic shavings are the main substances present in hazardous waste created at FCL. As regulations regarding the use of hazardous substances continue to get stricter, FCL's concerns regarding hexavalent chromium increased. As already has been highlighted, in 2020, we were able to replace

the Chrome VI bath with a Chrome III Sulphate-based bath, reducing our overall environmental impact since we are dealing with a less hazardous substance.

When comparing with 2019, FCL was able to reduce approximately 56% of the amount of hazardous waste generated per unit produced. Regarding the disposal methods, unfortunately, to this day, only 2,65% of the hazardous waste can be recycled. Nevertheless, we can witness a modest reduction in the percentage of hazardous waste forwarded to landfills. FCL is committed to studying new forms of recycling this type of waste. For that reason, we want to start a more open and honest dialogue with the entities responsible for dealing with FCL's hazardous waste. Only together we can find new solutions and reduce our environmental impact.



Hazardous waste	2018	2019	2020
Total waste (t)	120,02	144,179	49,503
% for Recycling	1,41%	3,14%	2,65%
% for Incineration (energy recovery)	3,76%	3,63%	4,88%
% for Landfill	94,82%	93,23%	92,46%

While hazardous waste is in lacking recycling methods, on the contrary, 100% of the non-hazardous waste generated at FCL is recycled. Besides this, in 2020, FCL was able to decrease the non-hazardous waste generated per unit produced, reaching the equal value of 2018.

Non-hazardous waste	2018	2019	2020
Total waste (t)	64,741	75,787	43,066
% for Recycling	100%	100%	100%



[Appendix](#)

[GRI Index](#)

[Consider excel – GRI Index Table](#)

[About the Sustainability Report](#)

*This report has been prepared in accordance with the GRI Standards: Core option.*

Contact: To define

## APPENDIX 11 – GRI INDEX

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Organization Profile</b>				
102-1	Name of the organization	Name of the organization	Fehst Componentes Lda.	
102-2	Activities, brands, products and services	a. A description of the organization's activities b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets		5-6
102-3	Location of headquarters	a. Location of the organization's headquarters	Rua Max Grundig, 9 Ferreiros 4705-820 BRAGA	
102-4	Location of operations	a. Number of countries where the organizations operate, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report	The production facilities are all located in northern Portugal (Braga).	
102-5	Ownership and legal form	a. Nature of ownership and legal form	Sociedade de Responsabilidade Limitada (Lda.)	
102-6	Markets Served	a. Markets served, including: i. Geographic locations where products and services are offered; ii. Sectors served; iii. Types of costumers and beneficiaries		5
102-7	Scale of the organization	a. Scale of the organization, including: i. Total number of employees; ii. Total number of operations; iii. Net sales (for private sector organizations) or net revenues (for public sector organizations); iv. Total capitalization (for private sector organizations) broken down in terms of debt and equity; v. quantity of products or services provided.	i. 82 employees ii. One iii. 4 150 825 € iv. 9 751 670 € v. 3 489 503 units produced	5-7
102-8	Information on employees and other workers	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the number reported in 102-8-a, 102-8-b and 102-8-c; f. An explanation of how data have been compiled, including any assumptions made.	a. 33 females and 49 males, all employees are in permanent condition. b. N/A c. All 82 employees are under full-time contracts. d. N/A e. N/A f. Data regarding employees is gathered and constantly updated by FCL's Human Resources Department (values presented as of 31.12.2020).	
102-9	Supply chain	a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products and services.		5 18-20
102-10	Significant changes to the organization and its supply chain	a. Significant changes to the organization's size, structure, ownership, or supply chain, including: i. Changes in the location of, or charges in, operation, including facility openings, closing, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationship with suppliers, including selection and termination.	i. None. ii. None. iii. FCL continually evaluates suppliers based upon proximity to operational centres, quality, cost, environmental performance, etc. Very few changes happened in FCL's supply chain, only added two new suppliers in 2020.	18-20
102-11	Precautionary Principle of approach	a. Whether and how the organization applies the Precautionary Principle or approach.	a. Although the company does not directly apply the Precautionary Principle, there is a risk-based thinking.	
102-12	External Initiatives	a. A list of externally-developed economic, environmental and social charters, principles, and or other initiatives to which the organization subscribes, or which it endorses.	a. Even though not a subscriber yet, FCL endorses the United Nations Global Compact and the 2030 Agenda, especially the 17 Sustainable Development Goals.	
102-13	Membership of associations	a. A list of the main memberships of industry or other associations, and national or international advocacy organizations.	a. AFIA - Associação de Fabricantes para a Indústria Automóvel; AHK – Câmara de Comércio e Indústria Luso-Alemã; MOBINOV – Cluster Automóvel.	

Figure 55 - GRI Index: 102 Organizational Profile

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Strategy</b>				
102-14	Statement from senior decision-maker	a. A statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability.		1
<b>Ethics and Integrity</b>				
102-16	Values, principles, standards, and norms of behavior	a. A description of the organization's values, principles, standards, and norms of behavior.		7-8
<b>Governance</b>				
102-18	Governance structure	a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.		8
<b>Stakeholder Engagement</b>				
102-40	List of stakeholder groups	a. List of stakeholder groups engaged by the organization.	a. Employees, Clients, R&D Partners and Universities, Suppliers, Community, Official Entities and Financial Institutions.	9-12
102-41	Collective bargaining agreements	a. Percentage of total employees covered by collective bargaining agreements.	a. 30% of employees are covered by collective bargaining agreements. Nevertheless, all employees are covered by ACAP - Associação Comércio Automóvel de Portugal.	
102-42	Identifying and selecting stakeholders	a. The basis for identifying and selecting stakeholders with whom to engage.		
102-43	Approach to stakeholder engagement	a. The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.		
102-44	Key topics and concerns raised	a. Key topics and concerns that have been raised through stakeholder engagement, including: i. how the organization has responded to those key topics and concerns, including through its reporting; ii. the stakeholder groups that raised each of the key topics and concerns.		

Figure 56 - GRI Index: 102 Strategy, Ethics and Integrity, Governance and Stakeholder Engagement

