

✕
Secil

✕
Navigator

✕
Semapa Next

✕
ETSA

✕
Semapa





SUSTAINABILITY
REPORT 2021



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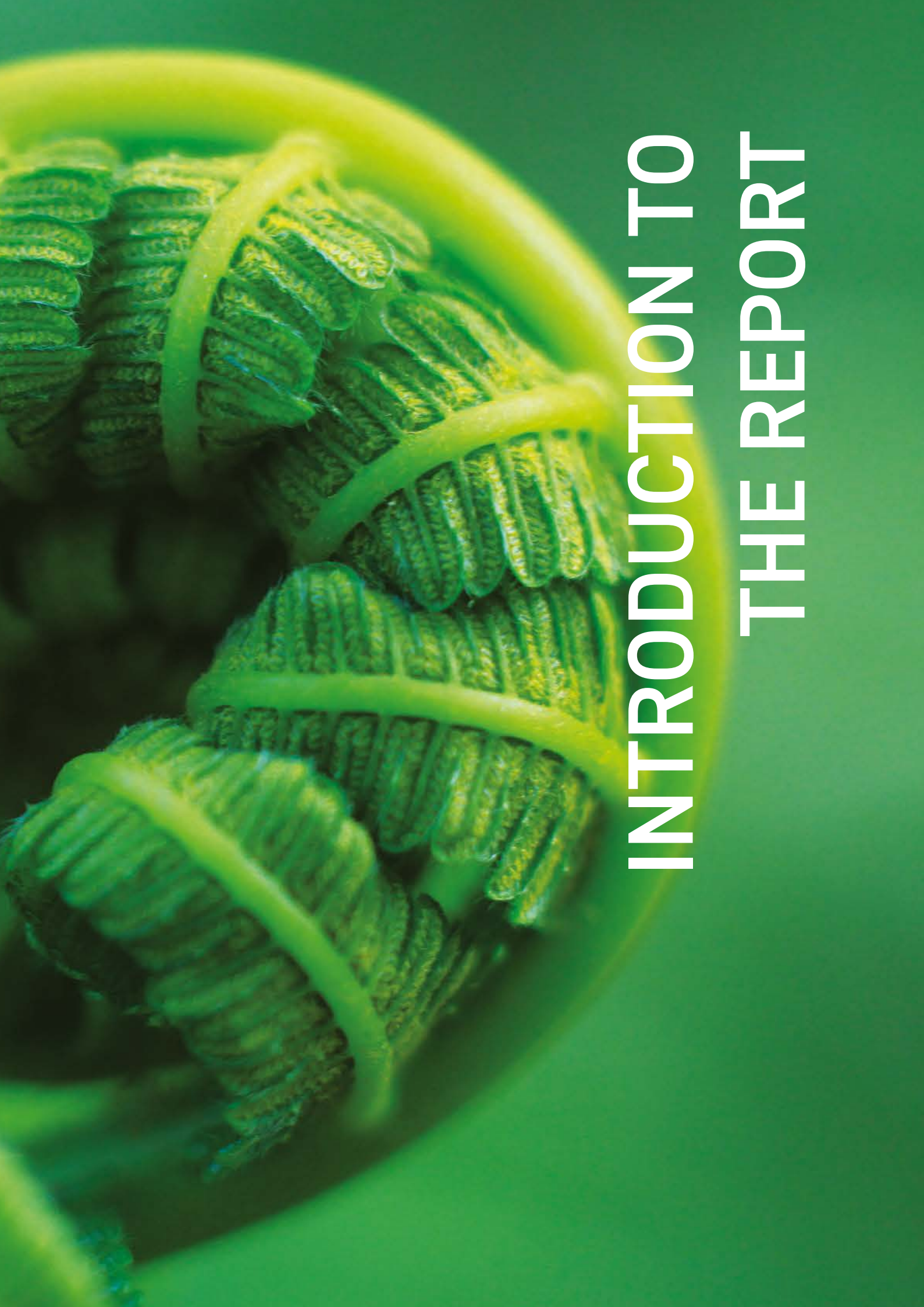
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INTRODUCTION TO THE REPORT



ABOUT THE REPORT

The 2021 Sustainability Report was prepared in accordance with the Global Reporting Initiative Standards, version 2021, demonstrating the Group's willingness to anticipate them on a voluntary basis, thus aligning itself with international best practices. The report also meets the requirements of Decree-Law No. 89/2017 - disclosure of non-financial and diversity information by large companies and groups.





The year 2021 marks the first complete year in the changes made to the Group's sustainability governance structure, with new working groups being set up, each dedicated to the Group's strategic areas. These topics were established following reflection by the Sustainability Committee, with the definition of strategic areas and the teams making up the working groups. Each of the groups began working together, focusing on building a common and ambitious path in each strategic area.

As in previous year, and where material topics were adjusted, this Sustainability Report reflects the response to the 13 material topics, each reflected in a sub-chapter. These sub-chapters are grouped into strategic pillars: Value Creation in the Business, Valuing People; Protecting the Planet; and Community Engagement.

Finally, after an atypical year, we highlight the influence of international trends on the Group's business, including the impact of the COVID-19 pandemic, as well as the Semapa Group's new roadmap to decarbonisation.

METHODOLOGICAL NOTES

All changes and reformulations are indicated in the GRI Index, for each of the indicators, where warranted.

Three annexes were included to complement the report and to increase transparency as regards the various benchmarks, in particular, the indicators of the World Economic Forum, reported for the first time.

INFORMATION REVIEW

The information contained in the report was verified by KPMG, which produced the independent limited assurance report appended hereto.

PERIOD, SCOPE AND LIMITATIONS OF THE REPORT

This report covers the activities carried out in 2021 (1 January to 31 December 2021) in line with the Annual Report, and includes all of the Group's activities. All indicators are consolidated, with the exception of Tribérica and Portucel Moçambique, whose activities are described throughout the document, where applicable. Semapa Next is presented together with Semapa Holding, except where otherwise specified.

OPINION AND CONTACT INFORMATION

For any clarification, please contact:

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2021 FIGURES

UNIVERSE OF

5,823*

EMPLOYEES

* includes Employees of Portucel Moçambique and Tribérica

PRESENT IN

20 COUNTRIES

REVENUE

2,131.4 M€

EBITDA

508.7 M€

MARGIN HIGHER
THAN 20%



EQUITY

1,092 M€



INVESTMENT IN
TANGIBLE FIXED ASSETS

120.3 M€



CASH FLOW

448.5 M€

NET PROFIT ATTRIBUTABLE
TO SHAREHOLDERS

198.1 M€



OPEN LETTER TO STAKEHOLDERS



JOSÉ FAY

Chairman of the Board of Directors

This is the Semapa Group's commitment, as the holding of an industrial group with companies operating in the production of pulp and paper, and cement, as well as in the environment.

This report clearly shows the priority the Group attaches to sustainability, detailing the policies and the various measures we have been taking to pursue and implement the strategic principles that guide our action.

The message I would like to leave is very simple: we have shown what we can do in this very difficult year and we have come out even stronger than before. I haven't the slightest doubt that through ambition, innovation and collaboration we have all the resources we need to successfully meet the challenges of the future.

While in 2021 the world tried to recover from a global health crisis that deeply affected everyone, including organisations, in 2022 Russia invaded Ukraine, bringing with it a significant increase in the level of uncertainty about the future.

In addition to these crises that have affected us all, we face another challenge posed by human interaction with nature, making us re-think the way we use natural resources and recognise the need to adopt behaviours that preserve natural habitats and biodiversity.

Sustainability has been one of our priorities for many years. We could say it's in our DNA as a Group, always with the aim of bringing value creation in line with our respect for the environment and natural resources, by developing and training our people and respecting the local communities where we operate.

Companies and their leaders play an absolutely central role in the Decade of Action, which encompasses the United Nations 2030 Agenda for Sustainable Development Goals (SDGs).



RICARDO PIRES
Chief Executive Officer (CEO)

This being my first report, I would like to thank all of the Group's Employees, who in these difficult years have shown an unparalleled sense of dedication and commitment, allowing us to not only demonstrate tremendous resilience, but to come through this health and economic crisis stronger.

In early 2022, when we thought the focus would be on post-Covid economic recovery, we were confronted with an unexpected scenario of war in Europe that could set back the gains made in the meantime by world economies.

This Sustainability Report is proof of the Semapa Group's strong commitment to current and future generations. In this sense, sustainability must be at the centre of the management of all the companies that make up the Group. Investing in the Sustainability Committee, which includes professionals from the various companies, reinforces the importance that the Group gives to this issue and enables sustainability to be managed in an organised and cohesive manner.

Sustainability is increasingly high on the agenda of companies and their leaders, and we must take on

greater responsibility in meeting the major goals of this decade envisaged in the United Nations 2030 Agenda for Sustainable Development Goals (SDGs).

The Semapa Group comprises various companies operating in different sectors; however, all of them have a common track record of numerous initiatives in the area of sustainability. Proof of this is the establishment of ambitious goals for the decarbonisation of our activities, as a result of a strategic discussion on the main aspects where the Group can contribute to a more sustainable development of society, such as, for example:

- Navigator, Portugal's leading paper manufacturer, was the first in the country, and one of the first worldwide, to commit to bringing national targets forward by 15 years and ensuring the carbon neutrality of its industrial sites by 2035.

- Secil, the largest Portuguese cement company, endorses the 2050 Climate Ambition for the cement industry, which aims at carbon neutrality in the concrete and cement value chain by 2050, based on reliable data on biodiversity, the use of alternative fuels, innovating in less carbon intensive products, energy efficiency, and responsible action in the communities where it operates.

- The ETSA Group focuses its activities on the environment and is a national leader in recycling in the food sector. The Group has drawn up a plan to reduce its emissions by 15% by 2025, with the aim of achieving carbon neutrality by 2035, in line with the targets of the United Nations Sustainable Development Goals.

The commitment to research and innovation is also a decisive action area for obtaining new, more sustainable products that stand out for their differentiation and for their lower environmental impact. Our commitment becomes even more urgent at a time when the changes taking place, whether at a technological, health or environmental level, or even at a geopolitical level, require innovative responses that allow us to tackle new problems.

Let me conclude by saying that our people, our principles and our values are the key to overcoming the challenges that lie ahead and the guarantee of our success as a Group.

OUR DNA

Semapa represents one of the largest domestic industrial groups and operates in various sectors of economic activity. The Group's identity is characterised by a variety of companies, all of which always aim at bringing value creation in line with our respect for the environment and natural resources, by developing and training our people and respecting local communities.

SUSTAINABILITY AS A CORE VALUE ACROSS THE ENTIRE GROUP

With its registered office in Lisbon, Semapa is a public company with shares admitted to trading on the regulated Euronext Lisbon market. As one of Portugal's largest industrial groups, Semapa employs over 5,800 people and operates on various continents. Around three-quarters of its turnover is generated in foreign markets.



One of the biggest Portuguese industrial groups with presence in

4 CONTINENTS



PORTFOLIO

that includes Pulp and Paper,
Cement and Other Building Materials,
Environment and Venture Capital



Listed since 1995 in

EURONEXT LISBON

(PSI20)



Family

QUEIROZ PEREIRA

reference investor



Professional, experienced and diversified

MANAGEMENT



WHAT WE DO

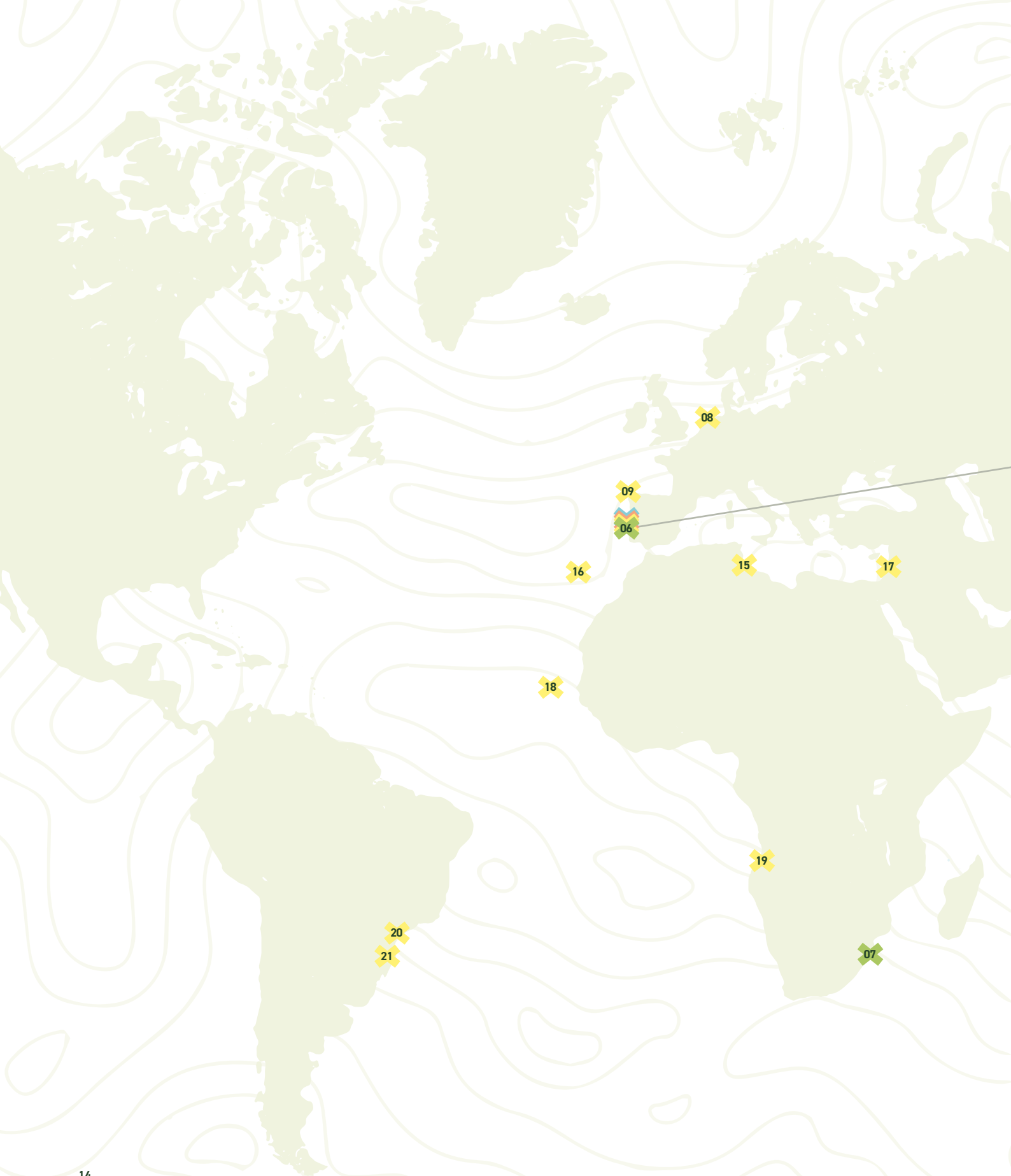
Semapa's core activity is the management of holdings, organised into four business areas, three of which are industrial.