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Reporting Practice</b>				
102-45	Entities included in the consolidated financial statements	<p>a. A list of all entities included in the organization's consolidated financial statements or equivalent documents.</p> <p>b. Whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.</p>	<p>a. Only Fehst Componentes Lda. (FCL)</p> <p>b. Enancer Electrónica S.A. and Siroco are not covered by the report.</p>	
102-46	Defining report content and topic Boundaries	<p>a. An explanation of the process for defining the report content and the topic Boundaries.</p> <p>b. An explanation of how the organization has implemented the Reporting Principles for defining report content.</p>		9-10
102-47	List of material topics	<p>a. A list of the material topics identified in the process for defining report content.</p>	<p>a. Innovation; Occupational Health and Safety; Clients' Relationship Management; Cybersecurity and data protection; Training and Professional Development; Product Quality and safety; Resources Management; Energy; Waste; Water; Air emissions; Quality of Employment; Supply Chain; Governance</p>	11
102-48	Restatements of information	<p>a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.</p>	<p>a. N/A, this is FCL's first Sustainability Report.</p>	
102-49	Changes in reporting	<p>a. Significant changes from previous reporting periods in the list of material topics and topic Boundaries.</p>	<p>a. N/A, this is FCL's first Sustainability Report.</p>	
102-50	Reporting period	<p>a. Reporting period for the information provided.</p>	<p>a. 2020</p>	
102-51	Date of most recent report	<p>a. If applicable, the date of the most recent previous report.</p>	<p>a. N/A, this is FCL's first Sustainability Report.</p>	
102-52	Reporting cycle	<p>a. Reporting cycle.</p>	<p>a. Biennially</p>	
102-53	Contact point for questions regarding the report	<p>a. The contact point for questions regarding the report or its contents.</p>	<p>a. (To define)</p>	
102-54	Claims of reporting in accordance with the GRI Standards	<p>a. The claim made by the organization, if it has prepared a report in accordance with the GRI Standards, either:</p> <p>i. 'This report has been prepared in accordance with the GRI Standards: Core option';</p> <p>ii. 'This report has been prepared in accordance with the GRI Standards: Comprehensive option'</p>	<p>a. 'This report has been prepared in accordance with the GRI Standards: Core option'</p>	
102-55	GRI content index	<p>a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report.</p> <p>b. For each disclosure, the content index shall include:</p> <p>i. the number of the disclosure (for disclosures covered by the GRI Standards);</p> <p>ii. the page number(s) or URL(s) where the information can be found, either within the report or in other published materials;</p> <p>iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.</p>		(To define)
102-56	External assurance	<p>a. A description of the organization's policy and current practice with regard to seeking external assurance for the report.</p> <p>b. If the report has been externally assured:</p> <p>i. A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process;</p> <p>ii. The relationship between the organization and the assurance provider;</p> <p>iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report.</p>	<p>a. This report was not submitted to external assurance.</p>	

Figure 57 - GRI Index: 102 Reporting Practice



Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Procurement Practices</b>				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <p>i. where the impacts occur.</p> <p>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</p>		18-20
103-2	The management approach and its components	a. An explanation of how the organization manages the topic.		
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. the mechanisms for evaluating the effectiveness of the management approach.</p> <p>ii. the results of the evaluation of the management approach.</p>		
204-1	Proportion of spending on local suppliers	<p>a. Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally).</p> <p>b. The organization's geographical definition of 'local'.</p> <p>c. The definition used for 'significant locations of operation'.</p>	<p>a. 29%</p> <p>b. Located in Portugal</p> <p>c. Manufacturing facilities located in Braga, Portugal.</p>	

Figure 58 - GRI Index: 204 Procurement Practices

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Energy</b>				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <p>i. where the impacts occur.</p> <p>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</p>	<p>b. i) The boundary for the material topic is limited to the manufacturing facilities located in Braga, Portugal. For each material topic, FCL is focused on reporting what it can directly control, to minimize its footprint as much as it can.</p>	35-37
103-2	The management approach and its components	<p>a. An explanation of how the organization manages the topic.</p>	<p>a. Fehst Componentes as an ISO 14001:2015 certified company must have control procedures of documents and records that include the requirements of the Environmental License. Also, FCL has its own Environmental Department that sets all goals and targets regarding environmental matters. Then, according to the identified needs, it is required to monitor all processes that feature environmental risks and detect any deviations from the global planning.</p>	33 35-37
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. the mechanisms for evaluating the effectiveness of the management approach.</p> <p>ii. the results of the evaluation of the management approach.</p>	<p>i. Fehst Componentes has an Environmental Management System in accordance with the ISO 14001:2015 Standard. For this reason, FCL must collect data and monitor the progress of the initiatives planned. To prove its progress to SGCIE on achieving a more energy-efficient installation, FCL must do internal and external audits. Consequently, FCL is obligated to do Annual Environmental Reports (RAA) internally. Besides that, every two years FCL must develop Execution and Progress Reports (REP) that need to be verified by an external entity.</p>	
302-1	Energy consumption within the organization	<p>a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used.</p> <p>b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.</p> <p>c. In joules, watt-hours or multiples, the total:</p> <p>i. electricity consumption</p> <p>ii. heating consumption</p> <p>iii. cooling consumption</p> <p>iv. steam consumption</p> <p>d. In joules, watt-hours or multiples, the total:</p> <p>i. electricity sold</p> <p>ii. heating sold</p> <p>iii. cooling sold</p> <p>iv. steam sold</p> <p>e. Total energy consumption within the organization, in joules or multiples.</p> <p>f. Standards, methodologies, assumptions, and/or calculation tools used.</p> <p>g. Source of the conversion factors used.</p>	<p>a. 1 442 GJ - Diesel and Natural Gas.</p> <p>b. 45,2 GJ - Solar energy.</p> <p>c. i. 7 761 GJ</p> <p>ii. 0 GJ</p> <p>iii. 0 GJ</p> <p>iv. 0 GJ</p> <p>d. N/A</p> <p>e. 9 248 GJ</p> <p>f. Methodologies: electricity and natural gas bills; Assumption: solar panels' energy is constant per year.</p> <p>g. 1 kwh = 0,0036 GJ</p> <p>Diesel density = 832,5 - Considering the Diesel Safety Data Form of the top 3 suppliers in Portugal (Repsol BP Galp)</p> <p>42,8 MJ/kg Diesel</p>	35-37
302-2	Energy consumption outside the organization	<p><b>Explanation for omission</b></p>	<p>Information on energy consumption outside of the organization is currently unavailable, but FCL is planning to collect and report this information in the future.</p>	
302-3	Energy intensity	<p>a. Energy intensity ratio for the organization.</p> <p>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</p> <p>c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.</p> <p>d. Whether the ratio uses energy consumption within the organization, outside of it, or both.</p>	<p>a. 2,65 MJ/Thousand units produced</p> <p>b. Thousand units produced</p> <p>c. Electricity, fuels and solar energy.</p> <p>d. Only within the organization.</p>	35-37
302-4	Reduction of energy consumption	<p><b>Explanation for omission</b></p>	<p>There were no specific reductions of initiatives calculated in 2020.</p>	
302-5	Reductions in energy requirements of products and services	<p><b>Explanation for omission</b></p>		

Figure 59 - GRI Index: 302 Energy

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Water and Effluents</b>				
303-1	Interactions with water as a shared resource	<p>a. A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts caused or contributed to, or directly linked to the organization's activities, products or services by a business relationship (e.g., impacts caused by runoff).</p> <p>b. A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used.</p> <p>c. A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts.</p> <p>d. An explanation of the process for setting any water-related goals and targets that are part of the organization's management approach, and how they relate to public policy and the local context of each area with water stress.</p>	<p>b. Fehst Componentes as an ISO 14001:2015 certified company, must have control procedures of documents and records that include the requirements of the Environmental License. Also, FCL has its own Environmental Department that sets all goals and targets regarding environmental matters. Then, according to the identified needs, it is required to monitor all processes that feature environmental risks and detect any deviations from the global planning.</p> <p>To account for the total water withdrawal bills are the mechanisms used. Nevertheless, there are fixed counters on UV painting and chrome plating sections to monitor their consumption precisely. Twice a year, FCL must monitor the discharged water of the chrome plating processes, to ensure compliance with the limits imposed by AGERE. Besides this, every discharge coming from our painting section is controlled before going to the municipal collector.</p>	39
303-2	Management of water discharge-related impacts	<p>a. A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:</p> <p>i. how standards for facilities operating in locations with no local discharge requirements were determined;</p> <p>ii. any internally developed water quality standards or guidelines;</p> <p>iii. any sector-specific standards considered;</p> <p>iv. whether the profile of the receiving waterbody was considered.</p>	<p>i. The discharges forwarded to the municipal collector must be monitored according to the conditions defined by AGERE. Therefore, FCL must comply with the limit values imposed and only discharge water reported on the license provided by AGERE. Limit values imposed (AGERE): Total Chromium – 2 mg/L Cr; Hexavalent Chromium – 0,1 mg/L Cr6 ; Nickel – 2 mg/L Ni; Copper – 1 mg/Cu.</p> <p>ii. None iii. None iv. The waterbody's profile was not considered.</p>	
303-3	Water withdrawal	<p>a. Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable:</p> <p>i. Surface water;</p> <p>ii. Groundwater;</p> <p>iii. Seawater;</p> <p>iv. Produced water;</p> <p>v. Third-party water.</p> <p>b. Total water withdrawal from all areas with water stress in megaliters, and a breakdown of this total by the following sources, if applicable:</p> <p>i. Surface water;</p> <p>ii. Groundwater;</p> <p>iii. Seawater;</p> <p>iv. Produced water;</p> <p>v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv.</p> <p>c. A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters by the following categories:</p> <p>i. Freshwater (<math>\leq 1,000</math> mg/L Total Dissolved Solids);</p> <p>ii. Other water (<math>&gt;1,000</math> mg/L Total Dissolved Solids).</p> <p>d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.</p>	<p>a. i. 0 megaliters ii. 0 megaliters iii. 0 megaliters iv. 0 megaliters v. 10,856 megaliters</p> <p>b. N/A, FCL does not capture water from water stress areas.</p> <p>c. i. 10,856 megaliters ii. 0 megaliters</p> <p>d. Methodologies: water bills, although chrome plating and UV painting have their own fixed counter for monitorization.</p>	39-40
303-4	Water discharge	<b>Explanation for omission</b>	At FCL facilities there is still only one discharge counter at the chrome plating ETAR and, it is possible to calculate painting discharges considering the water that enters the process. However, the rest of the discharges are not measured. Due to this, it is impossible to measure FCL's water discharges and, therefore, the overall water consumption.	
303-5	Water consumption			

Figure 60 - GRI Index: 303 Water and Effluents

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Emissions</b>				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <p>i. where the impacts occur.</p> <p>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</p>	<p>i. The boundary for the material topic is limited to the manufacturing facilities located in Braga, Portugal. For each material topic, FCL is focused on reporting what it can directly control to minimize its footprint.</p> <p>ii. Currently, FCL's reporting and measurement does not include the supply chain, nevertheless this is a topic that we are looking for to be able to report in the future.</p>	37
103-2	The management approach and its components	<p>a. An explanation of how the organization manages the topic.</p>		33 37
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. the mechanisms for evaluating the effectiveness of the management approach.</p> <p>ii. the results of the evaluation of the management approach.</p>	<p>i. Every two years, we develop an Execution and Progress Reports (REP) to evaluate our environmental performance. These reports include FCL's emissions. Then, it must be verified by an external entity. Also, internally FCL reports its emissions to soil, water and atmosphere.</p> <p>ii. The results of external and internal audits and data collection are then analysed by the Environmental Department, to see if FCL is working towards its stated goals.</p>	33
305-1	Direct (Scope 1) GHG emissions	<p>The reporting organization shall report the following information:</p> <p>a. Gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent.</p> <p>b. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p> <p>c. Biogenic CO2 emissions in metric tons of CO2 equivalent.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. the rationale for choosing it;</p> <p>ii. emissions in the base year;</p> <p>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</p> <p>g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>a. 94,1 tonCO2</p> <p>b. CO2</p> <p>c. N/A</p> <p>d. i. Since this is FCL's first Sustainability Report and we want to maintain the same methodology, to include a holistic approach of 3 years, the base year chosen was 2018.</p> <p>ii. 111,3 tonCO2</p> <p>iii. N/A</p> <p>e. Fuels: 1 GJ = 74 kgCO2; Natural Gas: 1GJ = 64,1 KgCO2</p> <p>f. Operational control.</p> <p>g. GHG Protocol</p>	37-38
305-2	Energy indirect (Scope 2) GHG emissions	<p>The reporting organization shall report the following information:</p> <p>a. Gross direct (Scope 2) GHG emissions in metric tons of CO2 equivalent.</p> <p>b. Gases included in the calculation (scope 2); whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p> <p>c. Biogenic CO2 emissions in metric tons of CO2 equivalent.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. the rationale for choosing it;</p> <p>ii. emissions in the base year;</p> <p>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</p> <p>g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>a. 544,43 tonCO2</p> <p>b. N/A</p> <p>c. CO2</p> <p>d. i. Since this is FCL's first Sustainability Report and we want to maintain the same methodology, to include a holistic approach of 3 years, the base year chosen was 2018.</p> <p>ii. 867,04 tonCO2</p> <p>iii. N/A</p> <p>e. Carbon Footprint, emission factors 2019 electricity grid (Portugal) = 0,25255 KgCO2/kWh</p> <p>f. Operational control.</p> <p>g. GHG protocol – location-based method</p>	38
305-3	Other indirect (Scope 3) GHG emissions	<b>Explanation for omission</b>	FCL does not account for emissions outside of the organization, only from sources that can directly control.	
305-4	GHG emissions intensity	<p>a. Índice de intensidade de emissões de GEE para a organização.</p> <p>b. Métrica específica (o denominador) escolhida pela organização para calcular esse índice.</p> <p>c. Tipos de emissões de GEE incluídos no índice de intensidade; se diretas (Escopo 1), indiretas (Escopo 2) provenientes de aquisição de energia e/ou outras emissões indiretas (Escopo 3).</p> <p>d. Gases incluídos no cálculo; se CO2, CH4, N2O, HFCs, PFCs, SF6, NF3 ou todos.</p>	<p>a. 0,183 tonCO2/thousand units produced</p> <p>b. Thousand units produced</p> <p>c. Scope 1 and 2.</p> <p>d. CO2</p>	38
305-5	Reduction of GHG emissions	<b>Explanation for omission</b>	There have not been implemented initiatives for GHG emissions reduction.	
305-6	Emissions of ozone-depleting substances (ODS)	<b>Explanation for omission</b>	FCL does not include or require the use of ozone-depleting substances in its processes.	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	<b>Explanation for omission</b>	The procedure to account for VOC emissions is still lacking in accuracy.	