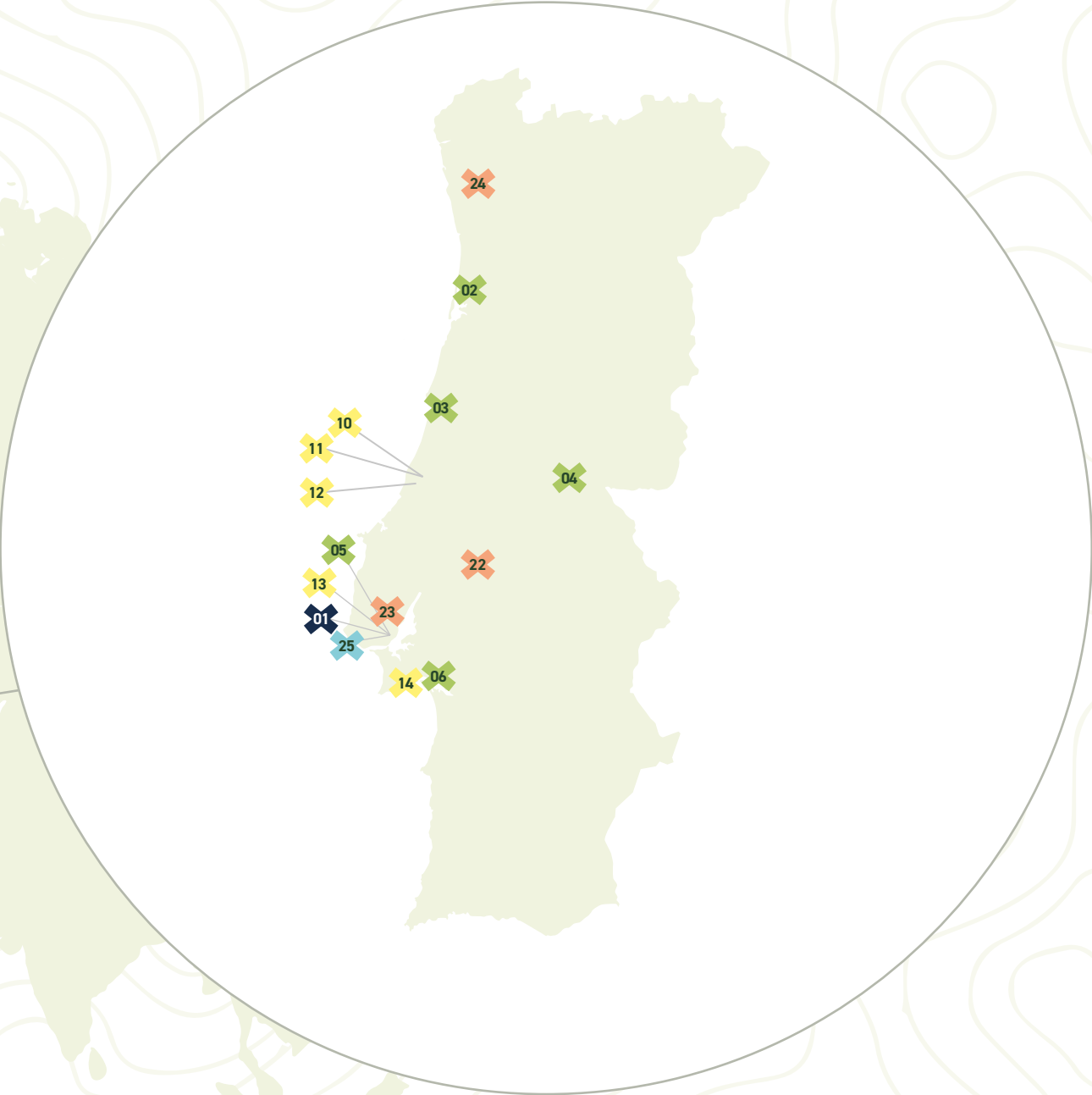


*Approximate value



WHERE WE ARE





**HOLDING
SEMAPA**

01 Lisbon Office

**PULP AND PAPER
NAVIGATOR**

- 02** Aveiro Plant
- 03** Figueira da Foz Plant
- 04** *Tissue* Plant
Vila Velha de Rodão
- 05** Lisbon Office
- 06** Setúbal Plant
- 07** Maputo Office

**CEMENT
SECIL**

- 08** Terneuzen Terminal
- 09** Vigo Terminal
- 10** Maceira-Liz Plant
- 11** Cal Maceira Plant
- 12** Cibra-Pataias Plant
- 13** Lisbon Office
- 14** Secil-Outão Plant
- 15** Gabès Plant
- 16** Funchal Terminal
- 17** Sibline Plant
- 18** Praia Terminal
- 19** Lobito Plant
- 20** Adrianópolis PR Plant
- 21** Pomerode SC Plant

**ENVIRONMENT
ETSA**

- 22** Coruche Plant
- 23** Santo Antão do Tojal Plant
- 24** Vila Nova de Famalicão Plant

**VENTURE CAPITAL
SEMAPA NEXT**

25 Lisbon Office

OUR IDENTITY

All Semapa Group companies have a clear mission that is embodied in a vision for the business, based on strategic values and principles stemming from the parent company and which, together, make up the Group's identity.

MISSION

To be a benchmark for investment management in key sectors of the Portuguese and international economy, aware of the principles of sustainable development and capable of balancing the requirements of creating returns for shareholders with an attractive project for the professionals of the Group and a deep social and environmental conscience.

SEMAPA VALUES

- Social and environmental awareness;
- Excellence, competence, innovation, and entrepreneurship;
- Discretion;
- Respect, trust, collaboration, and fairness;
- Integrity, ethics, and honesty.

STRATEGIC PRINCIPLES

- To grow, with the creation of shareholder value in a perspective of sustainable development with high social awareness;
- To promote development of local communities;
- Develop its Human Resources, providing them with permanent upgrading and career opportunities in accordance with demonstrated ambition and skills;
- To be ready for business opportunities and to make acquisitions with the potential for generating value.



GLOBAL CONTEXT

HOW WE TACKLE GLOBAL CHALLENGES

National and global economic changes, climate change, the growing scarcity of resources, the need to invest in a more circular economy, and the future of labour are some of the global trends seen as challenges and opportunities to which Semapa endeavours to respond to locally in the best way possible.

CLIMATE CHANGE

While the world economy is still trying to recover from the effects of the pandemic, climate change continues to affect people's daily lives and more challenges are expected in the business environment. This risk is clear to the World Economic Forum, as demonstrated in the latest "Global Risks Report" published in January 2022, which places climate action failure and extreme weather as the top two severe risks to the world over the next ten years.

The year 2021 was marked by two key moments in the fight against climate change: the Glasgow Climate Pact, which renewed the idea of reducing carbon dioxide emissions by 45% from 2010 levels by 2030, and the approval of the European Climate Law, which implements the commitment previously made in the European Green Deal to achieve carbon neutrality by 2050.

THE SEMAPA GROUP'S RESPONSE

ENVIRONMENT SEGMENT

ETSA has contributed to the decarbonisation of the Semapa Group by investing heavily in reducing fossil fuel consumption in its industrial units. With the acquisition of a biomass boiler for the Loures plant and a biomass energy recovery facility (BERF) at the Coruche manufacturing plant, ETSA has already reduced fossil emissions by over 80%.



ETSA aims to continue to reduce its carbon footprint with the implementation of various measures that will allow a reduction in greenhouse gas emissions (GHG). The roadmap to decarbonisation, which is currently being finalised, will pave the way to carbon neutrality.

PULP AND PAPER SEGMENT

The need to move towards a low-carbon economic model is reflected in The Navigator Company's roadmap to carbon neutrality. Navigator is therefore committed to anticipating the international targets for 2035, by reducing 86% of the direct CO₂ emissions of its industrial sites. Moreover, the Company is also committed to ensuring that 80% of the primary energy used comes from renewable energy sources by 2030.



CEMENT SEGMENT



Secil is taking another important step with the ongoing works to implement the CCL (Clean Cement Line) project at its Outão unit, covering a series of projects that will significantly reduce carbon emissions at this unit and which will be implemented by August 2023.

Secil, which subscribed to the roadmap to carbon neutrality by 2050, developed for the European cement sector by Cembureau, actively participated in the preparation of the roadmap for the national sector, submitted in March 2021 to the national authorities, committing to the goals for 2030 and 2050.

RESOURCES AND CIRCULAR ECONOMY

The scarcity of resources is a growing problem and one that is becoming increasingly well known to the general population and to businesses. Adopting more informed and sustainable consumption patterns is one of the ways to respond to this universal challenge.

In the strategy that the European Commission (EC) is implementing, the future of sustainable consumption is underpinned by consumer empowerment, transparency, trust, and consumer policies and regulation. Certification and labelling processes play a key role in this process. At the end of 2020, a legislative proposal was submitted for public consultation requiring companies to justify claims about the environmental footprint of their products/ services by using standardised methods for its quantification.

Another essential strategy to deal with the growing scarcity of resources is a strong and coordinated commitment to a circular economy. This involves maximising the reuse of materials and products, thereby reducing waste generation and purchases.

Accordingly, the EC put forward a new action plan for a circular economy as early as March 2020 and submitted, for public consultation, regulatory initiatives geared towards fighting greenwashing and promoting packaging eco-design to reduce packaging waste.

THE SEMAPA GROUP'S RESPONSE

ENVIRONMENT SEGMENT

Increased process efficiency at ETSA is always viewed as a process aiming at optimising circular indicators, as this is the core business of the company.



ETSA's business is based on the rendering of food by-products, thus avoiding greenhouse gas emissions, that would otherwise be disposed of and decomposed in landfills, releasing methane gas, a greenhouse gas more potent than CO₂. Moreover, products resulting from this activity are used directly and indirectly for producing green energy (biodiesel) and for producing animal feed for livestock and pets, and also organic fertilisers. The rendering process can prevent about 90% of potential greenhouse gas emissions, compared to the natural composting of these by-products, and sequesters around 5 times the amount of gas emissions.



PULP, PAPER AND CEMENT SEGMENTS

In their working groups, Navigator and Secil discuss new strategies to move towards a more circular economy and a growing commitment to the eco-design of their products. Alongside these efforts, and to monitor the changing trends in assessing and measuring circularity, in 2021 both companies participated in the pilot tests of a new tool that analyses circular transition indicators, an initiative promoted by BCSD (Business Council for Sustainable Development) Portugal in partnership with WBCSD (World Business Council for Sustainable Development).



THE FUTURE OF WORK

The EC's strategy is focused on the transition to a carbon-neutral and digitised economy, which will impact the future of work. This transition will be based on technological diffusion and innovation, through more circular and digital economic models, where the preparation of human capital will be a key topic.

New strategies for industry and digitisation, such as the European Green Deal, will boost market competition, and automation and new technologies will impact the productivity of human capital. Employment will change and with this there will be new functions in need of new skills. It is therefore essential to prepare for the impacts on the labour market, of the path laid out by Europe, by investing in the preparation of people and in their training, in order for them to adapt not only to the new functions, but also to improve productivity in their current tasks.

The pandemic has reinforced the need to place Employees at the heart of corporate strategy and this transition has brought with it huge challenges, such as teleworking, which showed that human capital needs to be increasingly prepared to face future adversities and is also directly linked to attracting and retaining talent. These challenges will certainly promote a stronger culture of well-being, diverse and inclusive environments, with a better work-life balance in order to attract the youngest and most dynamic talent on the market.

THE SEMAPA GROUP'S RESPONSE

ENVIRONMENT SEGMENT

ETSA provides its Employees with a support programme so that they can achieve a better balance between their personal and professional lives. The programme offers free specialised services in diversified areas, such as, psychology, legal, financial, and psychosocial.



CEMENT SEGMENT

Secil continued to implement its 360-degree feedback. This methodology helps provide Employees with a deeper understanding of themselves through the eyes of co-workers with whom they relate within the scope of their duties. This is not a moment of evaluation, but a moment of reflection, construction, commitment and alignment.



PULP AND PAPER SEGMENT

Navigator aims at providing 80% of its Employees with development plans by 2030, including training, definition of responsibilities and differentiation criteria to guide the professional development of each Employee.



SN

SD



CORPORATE SUSTAINABILITY MANAGEMENT

2.1 GOVERNANCE

HOW WE MANAGE SUSTAINABILITY

Corporate best practices are the essence of ethical and responsible organisations. As regards sustainability, Semapa has its own governance structure, thereby seeking to enhance the work already done by its subsidiaries, bringing greater consistency to the Group's performance.

Charged with the functions of sustainability management at strategic level in the Group, the ad hoc Sustainability Committee, created by the Board of Directors, depends, in functional terms, on the Group's Executive Board and is the body responsible for developing and carrying out sustainability-related activities approved by the Board of Directors. At operational level, the Committee comprises a set of Working Groups (WGs) that develop various cross-cutting sustainability topics, aggregating and aligning the work of all Group companies.

GOVERNANCE MODEL AND WORKING GROUPS

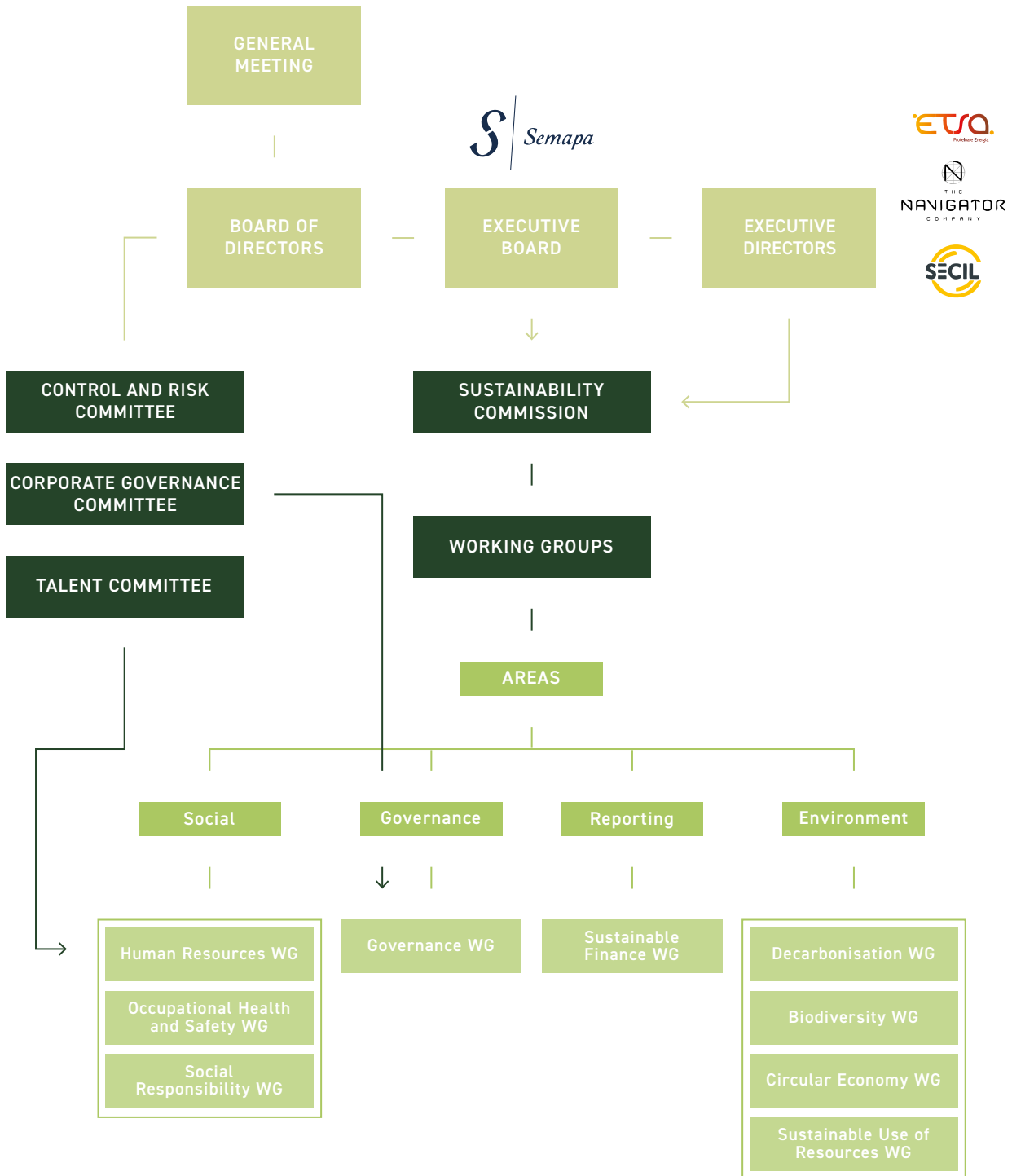
In 2020, and as regards managing sustainability, Semapa restructured its governance model, based on the recommendations made by the Sustainability Committee on the Group's strategic areas. Following the identification of the structuring issues, nine WGs were formed, led by coordinators, and their activity plans created.