Figure 61 - GRI Index: 305 Emissions

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Waste</b>				
306-1	Waste generation and significant waste-related impacts	<p>a. For the organization's significant actual and potential waste-related impacts, a description of:</p> <p>i. the inputs, activities, and outputs that lead or could lead to these impacts;</p> <p>ii. whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain.</p>	<p>i. Mainly our chrome plating process that also has the most hazardous substances.</p> <p>ii. At this time, FCL will only report impacts related to the activities that it can directly control, in that sense the activities of the supply chain are not included.</p>	
306-2	Management of significant waste-related impacts	<p>a. Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated.</p> <p>b. If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations.</p> <p>c. The processes used to collect and monitor waste-related data.</p>	<p>b. The waste generated is managed by a third party according to legislative obligations.</p> <p>c. Waste generated at FCL is cautiously collected and split by type, stored in eco-points and then dispatched to the respective licensed waste disposal operators. FCL does a quantitative estimation of the waste generated and fills the e-GAR with this information. Then, when the waste arrives at the third party, the values estimated must be approved and verified. After this, the precise data of the waste generated on FCL's installations is submitted to the Regional Waste Information System (SRIR).</p>	34-35 41
306-3	Waste generated	<p>a. Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste.</p> <p>b. Contextual information necessary to understand the data and how the data has been compiled.</p>	<p>a. Hazardous waste – 49,503 t; Non-hazardous waste – 43,066 t; Total waste generated – 92,569 t</p> <p>b. Data is collected from the third party that manages the waste generated on FCL's installations.</p>	41
306-4	Waste diverted from disposal	<p>a. Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste.</p> <p>b. Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:</p> <p>i. Preparation for reuse;</p> <p>ii. Recycling;</p> <p>iii. Other recovery operations.</p> <p>c. Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:</p> <p>i. Preparation for reuse;</p> <p>ii. Recycling;</p> <p>iii. Other recovery operations.</p> <p>d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal:</p> <p>i. onsite;</p> <p>ii. offsite.</p> <p>e. Contextual information necessary to understand the data and how the data has been compiled.</p>	<p>a. Hazardous waste diverted from disposal – 1,314 t; Non-hazardous waste diverted from disposal – 43,066 t; Total waste diverted from disposal – 44,38 t</p> <p>b. i. Preparation for reuse: 0 t</p> <p>ii. Recycling: 1,314 t</p> <p>iii. Other recovery operations: 0 t</p> <p>c. i. Preparation for reuse: 0 t</p> <p>ii. Recycling: 43,066 t</p> <p>iii. Other recovery operations: 0 t</p> <p>d. i. onsite: 0 t</p> <p>ii. offsite: 44, 38 t</p> <p>e. N/A</p>	42-43
306-5	Waste directed to disposal	<p>a. Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste.</p> <p>b. Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:</p> <p>i. Incineration (with energy recovery);</p> <p>ii. Incineration (without energy recovery);</p> <p>iii. Landfilling;</p> <p>iv. Other disposal operations.</p> <p>c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:</p> <p>i. Incineration (with energy recovery);</p> <p>ii. Incineration (without energy recovery);</p> <p>iii. Landfilling;</p> <p>iv. Other disposal operations.</p> <p>d. For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal:</p> <p>i. onsite;</p> <p>ii. offsite.</p> <p>e. Contextual information necessary to understand the data and how the data has been compiled.</p>	<p>a. Hazardous waste direct to disposal – 48,189 t; Non-hazardous waste direct to disposal – 0 t; Total waste direct to disposal – 48,189 t</p> <p>b. i. Incineration (with energy recovery): 2,417 t</p> <p>ii. Incineration (without energy recovery): 0 t</p> <p>iii. Landfilling: 45,772 t</p> <p>iv. Other disposal operations: 0 t</p> <p>c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:</p> <p>i. Incineration (with energy recovery): 0 t</p> <p>ii. Incineration (without energy recovery): 0 t</p> <p>iii. Landfilling: 0 t</p> <p>iv. Other disposal operations: 0 t</p> <p>d. i. onsite: 0 t</p> <p>ii. offsite: 48,189 t</p> <p>e. N/A</p>	42-43

Figure 62 - GRI Index: 306 Waste

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Environmental Compliance</b>				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <ul style="list-style-type: none"> <li>i. where the impacts occur.</li> <li>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</li> </ul>		33
103-2	The management approach and its components	a. An explanation of how the organization manages the topic.		
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <ul style="list-style-type: none"> <li>i. the mechanisms for evaluating the effectiveness of the management approach.</li> <li>ii. the results of the evaluation of the management approach.</li> </ul>		
307-1	Non-compliance with environmental laws and regulations	<p>a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of:</p> <ul style="list-style-type: none"> <li>i. total monetary value of significant fines;</li> <li>ii. total number of non-monetary sanctions;</li> <li>iii. cases brought through dispute resolution mechanisms.</li> </ul> <p>b. If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.</p>	Regarding FCL compliance with environmental regulations, in the last years, we have not committed any non-compliance with environmental laws or paid any substantial fines/sanctions.	

Figure 63 - GRI Index: 307 Environmental Compliance

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
<b>Employment</b>				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <p>i. where the impacts occur.</p> <p>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</p>	<p>b. i. The boundary for the material topic is limited to the workforce on the manufacturing facilities located in Braga, Portugal.</p> <p>ii. FCL identifies a necessity and then seeks, interviews, analyses, and hires employees it feels are best for the position's needs. To ensure that the best recruit is selected to meet the job requirements, employees are selected based on their skills, experience, and competence. For each material topic, FCL is focused on reporting information on employees under its control.</p>	26-27
103-2	The management approach and its components	a. An explanation of how the organization manages the topic.		27
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. the mechanisms for evaluating the effectiveness of the management approach.</p> <p>ii. the results of the evaluation of the management approach.</p>		26-27
401-1	New employee hires and employee turnover	<p>a. Total number and rate of new employee hires during the reporting period, by age group, gender and region.</p> <p>b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.</p>	<p>a. <b>New hires (Age group):</b> &lt;30 - 8 (84%); 30-50 - 3 (9%); &gt;50 - 0;</p> <p><b>New hires (Gender):</b> Female - 5 (15%); Male - 6 (12%);</p> <p><b>b. Turnover (Age group):</b> &lt;30 - 5 (56%); 30-50 - 4 (12%); &gt;50 - 2 (5%);</p> <p><b>Turnover (Gender):</b> Female - 4 (12%); Male - 7 (14%);</p>	27-28
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<p>a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum:</p> <p>i. life insurance;</p> <p>ii. health care;</p> <p>iii. disability and invalidity coverage;</p> <p>iv. parental leave; v. retirement provision;</p> <p>vi. stock ownership;</p> <p>vii. others.</p> <p>b. The definition used for 'significant locations of operation'.</p>	<p>a. Health services (occupational medicine included); Pharmacy discount protocol; Income protection systems in disease situations; Fehst Saudável: promotes labour gymnastics and occupational health; Offers baskets or merchandising as a small gesture of gratitude (special occasions)</p> <p>b. Manufacturing facilities located in Braga, Portugal.</p>	26-27
401-3	Parental leave	<p>a. Total number of employees that were entitled to parental leave, by gender.</p> <p>b. Total number of employees that took parental leave, by gender.</p> <p>c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender.</p> <p>d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender.</p> <p>e. Return to work and retention rates of employees that took parental leave, by gender.</p>	<p>a. 82 (all employees)</p> <p>b. Only 1 male.</p> <p>c. Only 1 male.</p> <p>d. Only 1 male.</p> <p>e. Return to work and retention rates of employees that took parental leave, by gender: Only males have taken parental leave on 2019 and 2020. Return to work rate – 100% Retention rate – 100%</p>	

Figure 64 - GRI Index: 401 Employment

Disclosure Number	Disclosure Title	Disclosure description	Information	Page
Occupational Health and Safety				
403-1	Occupational health and safety management system	<p>a. A statement of whether an occupational health and safety management system has been implemented, including whether:</p> <p>i. the system has been implemented because of legal requirements and, if so, a list of the requirements.</p> <p>ii. the system has been implemented based on recognized risk management and/or management system standards/guidelines and, if so, a list of the standards/guidelines.</p> <p>b. A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.</p>	<p>a. i. According to Portuguese law.</p> <p>ii. ISO 45001: Occupational Health and Safety management systems</p> <p>b. The OHS system audited by Catim covers all 82 workers. Excepting six workers, who are covered by an OHS system internally audited by FCL. These are not employees, but the workplace is controlled by FCL, performing canteen, maintenance and cleaning operations.</p>	31
403-2	Hazard identification, risk assessment, and incident investigation	<p>a. A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including:</p> <p>i. how the organization ensures the quality of these processes, including the competency of persons who carry them out.</p> <p>ii. how the results of these processes are used to evaluate and continually improve the occupational health and safety management system.</p> <p>b. A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals.</p> <p>c. A description of the policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals.</p> <p>d. A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.</p>		31-32
403-3	Occupational Health Services	<p>a. A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.</p>	<p>a. Sepri is a certified entity that performs Medical and Healthcare Services at FCL, ensuring confidentiality of workers' personal health-related information.</p>	
403-4	Worker participation, consultation, and communication on occupational health and safety	<p>a. A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers.</p> <p>b. Where formal joint management-worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision-making authority, and whether and, if so, why any workers are not represented by these committees.</p>	<p>a. Workers must communicate relevant information to the Occupational Health and Safety Superior Technician responsible at FCL.</p> <p>b. Workers committees – annual meetings.</p>	31
403-5	Worker training on occupational health and safety	<p>a. A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.</p>	<p>a. FCL is constantly providing training to employees about chemical, machinery and tools handling, besides ensuring that they have suitable Personal Protective Equipment.</p>	31-32
403-6	Promotion of worker health	<p>a. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided.</p> <p>b. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.</p>	<p>a. Medical and Healthcare services (Sepri); Pharmacy discount protocol: Fehst Saudável program – promoting labour gymnastics</p> <p>b. The Medical and Healthcare services also help identifying non-work-related health risks, besides the Pharmacy discount protocol can help promote the health of FCL's workers.</p>	31
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<p>a. A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products or services by its business relationships, and the related hazards and risks.</p>	<p>a. The Medical and Healthcare services and the Fehst Saudável program help prevent and mitigate work-related health risks.</p>	31-32
403-8	Workers covered by an occupational health and safety management system	<p>a. If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards/guidelines:</p> <p>i. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system;</p> <p>ii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited;</p> <p>iii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party.</p> <p>b. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded.</p> <p>c. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.</p>	<p>a. i. 100%</p> <p>ii. 7%</p> <p>iii. 93%</p> <p>b. N/A</p> <p>c. N/A</p>	
403-9	Work-related injuries	<p>a. For all employees:</p> <p>i. The number and rate of fatalities as a result of work-related injury;</p> <p>ii. The number and rate of high-consequence work-related injuries (excluding fatalities);</p> <p>iii. The number and rate of recordable work-related injuries;</p> <p>iv. The main types of work-related injury;</p> <p>v. The number of hours worked.</p> <p>b. For all workers who are not employees but whose work and/or workplace is controlled by the organization:</p> <p>i. The number and rate of fatalities as a result of work-related injury;</p> <p>ii. The number and rate of high-consequence work-related injuries (excluding fatalities);</p> <p>iii. The number and rate of recordable work-related injuries;</p> <p>iv. The main types of work-related injury;</p> <p>v. The number of hours worked.</p> <p>c. The work-related hazards that pose a risk of high-consequence injury, including:</p> <p>i. how these hazards have been determined;</p> <p>ii. which of these hazards have caused or contributed to high-consequence injuries during the reporting period;</p> <p>iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls.</p> <p>d. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls.</p> <p>e. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked.</p> <p>f. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded.</p> <p>g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.</p>	<p>a. i. zero</p> <p>ii. zero</p> <p>iii. 3 recordable work-related injuries and rate of 5,12</p> <p>iv. Different kinds of falls</p> <p>v. 117 276 hours</p> <p>b. i. zero</p> <p>ii. zero</p> <p>iii. N/A</p> <p>iv. N/A</p> <p>v. N/A</p> <p>c. Chemical, machinery and tool handling, besides different kind of falls.</p> <p>i. Risk Assessment Matrix</p> <p>ii. Falls</p> <p>iii. None</p> <p>d. Providing training and suitable Personal Protective Equipment</p> <p>e. 200 000 hours worked</p> <p>f. None</p> <p>g. N/A</p>	32
403-10	Work-related ill health	<p><b>Explanation for omission</b></p>	<p>FCL does not monitor records related to work illnesses and, with regard to fatalities, it has never happened at its premises.</p>	

Figure 65 - GRI Index: 403 Occupational Health and Safety



Disclosure Number	Disclosure Title	Disclosure description	Information	Page
Training and Education				
103-1	Explanation of the material topic and its Boundary	<p>a. An explanation of why the topic is material.</p> <p>b. The Boundary for the material topic, which includes a description of:</p> <ul style="list-style-type: none"> <li>i. where the impacts occur.</li> <li>ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.</li> </ul>		28-29
103-2	The management approach and its components	a. An explanation of how the organization manages the topic.		28-29
103-3	Evaluation of the management approach	<p>a. An explanation of how the organization evaluates the management approach, including:</p> <ul style="list-style-type: none"> <li>i. the mechanisms for evaluating the effectiveness of the management approach.</li> <li>ii. the results of the evaluation of the management approach.</li> </ul>	<p>i. Evaluation of the management approach is made through internal sources, precisely the Human Resources Department. As an ISO 9001 certified company, FCL is continuously improving its management approach regarding several topics. We are aware that employees have a big role on achieving a high-quality product, in that sense we constantly evaluate our management approach regarding human resources. To certify that the identified needs at the beginning of the Training Program were fulfilled, the HR Department must evaluate the trainer performance and assess the level of the trainees' satisfaction. Besides this, must execute learning assessments.</p> <p>ii. The results of internal audits and data collection express if the system is working towards stated goals. The performance metrics provide an indication of where the transfer of knowledge has been effective.</p>	
404-1	Average hours of training per year per employee	<p>a. Average hours of training that the organization's employees have undertaken during the reporting period, by:</p> <ul style="list-style-type: none"> <li>i. gender;</li> <li>ii. employee category.</li> </ul>		29
404-2	Programs for upgrading employee skills and transition assistance programs	<p>a. Type and scope of programs implemented and assistance provided to upgrade employee skills.</p> <p>b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.</p>	<p>a. Training to develop technical and soft skills, also language courses (English, German, etc.) and on job training.</p> <p>b. Opportunity program for employees at the end of their active careers.</p>	28
404-3	Percentage of employees receiving regular performance and career development reviews	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.		29-30