The goal of these groups is to enhance synergies between Semapa Group companies through collaboration on joint projects and initiatives in each of these areas. Each group functions independently under the leadership of their coordinators. The groups meet monthly at Sustainability Committee meetings, and other specific meetings where necessary.

More than the sharing of good practices within the Group, the WGs aim at developing joint guidelines for the various priority areas in order to establish Semapa's position on them. In addition, other corporate bodies have responsibilities in Semapa's priority areas, such as the Corporate Governance Committee, responsible for governance, the Talent Committee, with responsibilities in the human resources area and talent management, and the Control and Risk Committee, responsible for monitoring and managing all relevant risks in the Company's activity.



SUSTAINABILITY GOVERNANCE



The Working Groups affirmed their position in 2021 with regard to Semapa's way of working, with projects being developed either simultaneously by the various Group companies or individually, supported by the respective WGs.

As the focus of the groups is to build a common path for the Group, and sharing experiences and knowledge between companies, 2021 has shown that these WGs leverage the various companies and align them with the most structuring areas for Semapa Group.

THE WORKING GROUPS IN 2021

DECARBONISATION WG

The Decarbonisation Working Group was set up in 2020 to monitor plans for reducing the carbon footprint in the industrial and operational activities of Semapa Group subsidiaries.

A commitment was made to establish a common strategy and promote a Roadmap to Carbon Neutrality across Semapa, taking into account that each subsidiary was already taking steps to decarbonise their operations.

BIODIVERSITY WG

As nature conservation is a central concern for the Semapa Group, the Group's companies incorporate the conservation of Biodiversity and Ecosystem Services (B&ES) in their corporate strategies and activities. From corporate policies to the design of projects and operations, the companies address the topic based on four pillars – knowledge, conservation, restoration, and dissemination –, while at the same time seeking to keep up with developments of international agendas.

In the year that marked the start of the United Nations Decade on Ecosystem Restoration (2021-2030), the goal of conserving and restoring biodiversity and ecosystems identified in the European Green Deal became even more important. Moreover, the link between climate and nature was emphasised when the Glasgow leaders issued a Declaration on Forests and Land Use at COP 26, the climate summit held in November, setting an increased focus on the relevance of this important ecosystem in the fight against climate change.

In this context, within the scope of the WGs, in 2021 the companies continued to share, their projects, challenges and achievements, and identified areas for collaboration and potential areas for improvement to be developed from 2022 onwards in their action and reporting strategies.

CIRCULAR ECONOMY WG

In 2021, this WG continued to share the practices and projects of companies that allow them to improve the circularity of their processes, based on the reuse and recycling of materials and on cross-sector synergies, and to obtain additional energy and economic benefits. This focus will be essential in the contribution that businesses can make, in terms of the goals of the European Green Deal, to the European Union's Circular Economy Action Plan.

The Group also followed the trends that are emerging on the international agenda in relation to this issue, particularly in terms of measuring circularity. The Navigator Company and Secil monitored the development of the 2.0 version of the Circular Transition Indicators (CTI tool) during the year, developed by the WBCSD with the support of Circular IQ, aimed at providing standardised methodologies and quantitative metrics to support companies in measuring their circularity performance and understanding the associated risks and opportunities.



SUSTAINABLE USE OF RESOURCES

The sustainable use of natural resources is today one of the most important desiderata in the sustainable management of any company.

Semapa is aware of this important issue to its business and has set up the Sustainable Resource Use Working Group, composed of staff from the Group's main companies, to analyse the main sustainability aspects and initiatives for the use of natural resources.

Special emphasis was placed on water consumption, one of the most challenging aspects of sustainability, and one which requires all of the Group's companies to take initiatives to reduce the use of this important natural resource in the short and medium term, as water is of particular importance to the Group's industrial companies.

The Sustainable Resource Use WG comprises managers from Secil, ETSA, and The Navigator Company. It meets every two months to analyse the main topics on the agenda and share the experiences of the Group's companies, so as to enable progress in the implementation of a number of measures to achieve and improve the Group's position regarding the sustainable use of natural resources.

In addition to further studying water issues, a set of resource sustainability indicators were created for sharing, analysing and setting increasingly ambitious targets for the Semapa Group's industrial units, the periodical analysis of which enables monitoring of positive progress.

GOVERNANCE WG

With regard to corporate governance, 2021 saw the implementation of new legal and regulatory amendments, such as the review of the Securities Market Code and the publication of new schemes applicable to listed companies and large limited liability companies.

Consequently, the Working Group worked together with the departments and committees with responsibilities in this area to continue analysing these schemes with a view to adapting the Group's companies to the new regulations, and supporting compliance with corporate governance benchmarks. The WG, and as regards the listed companies, continued to monitor and share practices and knowledge to comply with the recommendations made in accordance with the IPCG Code adopted by said companies.

For Semapa, corporate governance is an essential tool for good economic performance, sustainable growth, and financial stability.

SUSTAINABLE FINANCE WG

In 2021, the Sustainable Finance Working Group continued to focus on improving the preparedness of Group companies to disclose their performance through ESG (Environment, Social, and Governance) metrics to the various Stakeholders, including from the financial sector.

Promoting the sharing of experiences in this area among all the companies and the construction of a common strategic path for the Group continued to be a key priority in the year.

During 2021, this WG established a reporting model with the definition of ESG KPIs appropriate to Semapa's profile as a holding company with diversified interests in the pulp and paper, cement and environment industries that allows the main non-financial indicators to be analysed and assessed, enabling more systematised monitoring.

Moreover, Navigator again achieved ESG ratings from external entities, such as CDP and Sustainalytics. It should be noted that it achieved a score of 'B' in its first response to the CDP Forest questionnaire, and obtained the same score in CDP Climate reporting.

HUMAN RESOURCES WG

The year 2021 was marked by more intense activity of the Human Resources Working Group, which held regular meetings to share initiatives among companies and discuss common themes. This activity largely contributed to a better alignment between the companies in terms of people management practices and working collaboratively. One of the outcomes, for example, is the Corporate Leadership Programme, described in Chapter 5. "Valuing People".

OCCUPATIONAL HEALTH AND SAFETY WG

The WG held regular meetings throughout 2021, during which it permanently monitored the health and safety area in Semapa companies.

The sharing of each company's individual ideas and initiatives creates an atmosphere of trust and mutual help, resulting in an improvement in the initiatives themselves, as well as an alignment of the different levels of maturity of the health and safety culture in the Group.

Moreover, the joint analysis of the main events and difficulties within this area allows us to discuss procedures and lessons learned that are essential for improving the working conditions of all our Employees.

The permanent contact between the health and safety officers of The Navigator Company, Secil and ETSA is a means of learning about the procedures and practices implemented, focusing on the successes and difficulties, facilitating the implementation of these practices and their continuous improvement.

The Occupational Health and Safety WG takes into account the different realities of the companies that form part of Semapa, visiting the Group's main facilities to gain further insight into each area in order to discuss recommendations to improve the safety of all our Employees.

Identifying indicators is a very relevant tool for continuously monitoring safety conditions, so that we can act on the circumstances that cause incidents and/or accidents in order to improve our incidence rates.

SOCIAL RESPONSIBILITY WG

At Semapa, social responsibility is a structuring pillar of the Group's activities, directly through the holding company and indirectly through the subsidiary companies. The Group has a deep connection to local communities which, in many cases, goes back several decades.

In 2021 this WG allowed the Semapa Group to align its initiatives and link the various activities in the community, in order to benefit the lives of as many people as possible.



2.2 RELATIONSHIP WITH STAKEHOLDERS

HOW WE ENGAGE WITH STAKEHOLDERS

Semapa actively engages with its Stakeholders in order to integrate their ideas and concerns in the decision making of each of its companies. The Group is continuously aware of and explores all opportunities to partner with its Stakeholders, thus contributing to SDG 17.

The relevant Stakeholders were identified according to best practices and presented in previous sustainability reports. Semapa's communication mechanisms are detailed below, namely the way the relationships work and the means of engagement with the different Stakeholder groups.



EMPLOYEES

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Staff meetings;
- Discussions with management;
- Team meetings;
- In-house information (Semapa Talks, Semapa News);
- Intranet;
- Website:



SUBSIDIARIES

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Close regular monitoring by having representatives sit on the companies' decision-making bodies;
- Information, training, and promoting the sharing of best practices;
- Staff meetings;
- In-house information (Semapa Talks, Semapa News);
- Interim and annual reports;
- Communication to markets;
- Meetings;
- Website.



FINANCIAL INSTITUTIONS

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Meetings;
- Presentation of results;
- Interim and annual reports;
- Communication to markets;
- Website.



BUSINESS ASSOCIATIONS

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Membership;
- Participation in governing bodies, advisory boards and/or forums;
- Participation in public consultations;
- Regular meetings with main counterparts;
- Website.



MAJOR PROVIDERS OF SPECIALISED SERVICES

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Reputational assessment survey;
- Regular meetings with main counterparts;
- Website.



OFFICIAL SUPERVISORY AND REGULATORY BODIES

PURPOSE OF ENGAGEMENT

Semapa seeks to integrate best practices, fostering a relationship of trust with regulators and achieving compliance at various levels, which is perceived as a value adding element.

MAIN MECHANISMS OF ENGAGEMENT

- Response to legal requirements;
- Reputational assessment survey;
- Regular meetings with main counterparts;
- Website.



COMMUNITY REPRESENTATIVES

PURPOSE OF ENGAGEMENT

Semapa's interactions with the community are aimed at developing long-term initiatives with these Stakeholders, supporting causes it considers important and worthy of mutual trust.

MAIN MECHANISMS OF ENGAGEMENT

- Reputational assessment survey;
- Protocols of collaboration;
- Participation in associations;
- Website.



INVESTORS AND ANALYSTS

PURPOSE OF ENGAGEMENT

Establishing long-term relationships and creating joint value for the Stakeholder group and Semapa, which regularly engages with this group.

MAIN MECHANISMS OF ENGAGEMENT

- Presentation of results;
- Interim and annual reports;
- General Meetings;
- Communication to markets;
- Investor Relations Officer;
- Site visits;
- Meetings;
- Website.



2.3 OUR MATERIAL TOPICS

Semapa’s material topics are the same as those identified in 2020, when the Group’s materiality was updated based on the material topics of its subsidiaries.

1ST ANALYSIS OF SEMAPA MATERIALITY

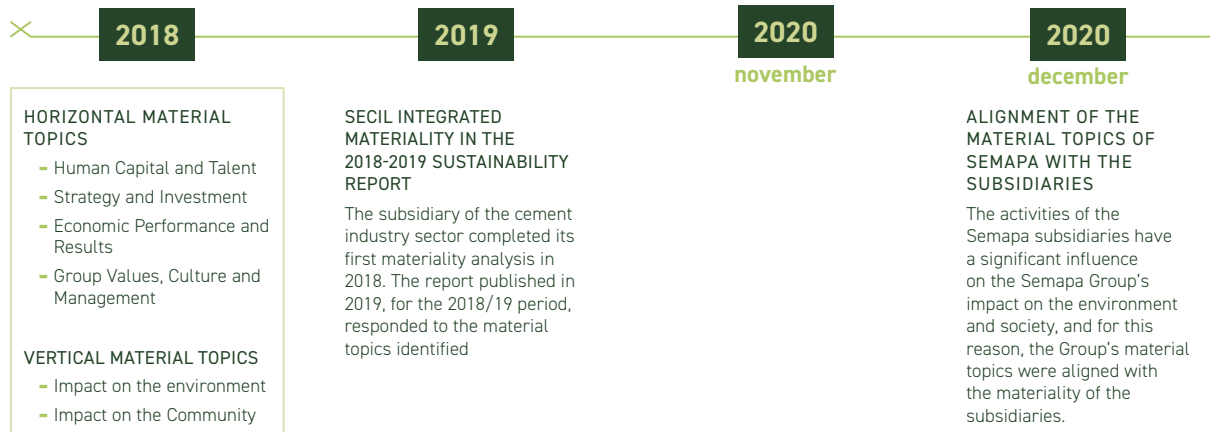
The 1st materiality analysis was carried out in 2018, based on a stakeholder engagement.

INCLUDED IN THE SUSTAINABILITY REPORT 2018

This Report was a response to the material topics, which resulted from the consultation.

THE NAVIGATOR COMPANY-NEW ANALYSIS OF MATERIALITY

Based on a thorough consultation with the Stakeholders, the pulp and paper subsidiary updated its list of material topics.



Although its materiality is greatly influenced by that of its subsidiaries, Semapa divides its 12 material topics into two major groups:

- **Core Topics (Corporate); and**
- **Business Topics.**

Core Topics are, in essence, cross-cutting topics whose relevance to Semapa is paramount as a holding company. Business Topics are those related to the business segments of the Semapa Group.

CORPORATE TOPICS - CORE

- Sustainable Value Creation
- Business Ethics
- Risk Management
- Human Capital and Talent
- Group Culture and Motivation

BUSINESS TOPICS - BUSINESS

- Water Management
- Climate Change and Energy
- Circular Economy
- Conservation of Biodiversity and Ecosystem Services
- Occupational Health, Safety and Well-being
- Local Community Engagement
- Innovation, Research and Development



2.4 OUR CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS

THE SDGS WE CONTRIBUTE TO

The Semapa Group is committed to supporting the United Nations 2030 Agenda, which sets 17 Sustainable Development Goals (SDGs), and therefore intends to align its strategy with these goals, assuming its responsibility, as a company, in the fulfilment of these ambitious global goals.

At Group level the SDGs have been revised and two levels of application have been identified:

- **Priority:** goals to which the Group is actively and directly contributing;
- **Support:** goals on which the Group has a direct or indirect impact.

Identifying and selecting the goals was based on the value chain of each subsidiary and the assessment of the relevant key issues, as well as the mission of the Group and that of each of the companies. We report on the progress made in each of these goals by the operating companies and by Semapa itself.

					
PRIORITY					
					
					
SUPPORT					
					
					
					
					
					
					

 Priority SDGs for the subsidiaries
  Support/aspirational SDGs for the subsidiaries



OUR CONTRIBUTION TO THE SDGS

PRIORITY



The Semapa Group, a major employer in Portugal and abroad, is focused on creating value and offering decent job opportunities in all its companies. The issues related to human capital and talent, group culture and motivation in the Group, and occupational health, safety, and well-being are a strategic concern for the Group.