Figure 66 - GRI Index: 404 Training and Education

# APPENDIX 12 – BPMNs OF THE SUSTAINABILITY REPORTING PROCESS

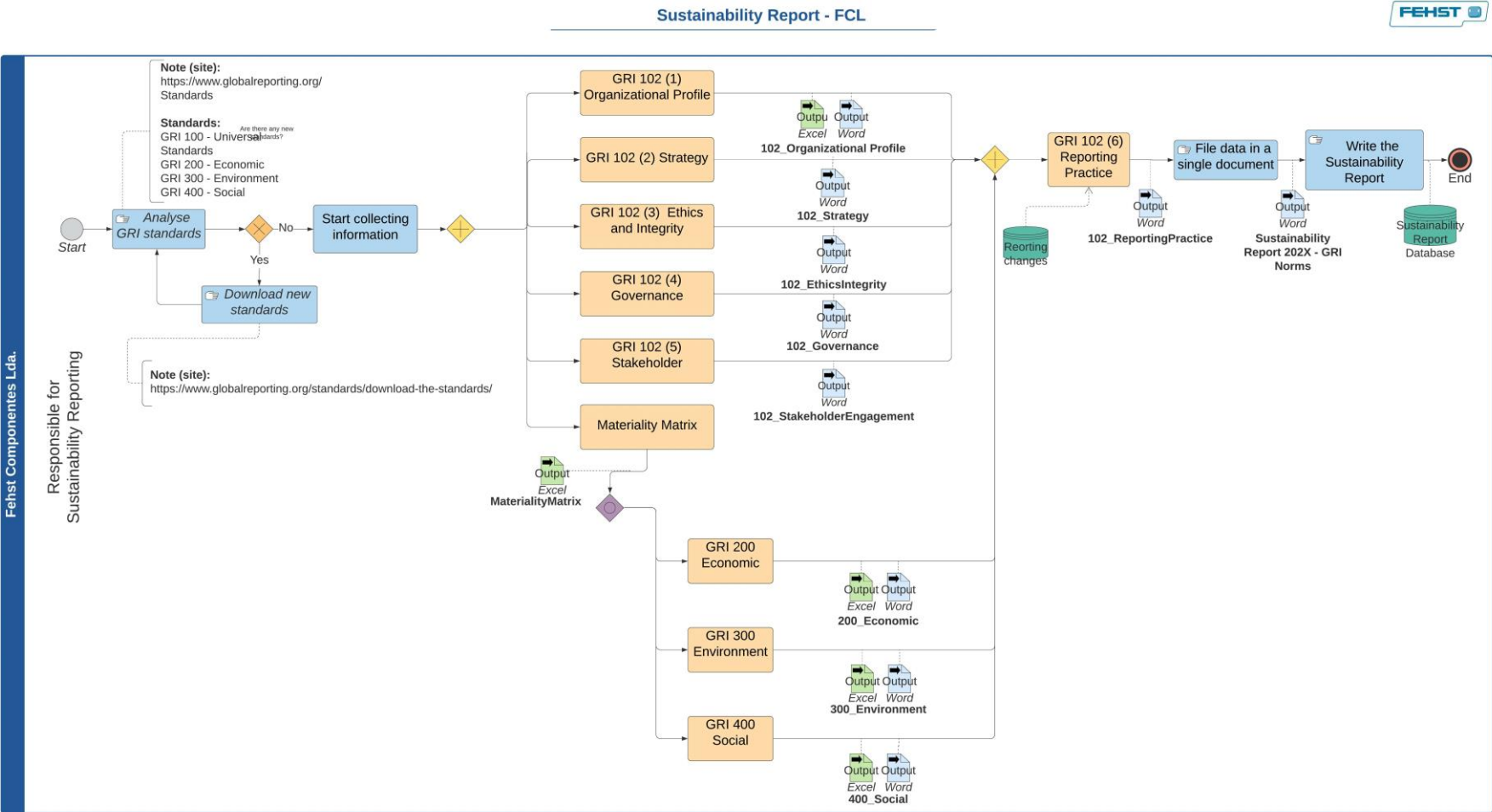


Figure 67 - Sustainability reporting general process

SUBPROCESS - GRI 102 GENERAL DISCLOSURE: Organizational Profile

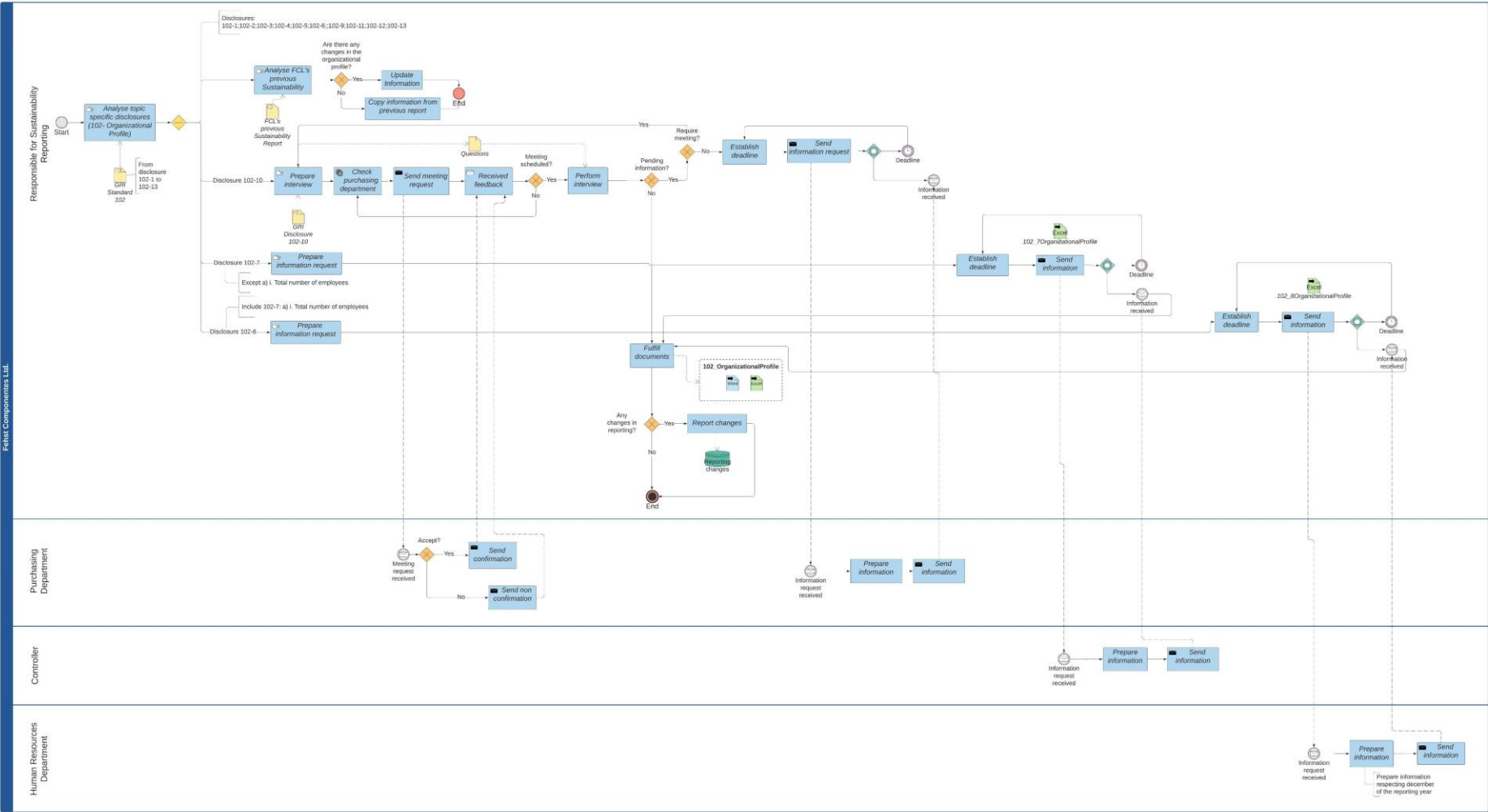


Figure 68 - GRI 102 subprocess: Organizational Profile example

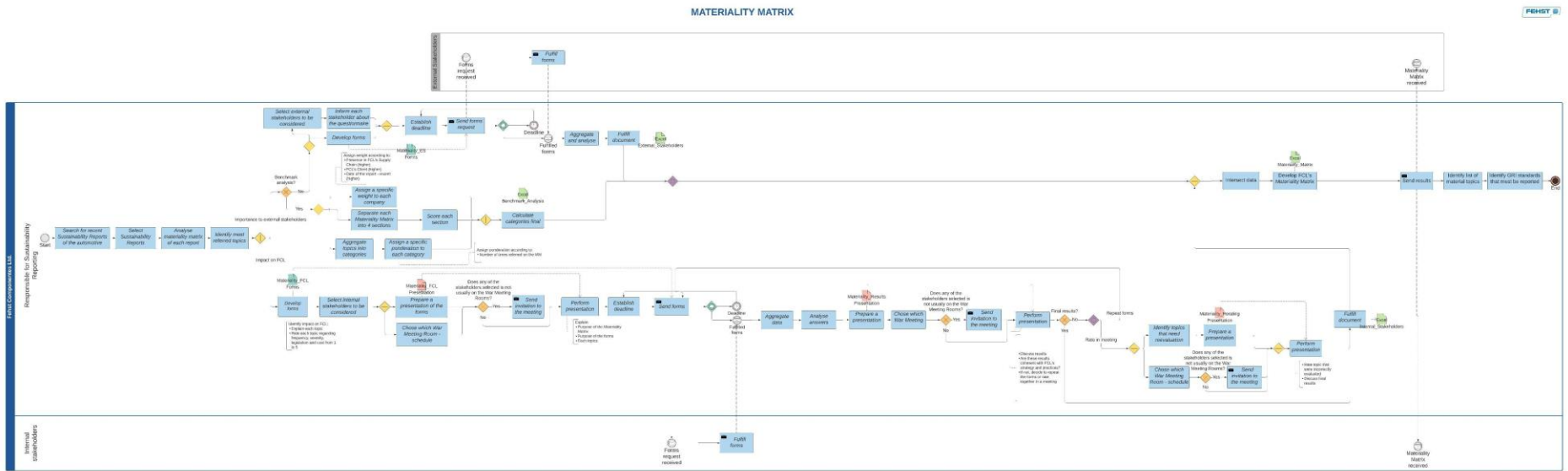


Figure 69 - Materiality Matrix subprocess

SUBPROCESS - GRI 200 ECONOMIC

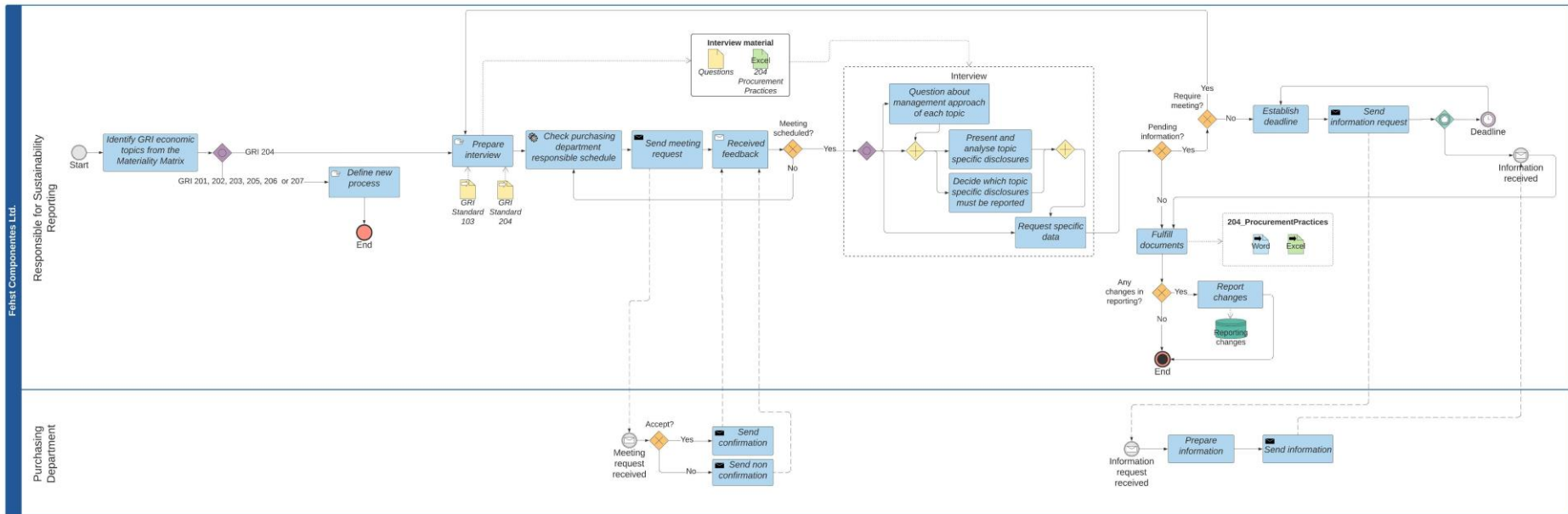


Figure 70 - Economic series subprocess

SUBPROCESS - GRI 300 ENVIRONMENT

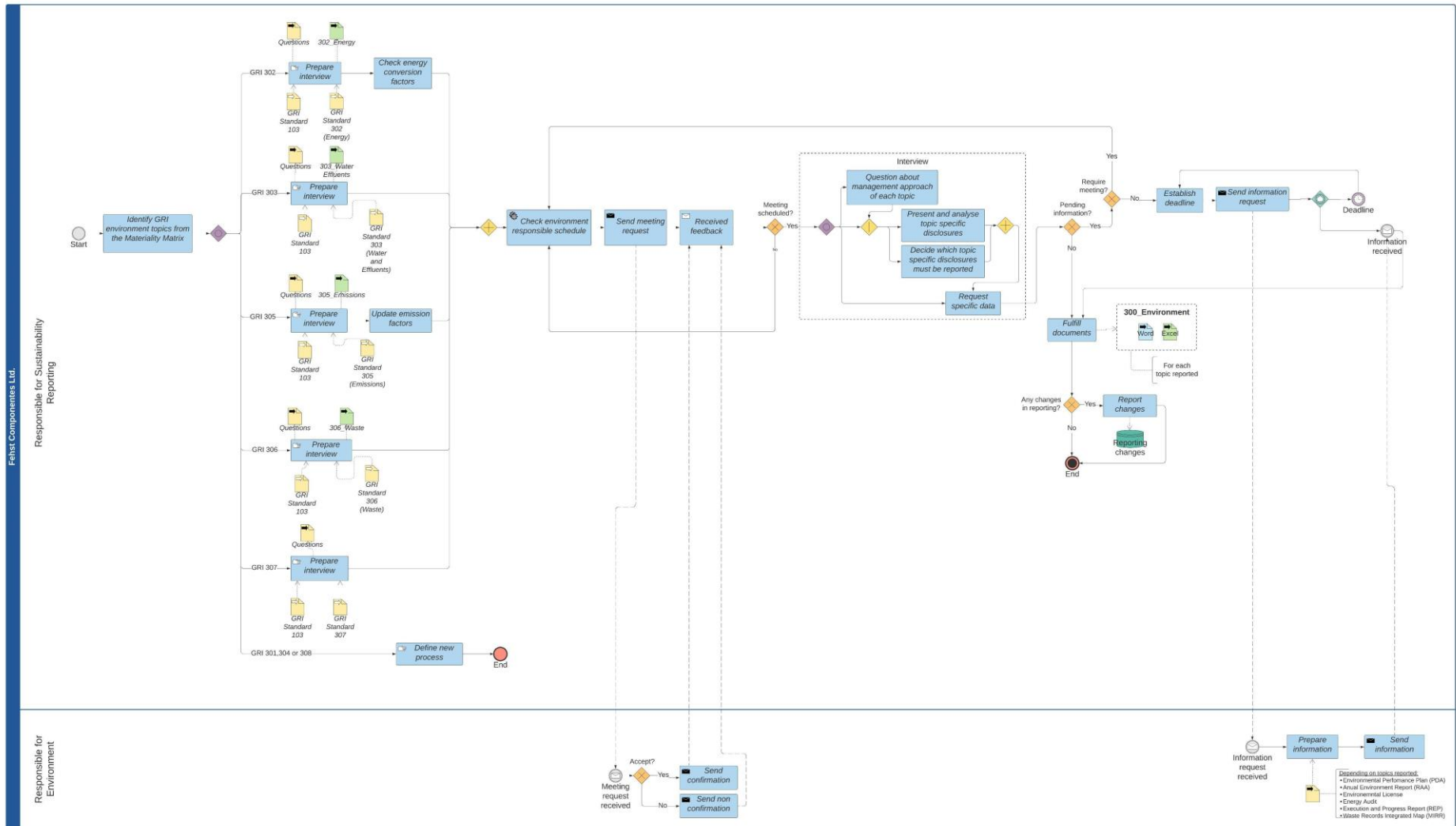


Figure 71 - Environment series subprocess

SUBPROCESS - GRI 400 SOCIAL

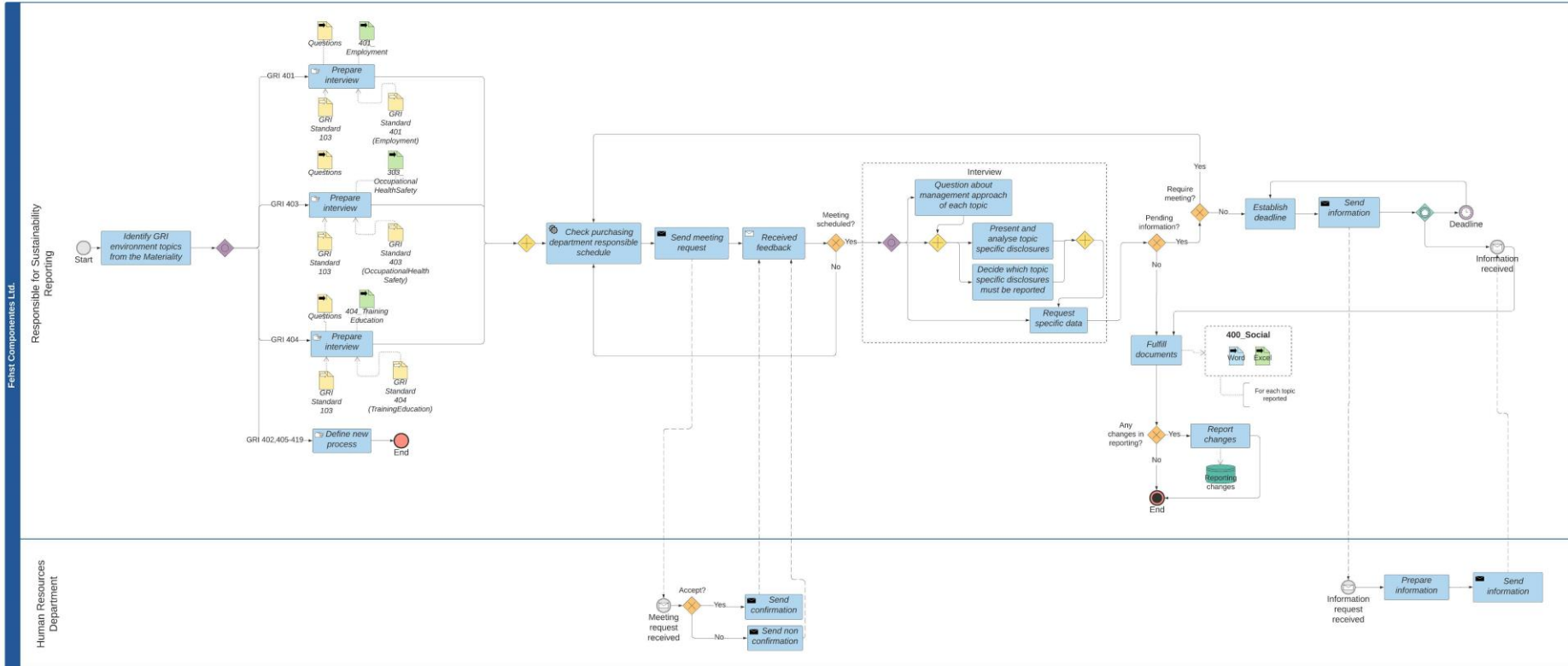


Figure 72 - Social series subprocess

## ATTACHMENT 1 – 17 SUSTAINABLE DEVELOPMENT GOALS

Table 45 – The 17 Sustainable Development Goal  
Retrieved from (UN, 2021b)

Goals	Objective	Description
1	No Poverty	By 2030, eradicate extreme poverty for all people everywhere.
2	Zero Hunger	End hunger, achieve food security and improved nutrition by 2030.
3	Good Health and Well-being	Ensure healthy lives and promote well-being for all at all ages by 2030.
4	Quality Education	Ensure that all girls and boys complete free, equitable and quality primary and secondary education by 2030.
5	Gender Equality	To achieve gender equality and empower all women and girls.
6	Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all by 2030.
7	Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all by 2030.
8	Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth.
9	Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation by 2030.
10	Reduced Inequality	Reduce inequality within and among countries by 2030.
11	Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable.
12	Responsible Consumption and Production	Ensure sustainable consumption and production patterns.
13	Climate Action	Take urgent action to combat climate change and its impacts.
14	Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15	Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, combat desertification and halt biodiversity loss.
16	Peace and Justice Strong Institutions	Promote peaceful and inclusive societies for sustainable development; provide access to justice for all.
17	Partnerships to achieve the Goal	Strengthen the means of implementation and revitalize the global partnership for sustainable development.