Environment Segment: Development of the new safety culture, the Road to Safety, which has as its principles: 1) being able to work safely; 2) knowing how to work safely, and 3) wanting to work safely.



Cement segment: Secil maintained its focus on the safety of its people, by putting in place a new positive safety programme, as it believes that positive feedback influences not only the well-being of Employees, but also communication, trust, and teamwork.



Pulp and Paper segment: Navigator remains focused on promoting a culture of safety. To this end, it has defined a Mission Zero Strategy (2021-2023) characterised by a strong visual identity.



The environmental impacts of the production processes are managed by all the companies of the Semapa Group and controlled through their strong policies and environmental management systems. There is also a growing concern for water management, climate change, energy, circular economy, and conservation of biodiversity and ecosystem services.



Environment Segment: ETSA's operations focus on the rendering of food industry by-products, thus avoiding having to dispose of them in a landfill with the consequent release of greenhouse gases, and contributing to the circular economy.



Cement & Pulp and Paper segments: These two Group segments have followed international agenda trends in measuring circularity. Thus, during 2021 The Navigator Company and Secil monitored the development of the 2.0 version of the Circular Transition Indicators (CTI tool), developed by the WBCSD with the support of Circular IQ.



The Semapa Group companies are committed to helping mitigate climate change. Their processes and the life cycles of their products address CO₂ emissions, as well as consumption and carbon sequestration. Renewable energy and carbon neutrality are a priority and a long-term goal.



Environment, Cement & Pulp and Paper segments: All Semapa Group subsidiaries are jointly developing or have already developed their carbon neutrality roadmap in order to respond to the challenges that climate change poses to society.



SUPPORT



The Semapa Group is concerned about the health and well-being of its Employees, promoting policies and specific programmes in these areas.



Environment segment: Access to curative medicine in all the companies and enhancement of the hygiene and health at work programme.



Promoting the personal and professional development of Employees is a commitment of the Semapa Group. The attraction and retention of talent is a concern in all Group companies.



Cement segment: Inauguration, in 2020, of the Casa da Cultura Pedro Queiroz Pereira (a cultural centre), aimed at promoting activities in the community of Adrianópolis (Brazil), free of charge and for every age, focusing on areas such as education, culture, sports, and leisure. This cultural centre saw increased activity in late 2021.



Pulp and Paper segment: Navigator has sought to develop across the board a set of skills for Employees with management and leadership responsibilities, including the development of relational skills, with an impact on the management of their teams.



7 AFFORDABLE AND CLEAN ENERGY



One of our objects is the conversion of the Group's energy matrix, as can be seen in all the decarbonisation roadmaps of the various subsidiaries.



Environment, Cement & Pulp and Paper segments: All Semapa Group subsidiaries are jointly developing or have already developed their carbon neutrality roadmap, in order to respond to the challenges that climate change poses to society.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



The Semapa Group operates in value chains with a strong impact on the local economy in structuring areas of society. It offers solutions and resilient products and focuses on R&D to innovate and respond in the best way possible to future challenges.



Environment segment: Approval of the new ETSAProHy industrial facility that will use innovative technology developed at ETSQ to produce three new high added value products for the animal feed market and future focus on human food.



Cement segment: The CCL project being implemented by Secil has a strong innovation component and involves various university researchers. The outcome of this project has seen or will see 12 patents registered.



Pulp and Paper segment: In 2021 Navigator launched the gKraft product range, in line with its commitment to creating sustainable value and contributing to cutting down on plastic by replacing it with sustainable materials.



Venture Capital: Promote innovation within and outside the markets where Semapa operates, by investing in innovative startups.

11 SUSTAINABLE CITIES AND COMMUNITIES



The Semapa Group contributes to the development of more sustainable cities through the cement industry, which, by having more sustainable manufacturing standards, will be an integral part of fairer communities and will be less harmful to the environment.



Cement segment: By creating more sustainable product lines, with low environmental impact, Secil contributes directly towards this goal.



For the Semapa Group, the importance of maintaining these interactions is clear, as is the impact it may have on our activities. Efforts are made to minimise the potential impact of its activities on biodiversity and ecosystem services and, where possible, to generate a positive impact, attaching increasing importance to so-called Natural Capital.



Cement segment: Secil is aware of the impact that mining activities can have on the landscape and biodiversity, and of the time it would take for these areas to recover spontaneously. Therefore, it has developed various strategies that are reflected in its Quarry Recovery Plans and Action Plans for the Promotion of Biodiversity.



Pulp and Paper segment: Navigator is aware of the importance of local management of its areas to ensure a harmonious relationship with communities and the surrounding environment. To this end, it has integrated a conservation strategy into its forest management model that combines prior assessment of the potential environmental and social impacts of the operations identified as having the greatest impact, with a view to ensuring adequate compatibility between production and conservation measures, and an annual biodiversity and ecosystem services monitoring plan.



The Semapa Group companies interact with many groups in civil society, both in Portugal and abroad. Companies have individually established a variety of partnerships to enhance performance.



Environment segment: Promotion of several partnerships between ETSA's R&D department and universities, within the framework of scientific projects.



Cement segment: Inauguration, in 2020, of the Casa da Cultura Pedro Queiroz Pereira (a cultural centre), aimed at promoting activities in the community of Adrianópolis (Brazil), free of charge and for every age, focusing on areas such as education, culture, sports, and leisure. This cultural centre saw increased activity in late 2021.



Pulp and Paper segment: Promotion of partnerships with numerous entities in order to foster compliance with other SDGs and the implementation thereof by the various Stakeholders.



Venture Capital: The portfolio startups have access to the Semapa Group and its network of partners, in order to explore new partnership opportunities.



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DECARBONISATION, A CORPORATE APPROACH



3.1 BACKGROUND

WHAT IS THE RELEVANCE OF THIS TOPIC?

Climate change is an unavoidable topic, and the reduction of greenhouse gas emissions has become a priority. The Semapa Group has joined forces in this direction and is debating the possible paths to the Group's decarbonisation from a bottom-up perspective. Each of the subsidiaries is taking steps to reduce their emissions and decarbonise their activities. These practices are being discussed in Semapa's Decarbonisation Working Group in order to establish a common strategy and design a carbon roadmap for the holding company.



ASSOCIATED IMPACTS

Last year's IPCC report once again demonstrated the impact that climate change may have not only on people's daily lives, but also on the operation and business model of several companies.

The Group has been committed to minimising these effects, responding with a decarbonisation plan that is transversal to all Group companies and meeting EU goals. Some of these impacts are the lack of raw materials and fluctuations in energy prices, resulting from risks such as drought or fires, which have a strong adverse effect on operations and, consequently, cause serious economic damage.





3.2 COMMITMENTS

The disastrous effects of climate change are increasingly visible: prolonged droughts, scarcity of drinking water, torrential rains, melting glaciers, increased flooding, and rising sea levels, among many others.

Climate change, which results from increased emissions of greenhouse gases in the atmosphere, mainly carbon dioxide (CO₂), is undoubtedly the biggest ecological challenge today and social concern about it is increasing every year.

The 2015 Paris Agreement was a decisive step towards action, as 195 countries agreed to hold the increase in global average temperature to well below 2°C above pre-industrial levels by the end of the century and to limit the temperature increase to 1.5°C by implementing policies to reduce greenhouse gas emissions. The Glasgow summit took place in 2021, renewing the idea of reducing carbon dioxide emissions by 45% from 2010 levels by 2030. The industry sector, largely responsible for the emissions of these gases, plays a very important role in this.

Semapa is defining its roadmap to carbon neutrality by implementing measures such as increasing the incorporation of energy from renewable sources and alternative fuels, and promoting energy and resource efficiency. The use of more efficient technologies, cleaner production processes, and the digital transformation of industry (Industry 4.0) will result in the decarbonisation of industrial processes.

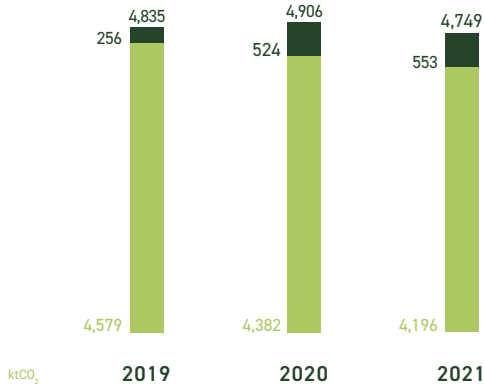
R&D projects are vital for an innovative industry and for the development of new circular and low-carbon products and services.



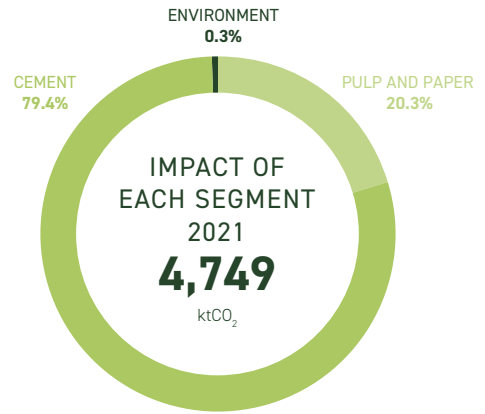


3.3 OUR PERFORMANCE

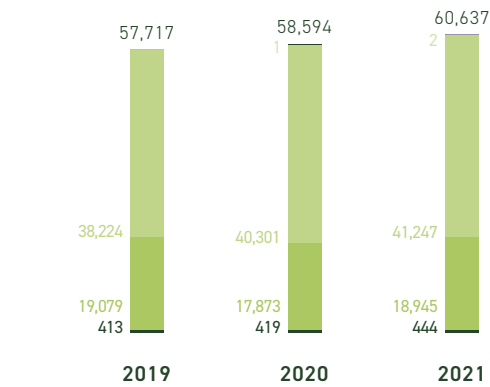
DIRECT AND INDIRECT EMISSIONS



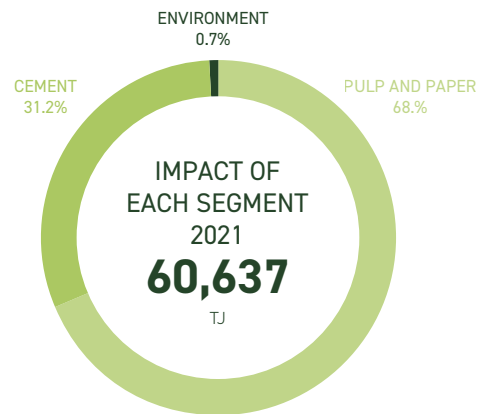
DIRECT EMISSIONS INDIRECT EMISSIONS GRI 305-1 GRI 305-2



ENERGY CONSUMPTION

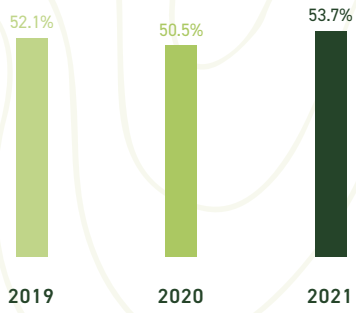


ENVIRONMENT CEMENT PULP AND PAPER HOLDING GRI 302-1





RENEWABLE ENERGY CONSUMPTION



2021 % PRIMARY RENEWABLE ENERGY

GRI 302-1



3.4 HIGHLIGHTED INITIATIVES

THE SEMAPA GROUP



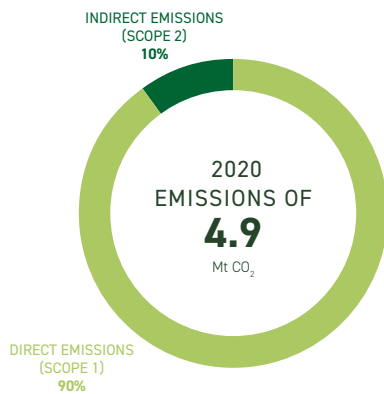
Discussions on the Group's roadmap to carbon neutrality began with the approaches and projects underway at each of the subsidiaries. It became immediately apparent that, while at ETSA and The Navigator Company decarbonisation focuses on processes, in the case of Secil the focus is on products (clinker and cement), which presents an immediate challenge for the projection of the Group's carbon roadmap.

Semapa's carbon roadmap will establish the strategy for carbon neutrality across the entire Group, and urges each company to follow the path outlined, while simultaneously ensuring the cohesion of the sustainability policy and fighting climate change resulting from GHG emissions.

Work was carried out in three phases, with the support and coordination of a specialist company:

1. The first phase consisted of a comprehensive collection and analysis of information on CO₂ and other GHG emissions.
2. The second phase measured the carbon footprint of the three companies for scopes 1 and 2 (direct and indirect emissions) for 2020, set as the base year.
3. This phase resulted in a summary report detailing the Semapa Group's complete GHG inventory.

In 2020 Semapa's carbon footprint was 4.9 Mt CO₂e, 90% of which are direct emissions (scope 1), related to processes and the use of all types of fossil fuels, and 10% indirect emissions (scope 2), related to the consumption of electricity acquired from third parties.



The definition of Semapa's carbon roadmap is in its final stages. Based on the base scenario, it will define emission reduction targets and actions to be taken to reach carbon neutrality. GHG emission projections give an overview of and compare potential trajectories with proposed targets, highlighting the effort required to reduce these emissions and successfully shape potential reduction pathways.

The economic effort required to achieve the projected technological changes is linked to the carbon roadmap.

For non-avoidable emissions, i.e. those that are impossible to reduce through traditional measures, offsetting through the purchase of emission rights (CO₂ certificates) or through carbon sequestration and storage will be necessary to achieve carbon neutrality by 2050.



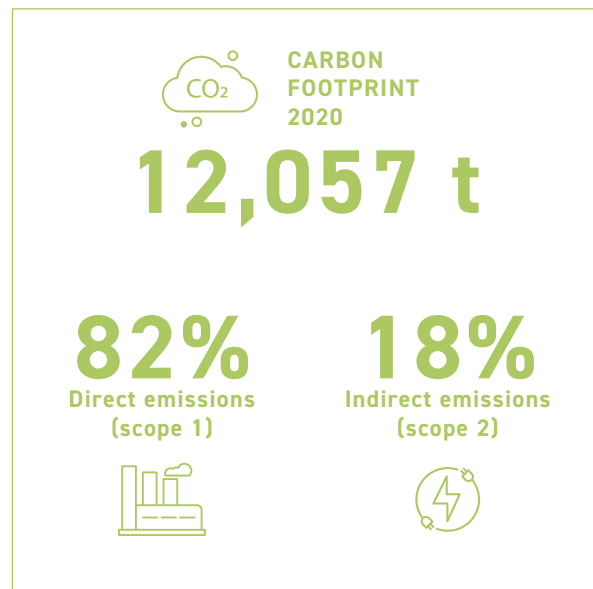
ENVIRONMENT SEGMENT



ETSA's business is based on the rendering of food by-products, thus avoiding greenhouse gas emissions, that would otherwise be disposed of and decomposed in landfills, releasing methane gas, greenhouse gas more potent than CO₂. Moreover, products resulting from this activity are used directly and indirectly for producing green energy (biodiesel) and for producing animal feed for livestock and pets, and organic fertilisers. The rendering process can prevent about 90% of potential greenhouse gas emissions, compared to the natural composting of these by-products, and sequesters around 5 times the amount of gas emissions.

As regards the process, ETSA has contributed to the decarbonisation of the Semapa Group by investing heavily in reducing fossil fuel consumption in its industrial units. With the acquisition of a biomass boiler for the Loures plant and a biomass energy recovery facility (BERF) at the Coruche manufacturing plant, ETSA has already reduced fossil emissions by over 80%.

The company also calculated its carbon footprint based on the year 2020, the value of which was 12,057 tonnes of CO₂e, of which 82% are related to direct emissions (scope 1), related to the combustion of all types of fuel in the manufacturing processes and in the transport of raw materials, and 18% to indirect emissions (scope 2), related to the consumption of electricity.



After calculating this footprint, ETSA developed an action plan based on three pillars:

1. The reduction of emissions resulting from the use of fossil fuels in industrial units by using energy from renewable sources, first by replacing them with biomass and, in a second phase, by using hydrogen as a fuel. At the same time, measures will be implemented to optimise steam production and rationalise consumption in industrial processes.
2. The reduction of emissions resulting from the use of fossil fuels in the heavy and light vehicle fleet, first by using vehicles powered by liquefied natural gas and electrical power, and then by using those powered by hydrogen.
3. The reduction of emissions associated with electricity consumption, partly by significantly increasing the penetration of renewable energy into the grid, through new sources (wind, hydro, hydrogen, etc.), but above all by optimising consumption and also by installing photovoltaic plants at all units.



In 2021, ETSA continued to implement some of the measures aimed at reducing CO₂e emissions, by implementing projects that seek to change its energy matrix and improve the efficiency of some processes, such as:

BOILER REPLACEMENT

At its facilities in Vila Nova de Gaia, ETSA replaced a natural gas boiler that produced hot water for the washing and sanitation systems of vehicles and manufacturing plants with a solar panel system equipped with a heat pump. As a result, the use of natural gas and associated CO₂ emissions was entirely stamped out.

CONDENSATE RECOVERY SYSTEM

At the Loures plant, ETSA installed and implemented an advanced system for recovering pressurized steam condensate, fitted with a monitoring system. This technology avoids depressurization of steam, resulting in energy savings. The system enables the production line to operate only with the biomass boiler, eliminating the need for the fuel oil boiler.



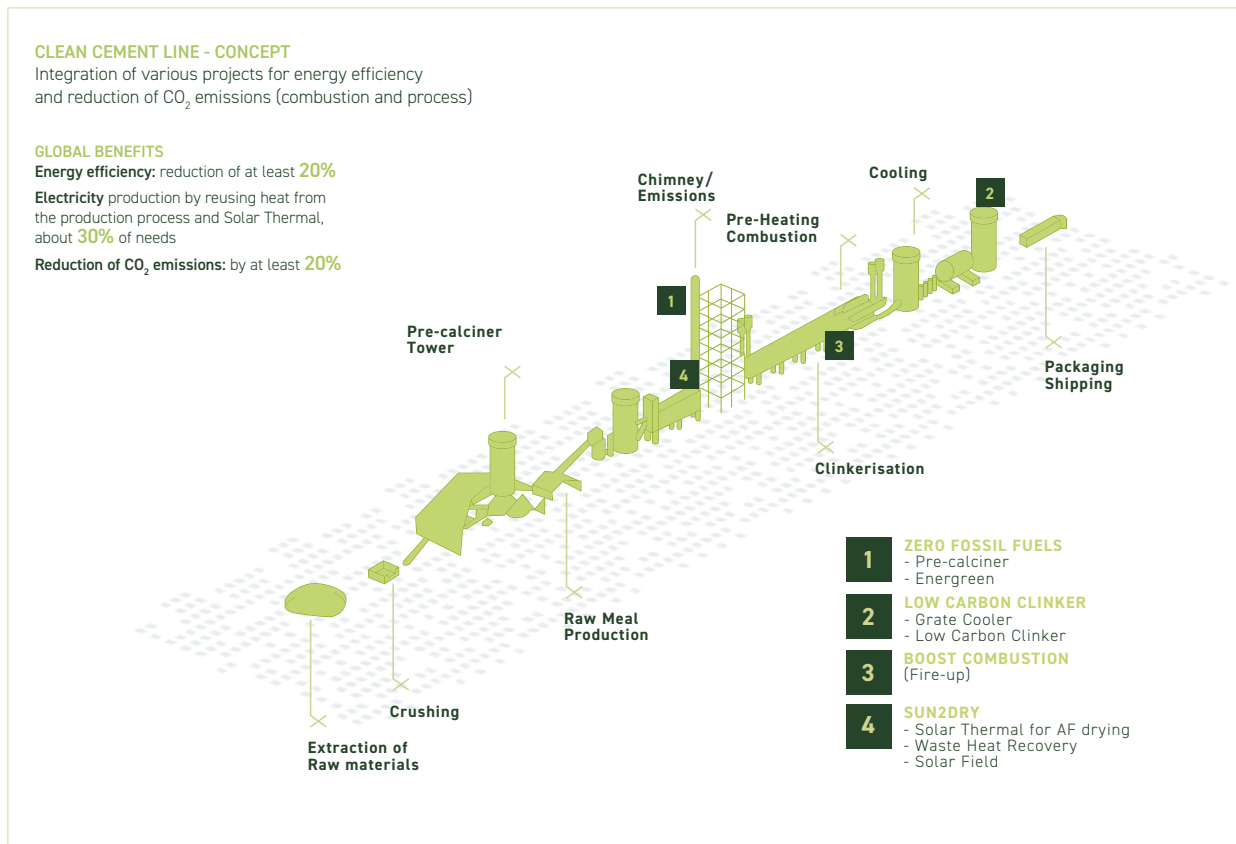
CEMENT SEGMENT



Due to the impact it has on Secil's activity, the topic of decarbonisation has been followed up on over the years, during which the Company has implemented measures that have enabled it to strike a balance between reductions in emissions and its long-term economic sustainability.

CLEAN CEMENT LINE

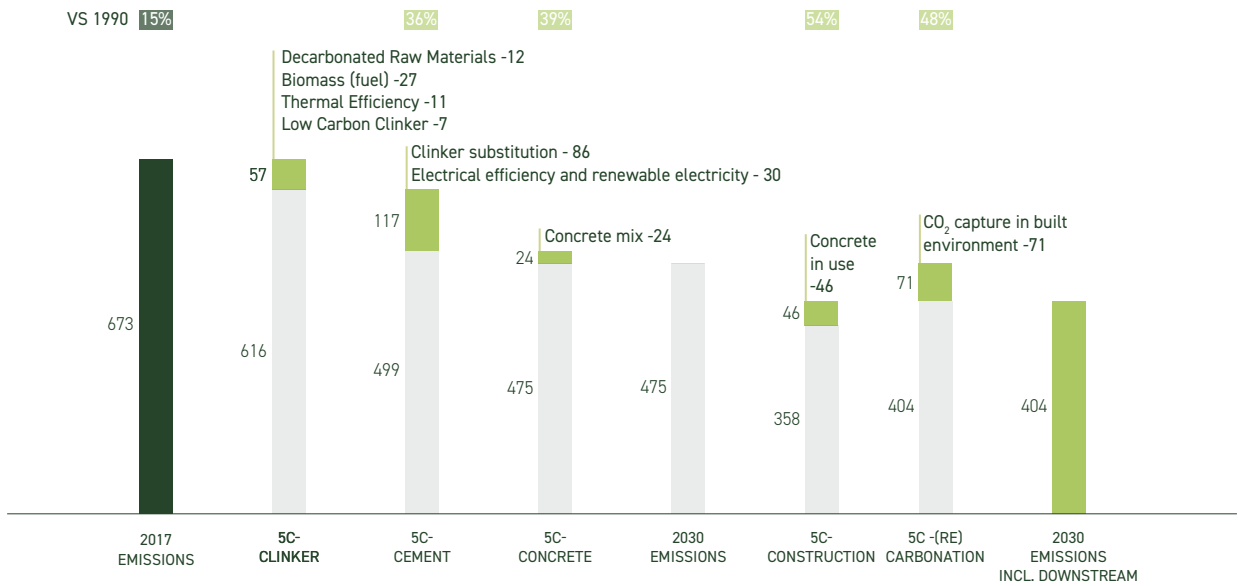
Secil is taking another important step with the ongoing works to implement the CCL (Clean Cement Line) project at its Outão unit, covering a series of projects that will significantly reduce carbon emissions at this unit and which will be implemented by August 2023.



DECARBONISATION GOALS

Secil, which subscribed to the roadmap to carbon neutrality by 2050 developed for the European cement sector by Cembureau, actively participated in the preparation of the roadmap for the national sector submitted in March 2021 to the national authorities, committing to the goals for 2030 and 2050.

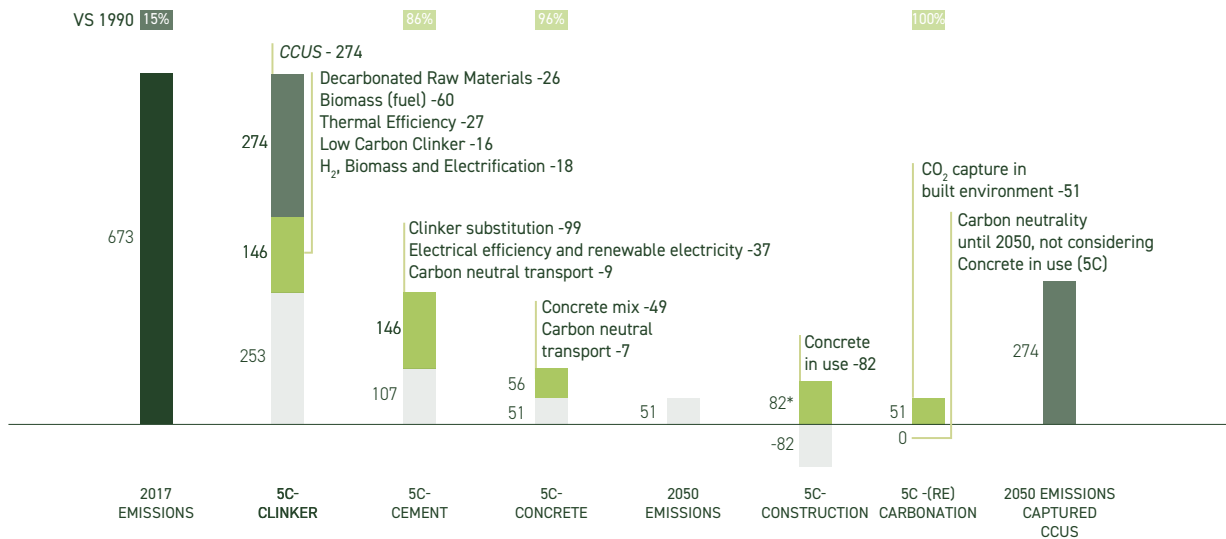
Potential Reduction until 2030 (Portugal)



CO₂ reduction potential along the cement value chain (5Cs)

Source: ATIC (Associação Técnica da Indústria de Cimento)

Potential Reduction until 2050 (Portugal)



CO₂ reduction potential along the cement value chain (5Cs)

Source: ATIC (Associação Técnica da Indústria de Cimento)

*The potential for reducing emissions from the concrete in use (construction) mentioned here is not incorporated in the calculations for the potential reduction until 2050. For the purposes of Carbon Neutrality achieved until 2050, we only considered the reduction of CO₂ emissions made in our sector. However, it is important to underline that concrete, as a construction material, provides additional CO₂ reductions due to some of its properties, as is the case of thermal inertia that improves the energy efficiency of buildings. It also contributes to indirect CO₂ reductions, through its use in dams, foundations and wind turbine shafts, and other similar applications. For example, concrete is a material of choice for renewable energy equipment or transport infrastructure. Furthermore, we considered that these savings could somehow be counterbalanced by the needs of climate change adaptation, in which our materials should play a key role.



Secil is currently developing an in-house roadmap with the 2030 and 2050 targets for the entire Group, being aware of the diversity and added challenges in the countries outside the EU, given the different level of commitment in each country to the level of decarbonisation undertaken for 2030 and 2050.

Secil has also been a member of the Global Cement and Concrete Association (GCCA) since its creation, having signed the letter of commitment which includes the climate change and energy pillar. In October 2021, the GCCA presented its 2050 Roadmap to Carbon Neutrality, in which leading cement and concrete producers from around the world (representing 80% of total production outside China) jointly committed to the carbon neutrality of concrete by 2050 and also an interim target to avoid 5 billion tonnes of CO₂ emissions by 2030.

SPECIAL MENTION

In April, Secil was awarded a Special Mention in the National Sustainability Business Award in the Decarbonisation category, promoted by newspaper *Jornal de Negócios*. This distinction was awarded for the structural concrete with cork project developed by Secil in partnership with architect João Luís Carrilho da Graça, Itecons, and Amorim Revestimentos, used at the construction site of the new Lisbon Cruise Terminal, inaugurated in November 2017. A more sustainable construction process, which reduces CO₂ emissions on site and during the useful life of the building due to its thermal properties, with a 50% increase in thermal insulation capacity and a 30% reduction in the weight of concrete.



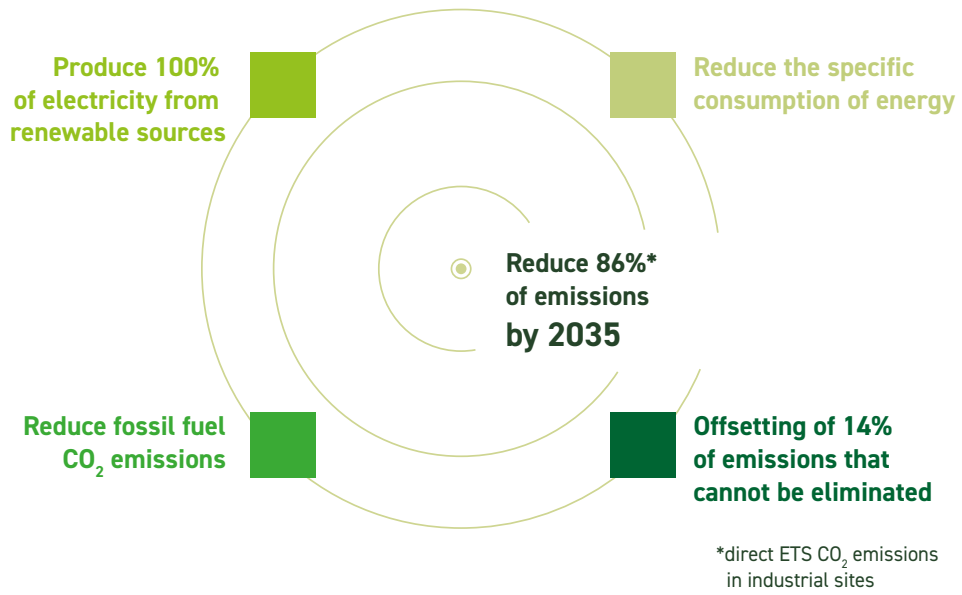
PULP AND PAPER SEGMENT

As in the previous year, Navigator pressed ahead in 2021 with projects relating to the roadmap to carbon neutrality at industrial sites and also with the corporate programme for energy efficiency.



Also in 2021, The Navigator Company conducted an ambitious project to analyse its carbon footprint, culminating in its signing up to the Science Based Target Initiative (SBTi). The commitment to define targets for reducing GHG emissions, based on state-of-the-art climate science, strengthens its position with regard to climate change mitigation and adaptation. The short-term, science-based targets submitted by The Navigator Company are consistent with the ambition to reduce scope 1 and 2 GHG emissions to levels needed to keep the increase in global warming to well below 1.5 °C above pre-industrial levels, in line with the Paris Agreement, and well below 2 °C in scope 3.

The Navigator Company also continued to analyse its ESG criteria performance based on internationally recognised initiatives, responding to the CDP Climate 2021 questionnaire and submitting, for the first time, its response to the CDP Forest questionnaire. It obtained a score of 'B' (Management level) in both questionnaires. The change in the Company's CDP Climate score was a reflection of the more stringent requirements, especially in some categories that value Navigator's adherence to another initiative - the Science Based Targets initiative (SBTi). It should be noted that, in 2021, the response to this questionnaire was based on the year 2020 and therefore does not yet reflect Navigator's commitment to SBTi. At the end of 2021, Navigator formalised its membership and immediately submitted its GHG emission reduction targets in accordance with the initiative's methodology, thereby strengthening its position in the fight against climate change.



SOLAR POWER PLANTS

As part of its strategy for ensuring energy transition, investment in self-consumption photovoltaic power plants is now part of Navigator’s activity, based on its commitment to having its industrial sites carbon neutral by 2035.

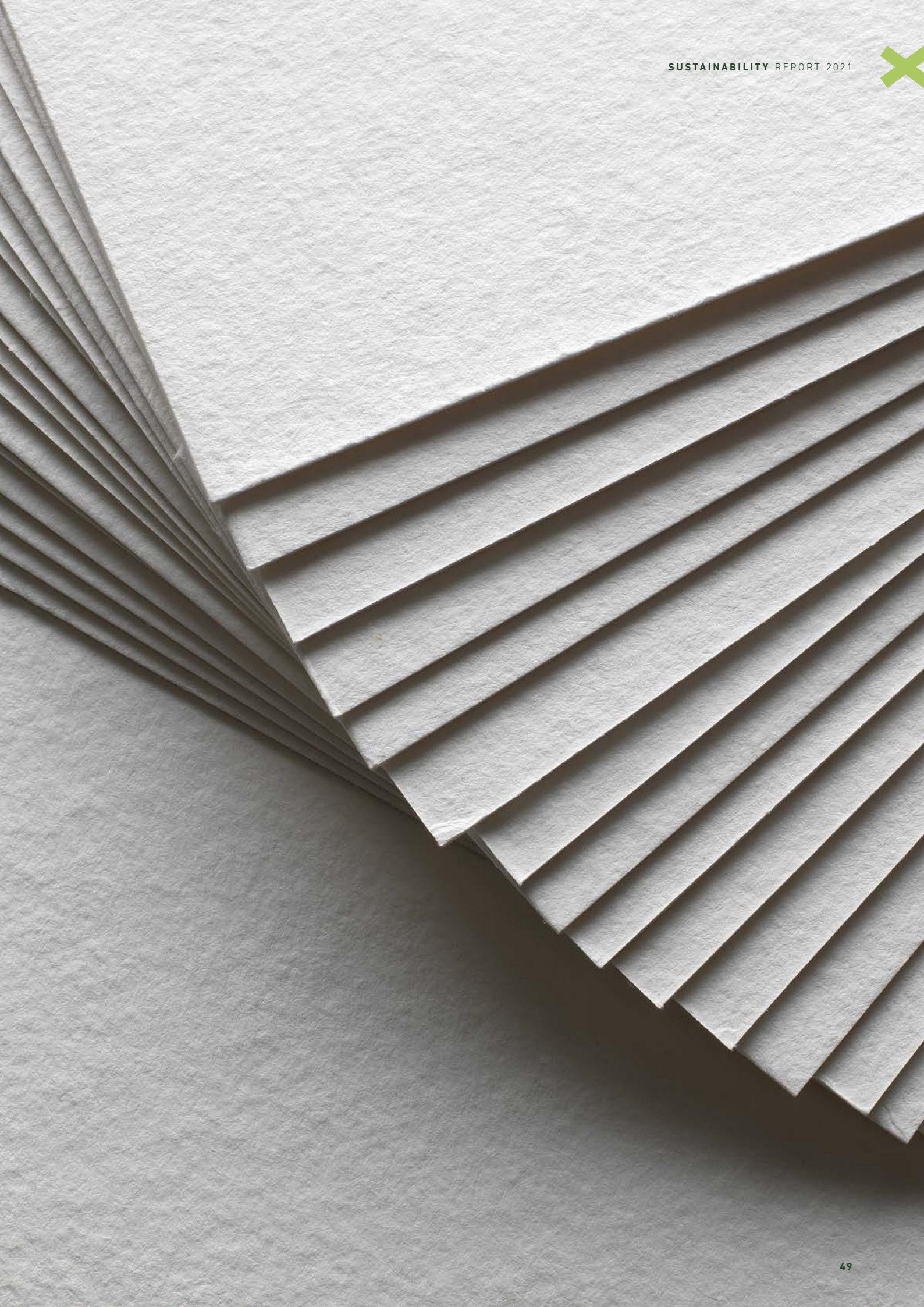
In 2021, The Navigator Company installed two new solar photovoltaic power plants, one at the Figueira da Foz site and another at the pulp mill of the Setúbal site.

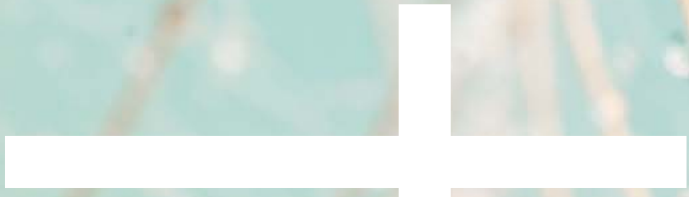
The completion of these projects brings Navigator’s solar power plants to five, reaching approximately 7 MW of installed capacity, which is equivalent to more than 21,000 solar panels installed.



	Figueira da Foz Solar Power Plant	Setúbal Pulp Plant Solar Power Plant
Annual production forecast (MWh)	3,500	3,200
Avoided CO ₂ emissions potential (t)	1,296	1,187
Cost reduction potential (€)	300,000	250,000









VALUE CREATION IN THE BUSINESS



4.1 SUSTAINABLE VALUE CREATION

The Semapa Group is focused on creating value, based on an economic performance with positive results, bearing in mind the direct and indirect impacts on the surrounding communities.

Valuation of our business is much more than economic performance. It is the spirit of sharing and creating sustainable value. We create value through an ethical and transparent performance and we take responsibility for our entire value chain. We seek valuation through innovation and R&D, in order to create more resilient and sustainable business models.





WHAT IS THE RELEVANCE OF THIS TOPIC?

Semapa is aware of the impact that its business has on society and therefore aims at creating sustainable value and sharing it with its Stakeholders. In this way, it aims to benefit not only its Shareholders, but also its Employees, Customers, Suppliers, local Communities, and Society in general, as demonstrated hereunder.

The Semapa Group plays an important role in the national economy and impacts the lives of thousands of people throughout its value chain. It is increasingly clear that the way the Group manages its relationship with the community, with the resources and risks associated with its activities, has an impact on economic performance.

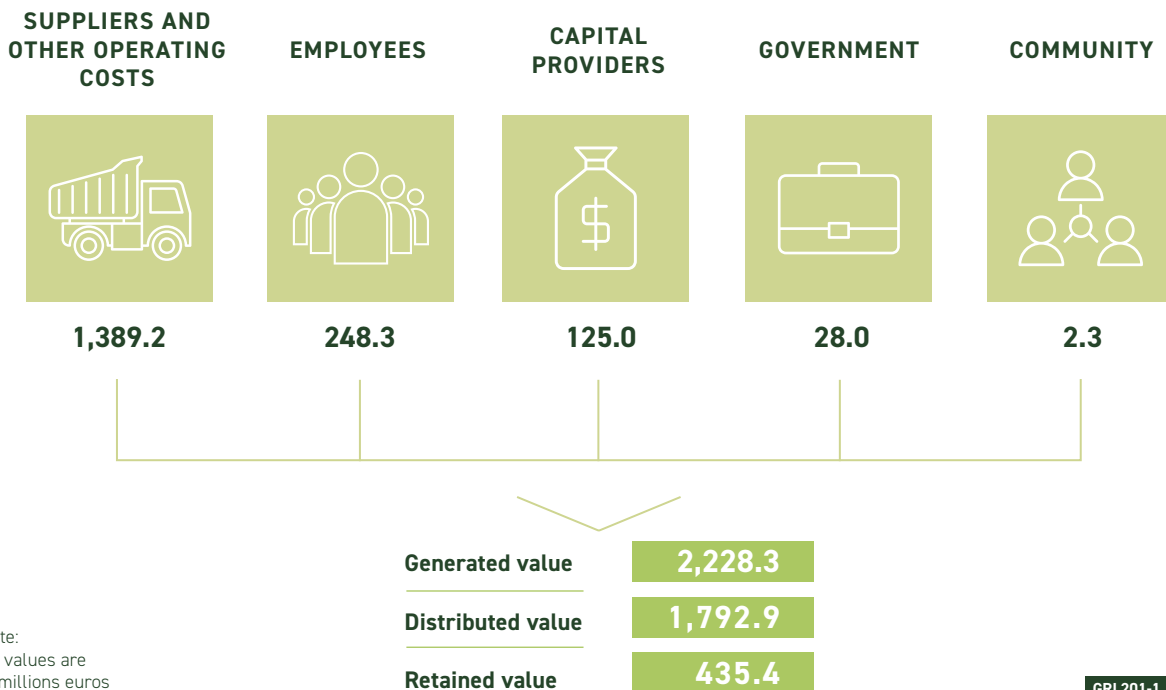


ASSOCIATED IMPACTS

A responsible and fair business is essential to the performance of any company. This topic is a reflection of all the material topics and, therefore, its positive and negative impacts are closely linked to the impacts of other topics covered in this report. This is a core topic and forms the basis of the Group's management.



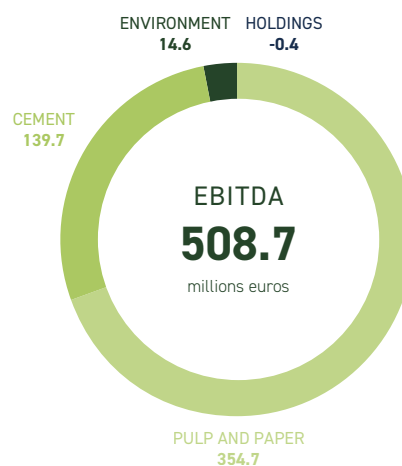
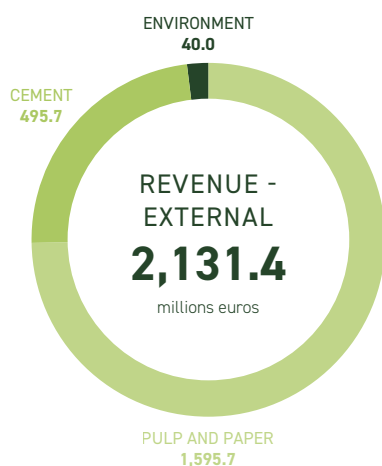
VALUE SHARED WITH SOCIETY



Note:
All values are in millions euros

GRI 201-1

ECONOMIC PERFORMANCE



FINANCIAL INDICATORS

IFRS - Cumulative figures (million euros)	2021	2020	Var.
TOTAL TURNOVER	2,131.4	1,867.4	14.1%
EBITDA	508.7	419.3	21.3%
EBITDA Margin (%)	23.9%	22.5%	1.4 p.p.
Depreciation, amortisation and impairment losses	(193.9)	(214.7)	9.6%
Provisions	(4.7)	(5.5)	14.3%
EBIT	310.1	199.2	55.6%
EBIT Margin (%)	14.5%	10.7%	3.9 p.p.
Net financial results	(49.3)	(58.9)	16.2%
Net monetary position	7.2	13.9	-48.3%
Pre-tax results	267.9	154.3	73.7%
Income tax	(18.0)	(12.0)	-49.9%
Net profit for the period	250.0	142.2	75.7%
Attributable to Semapa shareholders	198.1	106.6	85.9%
Attributable to non-controlling interests (NCI)	51.8	35.7	45.3%
Cash Flow	448.5	362.4	23.8%
Free Cash Flow	295.4	345.5	-14.4%
	31/12/2021	31/12/2020	Dec21 vs. Dec20
Equity (before NCI)	1092.3	948.8	15.1%
Interest-bearing net debt	1,015.6	1,215.5	-16.5%
Lease liabilities (IFRS 16)	96.7	80.3	20.7%
TOTAL	1,112.3	1,295.9	-14.2%



The Semapa Group recorded a consolidated turnover at the close of 2021 of 2,131.4 million euros (+14.1% year-on-year), 1,595.7 million euros generated in the pulp and paper segment (Navigator), 495.7 million euros in the cement segment (Secil), and 40.0 million euros in the environment segment (ETSA). Exports and sales abroad for the same period amounted to 1,576.5 million euros, accounting for 74% of turnover.

It should be noted that, in 2021, paper sales increased in a context of price recovery, in the cement segment, turnover reflecting the positive developments in the major markets where Secil operates, while the environment segment recorded its highest turnover ever.

EBITDA in 2021 amounted to 508.7 million euros (up 89.4 million euros year-on-year, i.e. 21.3% more), 354.7 million euros in the pulp and paper segment (up 24.2%), 139.7 million in cement (up 13.1%), and 14.6 million in the environment segment (up 44.3%). The consolidated EBITDA margin was 23.9% (vs 22.5% in 2020).

Net profit attributable to Semapa shareholders in 2021 amounted to 198.1 million euros (vs 106.6 million euros year-on-year). This growth resulted from the favourable development of EBITDA (up 89.4 million euros) combined with an improvement in financial results (up 9.6 million euros), as a result of a reduction in Secil's negative exchange rate effects (Brazilian Real), a reduction in depreciation, amortisation and impairment losses, and provisions (up 21.5 million euros), less impact from the net monetary position (down 6.7 million euros) and negatively influenced by tax charges (6.0 million euros less).

OPERATIONAL INDICATORS

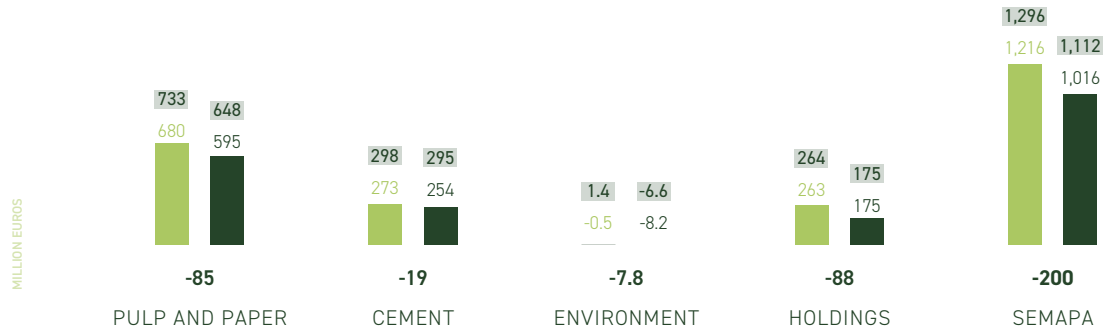
	Units	2021	2020	Var.
PULP AND PAPER				
BEKP sales (pulp)	1,000 t	292	394	-25.9%
UWF sales (paper)	1,000 t	1,474	1,276	15.5%
Total tissue sales	1,000 t	105.4	106	-0.6%
CEMENT				
Grey cement sales	1,000 t	5,257	4,652	-1.1%
Ready-mix concrete sales	1,000 m ³	1,960	1,803	8.7%
ENVIRONMENT				
Collection of animal by-products (category 1, 2, and 3)	1,000 t	125.1	121.4	3.1%

INVESTMENTS

In 2021, investment in fixed assets amounted to 120 million euros, including 20 million euros relating to the CCL project at Secil's Outão cement plant and 80 million euros relating to the modernisation and maintenance of equipment and production capacity, energy, and decarbonisation at Navigator. Also of note is the 11 million euros invested in financial interests in startups and venture capital funds by Semapa Next.

NET DEBT

At the end of 2021, consolidated interest-bearing net debt stood at 1,015.6 million euros, 200 million euros below that at the end of 2020. As at 31 December 2021, total consolidated cash and cash equivalents amounted to 382 million euros, in addition to 581 million euros in contracted and unused credit lines, thus ensuring a strong liquidity position.



2020 2021 NET DEBT + IFRS16

SHAREHOLDER VALUE

Semapa creates value for its shareholders by distributing dividends and enhancing the value of its shares, seeking to reinforce their stability and long-term growth.

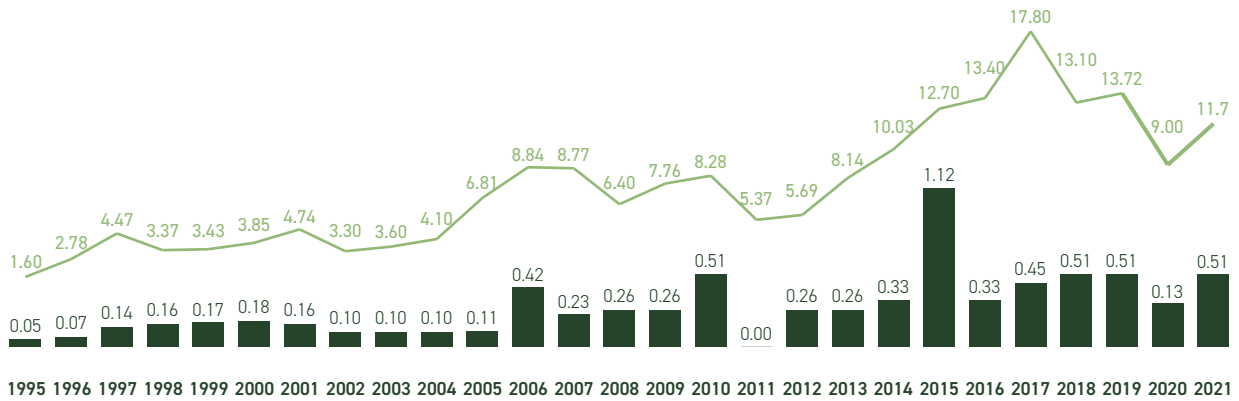
In 2021, net profit attributable to Semapa shareholders was 198.1 million euros, down 6.4% compared to the previous year, due essentially to the combined effect of the following factors:

- 89.4 million increase in EBITDA: the pulp and paper segment recorded an increase of 69.2 million euros and the cement segment an increase of more than 16.2 million euros;
- a reduction in depreciation, amortisation and impairment losses of 21.5 million euro, notably for Navigator;
- improvement in net financial results by about 9.6 million euro, reflecting, in particular, Secil's less negative exchange rate effects (Brazilian real);
- lower impact of the net monetary position (6.7 million euros), resulting from the application of accounting standard IAS 29 due to the fact that the Lebanese economy was considered hyperinflationary;
- an increase in income taxes of approximately 6.0 million euros. This item is positively impacted by around 25.7 million euros due to Semapa's recognition of deferred tax assets, relating to tax losses already taxed and carried forward up to and including 2028.

In May 2021 Semapa distributed a total of 40.9 million euros in dividends, corresponding to 0.512 euros per share.



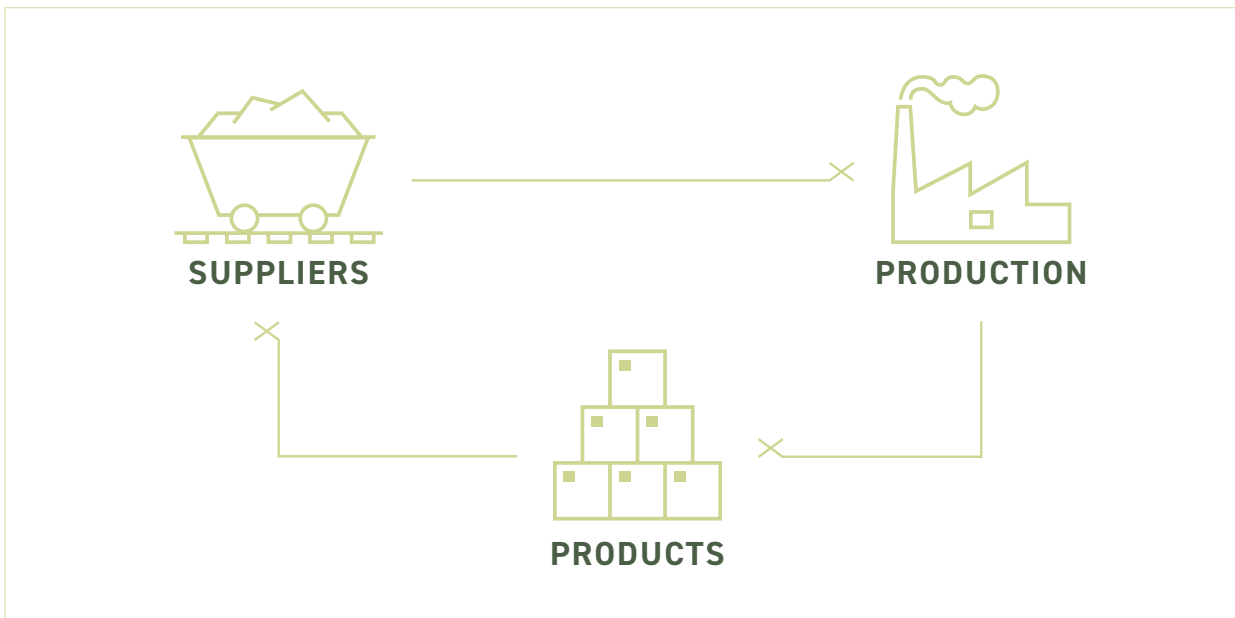
ANNUAL SHAREHOLDER RETURN = 18.4%



EUROS
DPS SHARE PRICE

RESPONSIBILITY ALONG THE VALUE CHAIN

Sustainability is an integral part of the Group's direct operations. Semapa aspires to improve the performance of operations in the entire value chain of its business areas, namely at the level of its suppliers and products. The Group companies are already moving in this direction, by implementing various initiatives, taking responsibility for their value chains and thereby delivering products to their customers with a more positive impact on society, as demonstrated throughout this report.



This report contains many examples of how the Semapa Group shows its efforts in having sustainable production processes, by making them more efficient or less polluting. Below is an overview of the Group's efforts in recent years to be increasingly more aware and responsible, both upstream of production, with its suppliers, and downstream with its products.

SUPPLIERS

ENVIRONMENT SEGMENT



ETSA LOG, the Group's company that transports raw materials, is responsible for 15% of ETSA's CO₂ emissions, evidenced by diesel consumption.

With this knowledge, ETSA continued to invest in training its drivers, with external support, to help them reduce unnecessary fuel consumption, which resulted in a decrease of about 0.8% in fuel consumption.

PULP AND PAPER SEGMENT



The year 2021 was marked by the impact of the pandemic on commodity prices. The Navigator Company therefore focused on ensuring that market disruptions would not affect its operations, in terms of both material supply and costs.

As sustainability is a priority for Navigator, the procurement team played an important role in the science-based targets project by studying the carbon footprint of its main suppliers. To support this study, Navigator conducted a survey of its suppliers' commitments to reducing their carbon footprint by 2030, in order to work together with those who have not yet defined a policy for monitoring and reducing GHG emissions.

In logistics, Navigator stepped up its commitment to rail transport in order to increase efficiency and reduce the carbon footprint associated with product transport. As a result, we were able to increase the volume of trains running along the railway branch lines of the Figueira da Foz and Setúbal plants and at the railway terminals close to these units.

PRODUCTS

ENVIRONMENT SEGMENT



In 2021, the competent authorities gave their positive opinion on the designs and operation of the new ETSAProHy industrial unit. This new industrial unit will apply innovative technology developed at ETSA to produce three new high added value products for the animal feed market, with a future focus on human food. Its construction and operation will take place throughout 2022 and 2023.

CEMENT SEGMENT



One of the pillars of Secil's business is the conducting of research and development for the decarbonisation of the cement industry. One of its main objectives is to develop innovative technologies for the sustainable production of cement, mortars and concrete with a low CO₂ footprint, and to promote research into new raw materials, alternative fuels, new types of cement, etc.

The CCL project being implemented by Secil has a strong innovation component and involves several university researchers. The outcome of this project has already seen or will see 12 patents registered. Some of the sub-projects of the CCL, in particular those concerning alternative fuels, hydrogen and Low Carbon Clinker, are the result of research work, innovation, and development carried out by Secil and its partners.



PULP AND PAPER SEGMENT

Last year Navigator took an important step in its portfolio diversification strategy, venturing into a new business area with the development of a range of products for the packaging segment. Based on the 'From Fossil to Forest' concept, Navigator launched the gKraft product range, drawing on 40 years of experience in the paper sector and on the use of Eucalyptus globulus as the distinguishing feature for innovating and creating a groundbreaking product that will pave the way for a new packaging paradigm. The launch of this project is in line with its commitment to creating sustainable value, bem como contributing to cutting down on plastic by replacing it with sustainable materials.



SUSTAINABLE FINANCE

As previously stated, in 2021 the Sustainable Finance WG continued to focus on improving the preparedness of Group companies to disclose their performance through ESG (Environmental, Social, and Governance) metrics to the various Stakeholders, including to the financial sector.

In addition to defining an internal KPIs reporting model appropriate to Semapa's profile as a holding company, the WG also saw The Navigator Company achieve ESG ratings from external entities, such as CDP (Forest and Climate) and Sustainalytics.

CDP

Navigator has participated in the CDP Climate reporting since 2018, seeking to respond to the more stringent requirements of this tool for assessing the Company's progress in the field of risk management and climate action. In addition to the questionnaire on climate change, in 2021 Navigator submitted, for the first time, its response to the CDP Forest questionnaire on forest management. The Company achieved a score of 'B' (Management level) in both questionnaires. The change in the Company's CDP Climate reporting score was a reflection of the more stringent requirements, especially in some categories that value Navigator's adherence to another initiative – the Science Based Targets initiative (SBTi). It should be noted that this questionnaire is based on the year 2020, and that at the end of 2021 Navigator joined the SBTi and, subsequently, submitted GHG emission reduction targets based on the most state-of-the-art climate science, strengthening its position in the fight against climate change.



SUSTAINALYTICS

Navigator's sustainability performance was again recognised in 2021, improving its position in the Sustainalytics 2021 ESG Risk Rating. With a score of 14.3 (vs 17.2 in the previous rating) the Company ranks again among the best sustainable companies in the world as a 'Low Risk ESG Company' for investors, and ranks third in the "Paper and Forest" cluster – in a total of 81 companies worldwide part of this cluster, and also third in the "Paper and Pulp" cluster, out of a total of 60 companies worldwide.

For Navigator this Sustainalytics ESG rating has an impact on the financing cost of a commercial paper issued in 2019, amounting to 65 million euros, the first green financing product of its kind contracted in Portugal.



SUSTAINABLE FINANCING

In 2021, Navigator carried out two financing operations that stand out in particular for their sustainable nature. In the first half of the year, 27.5 million euros were disbursed relating to a loan contracted in 2020 with the European Investment Bank, directly linked to the new biomass boiler at the Figueira da Foz industrial site, in a total investment of 55 million euros, which will allow Navigator to reduce fossil carbon dioxide emissions.

Issuance of a bond of 100 million euros in the second half of the year under a Sustainability Linked Bonds Framework, indexed to ESG targets. The terms of the loan are indexed to two ESG indicators envisaged in Navigator's Sustainability Agenda which, in turn, are aligned with the United Nations Sustainable Development Goals.

The first indicator sets targets for reducing CO₂ emissions and is consistent with Navigator's Roadmap to Carbon Neutrality, in which Navigator pledges to ensuring the carbon neutrality of its industrial sites by 2035. The second indicator sets targets for increasing the percentage of certified wood purchased on the domestic market. Wood certification is one of the most direct routes to achieving sustainability goals in our business sector, and the best guarantee that processes leading to sustainable forest management have been adopted.

SEMAPA'S RESPONSE TO THE EU TAXONOMY

The EC put forward a new strategy for creating growth in 2019, the European Green Deal, aimed at reducing greenhouse gas emissions to zero by 2050 and supporting economic growth through the more efficient and sustainable use of natural resources.

In addition to the European Green Deal, the European Union launched the EU Taxonomy. The EU Taxonomy is a new classification system which establishes a list of environmentally sustainable economic activities. This system can play a crucial role in helping the entire European Union leverage sustainable investment and implement the European Green Deal. This Taxonomy will provide companies, investors and policy makers with appropriate definitions to better understand which parts of the economy can be classified as environmentally sustainable investments. This Working Group also coordinated the preparation of information within the framework of Green Taxonomy.

Regulation (EU) No 2020/852 of the European Parliament and of the Council established a framework to facilitate sustainable investment through a classification system of sustainable economic activities (EU Taxonomy). The aim is to reorient capital flows towards sustainable investments in order to achieve sustainable and inclusive growth. The six environmental goals that this Regulation covers are: (i) climate change mitigation; (ii) climate change adaptation; (iii) the sustainable use and protection of water and marine resources; (iv) the transition to a circular economy; (v) pollution prevention and control; and (vi) the protection and restoration of biodiversity and ecosystems;

For the year 2021 report, non-financial companies should disclose the proportion of turnover, capital expenditure, and operating expenditure associated with eligible activities under the EU Taxonomy, according to the first two environmental objectives – climate change mitigation, and climate change adaptation. Semapa presents its response to this new legal requirement in Chapter 9 of this report.



4.2 BUSINESS ETHICS

WHAT IS THE RELEVANCE OF THIS TOPIC?

The Semapa Group has a management approach that is based on the principles of ethics, integrity and honesty in internal and external relationships and in the performance of activities that integrate all stages of the value chain.

The fundamental principles allow the Group to sustainably create value and protect the interests of shareholders, with a suitable level of return for investors, supported by the offer of the highest quality standards in the supply of goods and services to its customers, as well as in the recruitment, motivation and development of the best and most competent professionals. Its activities are governed by internal policies such as the Code of Ethics, the Code of Good Conduct for Preventing and Combating Harassment, and the Annual Plan for Equality, as well as established mechanisms and procedures for reporting irregularities and preventing conflicts of interest.



ASSOCIATED IMPACTS

Society and the markets are heading in a direction in which Stakeholders have more and more impact on companies' decisions. It is these same Stakeholders who day after day demand more sustainable and more ethical businesses. The entire Group believes that conducting business in a more ethical manner leads to added value.

By working in several different areas and adopting more ethical measures, the Group creates a positive impact not only on its value chain, but also on society. It should be borne in mind that no company is immune to corruption. It is the responsibility of the whole Group to work daily to avoid financial and reputational risks.



RESPONSIBILITY IN OUR CONDUCT AND PERFORMANCE

At Semapa, there is a set of Ethical Principles, approved by the Board of Directors on 30 December 2002, which establish rules and principles of an ethical nature applicable to Employees and members of the governing bodies.

In particular, the following duties are recognised:

- **the duty of diligence, translated into specific pledges of professionalism**
- **the duty of zeal and responsibility**
- **the duty of loyalty, which, within the scope of the principles of honesty and integrity, is especially aimed at safeguarding against situations of conflict of interest**
- **the duty of confidentiality, which applies to the processing of relevant information**

The document also establishes duties of corporate social responsibility, such as environmental conservation and the protection of all shareholders, ensuring that information is fairly disclosed, and all shareholders are treated equally and fairly.

At the end of 2018, the Ethical Principles were adapted to expressly integrate the commitment to respect and promote human rights and embrace the fight against money laundering and corruption.

As a key employer, Semapa has had a Code of Good Conduct in force since 2017, which enshrines specific rules aimed at reinforcing the prevention of and combat against any and all types of harassment in the workplace, without prejudice to other rules of conduct applicable to them.

GENDER EQUALITY PLAN

THE SEMAPA GROUP



Semapa continues to believe that, more than fulfilling a legal obligation, the pursuit of measures to ensure equality between women and men is an integral part of socially responsible management, contributing to better organisational performance and to attracting and developing talent.

Consequently, Semapa has a global and holistic view of the entire economic group and fulfils its shareholder duties to its Subsidiaries, while seeking to share common values and principles. This vision is reflected in the Charter of Ethical Principles adopted by the Board of Directors in 2002, applicable to subsidiaries where, among others, the obligation of non-discrimination is expressed:

“In the company’s internal relations and those with third parties, Semapa Employees shall not discriminate or accept any discrimination on any grounds, such as descent, gender, race, language, place of birth, religion, political beliefs or ideology, education, or social or economic status.”

Moreover, since the approval of this Charter of Ethical Principles, Semapa has always considered “equal opportunities” to be a critical and fundamental principle in labour relations.

Furthermore, in 2017 Semapa adopted a Code of Good Conduct for Preventing and Combating Harassment in the Workplace, also applicable to all male and female Employees of the Semapa Group companies (unless they have a specific Code on this matter), which prohibits harassment in the workplace and sets out the obligations of Employees and employers in this regard, as well as the procedure to be followed in the event of harassment.

In 2021, Semapa published its Gender Equality Plan for 2022 as it has done in recent years. This plan has the following areas of intervention, with actions 2, 3, 4 and 6 carried over from the previous plan, and two new actions, 1 and 5.

- | | |
|--|--|
| 1. Corporate strategy, mission and values | 4. Protection for working parents |
| 2. Equal access to employment | 5. Equal pay for equal work |
| 3. Initial and continued training | 6. Reconciliation between work, private and family life |

It should also be noted that the Semapa Group discloses this plan every year on its website in order to reinforce the Group’s transparency. The Executive Board, the Human Resources Department and an in-house equality working group are in charge of implementing and executing the plan for 2022, and of ensuring availability of the necessary resources.



PULP AND PAPER SEGMENT

In 2020, The Navigator Company approved a new Gender Equality Plan and principles concerning the diversity of the composition of governing bodies. By having these measures included in the plan, The Navigator Company expects to see results in areas such as gender equality and reconciliation between work, private and family life.



In 2021, the internal working group set up to monitor the plan and provide input continued the work started in late 2020, having identified potential areas for improvement and lines of work to be developed in order to contribute effectively and materially to the Company's Gender Equality Plan in the 2021-2022 period. The actions to be carried out in the future will be threefold: a) information, indicators and good practices; b) external communication; and c) awareness raising and internal consultation.



GOVERNANCE BEST PRACTICES

The Semapa Group aims at implementing the best corporate governance practices as an essential tool for sustained growth. With this in mind, the Governance Working Group supports the integration of the Group's companies and helps them adapt to good corporate governance benchmarks.

The year 2020 was marked by the adaptation to and integration of the requirements applicable to companies issuing shares admitted to trading on the Portuguese regulated market, inter alia, (i) the first review of the Corporate Governance Code of the Portuguese Institute for Corporate Governance (IPCG), and (ii) the publication of Law No 50/2020 of 25 August 2020, transposing Directive (EU) No 2017/828 of the European Parliament and the Council of 17 May 2017 on the exercise of certain rights of shareholders in listed companies encouraging long-term shareholder engagement.

2021 was a year for consolidating the requirements adopted in the previous year, such that they are reflected in the subsidiaries, namely Navigator, which is covered by the same regulations. Secil, ETSA, and Semapa Next continue to develop their governance procedures in order to catch up with the Group's standards.



4.3 RISK MANAGEMENT

WHAT IS THE RELEVANCE OF THIS TOPIC?

Semapa assumes as its duty the management of the risks inherent to its activity as a holding company, but also the monitoring of the context and the management of the risks to which its subsidiaries are exposed. As such, the Board of Directors considered it essential to have an agile and robust control and management system, in order to respond to the different businesses, geographic regions and risk situations to which the Group is exposed.



ASSOCIATED IMPACTS

The duty of sound risk management is inherent to Semapa's business as a holding company. Poor risk management can lead to impacts not only now but also in the future, and can even compromise business continuity.

Good risk management is essential as it is directly related to business continuity in order to avoid not only economic, but also social, environmental, and reputational impacts.



GOVERNANCE MODEL

In carrying out its business, Semapa seeks to operate in accordance with: (i) a desire for very low risk with regard to legal and regulatory compliance, environment, and health and safety; (ii) low risk for financial results; and (iii) medium risk for investments.

The risk-taking policy approved by the Board of Directors qualitatively defines the level of risk that Semapa is willing to accept to achieve its business objectives and strategy. It is aligned with the main material topics for Semapa, ensuring the consistency of the risk management and control system.

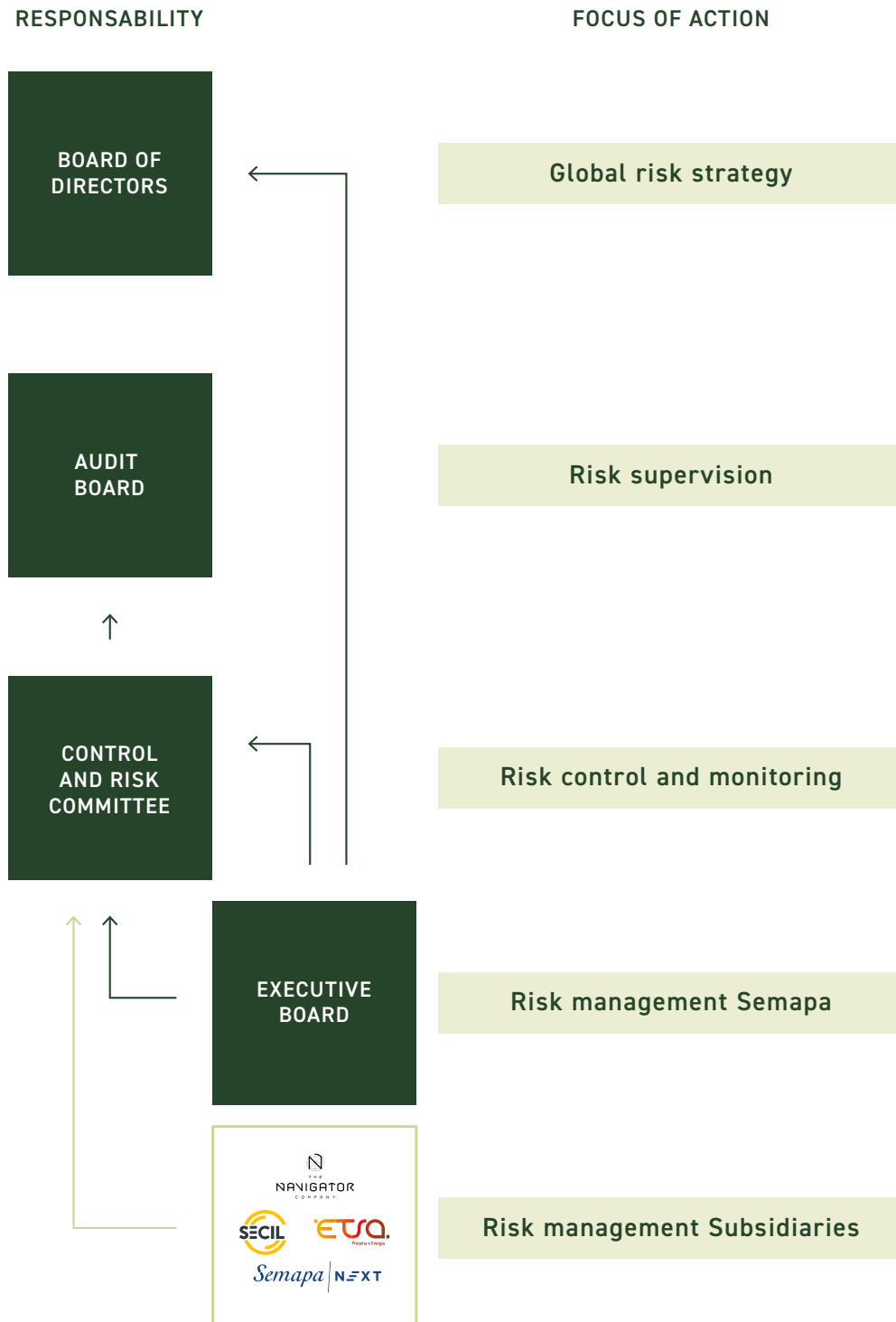
Semapa's activity is the management of shareholdings in other companies, the analysis of investment opportunities and the reporting of information to the market, maintaining a simplified, small and highly optimised structure since its foundation. Thus, the governance model is adjusted to the structure of Semapa, defining the focus of action and the attribution of responsibility to the different actors in the risk management and control system.

Again at governance level, the Crisis Management Office, which was set up in 2020 when the COVID-19 pandemic broke out, continued to work during the first semester of 2021 with a view to monitoring, anticipating, and mitigating the effects of the pandemic on the Group's various companies and industrial sites. Four monitoring groups thus remained active during this period: (1) Preservation of Employees' Health and Containment of the Pandemic; (2) Communication; (3) Business Development and Continuity Plans; and (4) Financial Plan (contingency). In the second half of 2021, only the two former monitoring groups indicated above remained active.



In this context, in 2021 Semapa continued to consolidate and run the risk management system, carrying out a number of initiatives that increased the system's level of maturity, in particular setting up an in-house extended risk forum that engaged those involved in the Risk Management System, namely the members of Semapa's Control and Risk Committee and the heads of risk areas in each of its subsidiaries. This forum meets periodically and aims at guaranteeing greater proximity, participation, and knowledge sharing among those responsible for the Group's Risk Management.

TOP RISKS IDENTIFIED





As Semapa is an industrial holding company, management of each of the top risks lies with the holding company and/or subsidiaries. As regards risks under the direct management of each subsidiary, Semapa continues to follow-up and monitor the main mitigation measures and additional strategies defined by each of the subsidiaries.





In the 2021 financial year, Semapa implemented another annual cycle of activities to monitor its strategic risks, seeking to stabilise the model and increase its efficiency in order to facilitate proactive management and reporting of risks by the various parties involved in the process.

The work carried out in 2021 resulted in minor changes in the designations of some Top Risks so as to better understand them in the internal and external context, which had no material impact on the meaning and content thereof. Throughout 2021, the risks considered strategic for the Group in this financial year were followed up and monitored, as follows:

TOP STRATEGIC RISKS	
Portfolio	
Reputational Capital	
Investment Decision-Making	
Business	
Talent	
Legal and Regulatory Framework in Portugal	
External Shock	
Fraud	
Access to Raw Materials	
Cibersecurity	
Environmental Disasters	

OPERATIONAL RISKS	
Pulp and Paper Sector	<ul style="list-style-type: none"> - Risks associated with the Forestry Sector - Supply of raw materials - Market price for BEKP Pulp, UWF Paper and Tissue paper - Production of energy - Country Risk - Competition - Concentration of customers' portfolio - Environmental risks - regulatory environment - Environmental risks - climate change related risks
Cement Sector	<ul style="list-style-type: none"> - Supply of raw materials - Demand for the Group's products - Competition - Energy costs - Country Risk - Environmental risks - regulatory environment - Environmental risks - climate change related risks
Environment Sector	<ul style="list-style-type: none"> - Supply of raw materials - Sale price - Demand for the Group's products - Competition - Other Risks



IDENTIFIED RISKS		RESPONSIBILITY				
STRATEGIC	Portfolio	*				
	Reputational Capital	**				
	Investment Decision-Making	*				
	Business	***				
	Talent	**				
	Legal and Regulatory Framework in Portugal	**				
	External Shock	**				
FINANCIAL	Foreign Exchange	***				
	Access to Funding	**				
COMPLIANCE	Fraud	**				
OPERATIONAL	Access to Raw Materials	***				
	Cibersecurity	**				
	Environmental Disasters	***				

'Owners' * Management by Semapa ** Management and monitoring by Semapa and Management by Subsidiaries *** Management by Subsidiaries

The 2021 Annual Report presents a comprehensive analysis of all the strategic risks (under Chapter 4 of the Management Report) and operational risks, including economic and legal risks (under Chapter 11 of the notes to the consolidated financial statements).



FUTURE CHALLENGES

The effect of the COVID-19 pandemic in the past two years, compounded by a growing focus on ESG and climate change has stepped up the pressure of Stakeholders on organisations, increasing their influence on operations and, consequently, on the risk environment in which they operate.

While the Group considers that these factors may represent an increased risk framework, it nevertheless believes that they are also an opportunity for companies to be aware of this trend and for anticipating and adapting more rapidly to these new global circumstances. To this end, the Group has increased its investment in research and the development and innovation of its products and processes, and strengthened and trained its Employees and systems.

The Group's risk management structure addresses climate change risks, as they are directly linked to the Group's business processes. Climate change is therefore addressed across the board, with mitigation controls described in the internal risk model, and subject to monitoring. The sustainability of the Group's various industrial activities or the risk of environmental constraints to industrial production is partly fed by the issue of the (de)carbonisation of economies, which the Group aims to anticipate.

Moreover, due to the recent geopolitical conflict between Russia and Ukraine, which is a potentially material external shock, the international economic and social climate will undoubtedly worsen, particularly in Europe. Despite the Group's direct exposure to the Ukrainian and Russian markets, there is still much uncertainty about the impacts this new context will have on the Group's operations.

4.4 INNOVATION, RESEARCH AND DEVELOPMENT

WHAT IS THE RELEVANCE OF THIS TOPIC?

The Semapa Group is committed to innovation and research and development (R&D), not only to secure new business profitability, but also to help improve process efficiency and create innovative, low environmental impact products. All of the Group's business segments are aligned in respect of innovation and research and development, and have their own R&D departments, to ensure the production of scientific and technological knowledge, and guarantee competitiveness in various sectors.

ASSOCIATED IMPACTS

As Semapa subsidiaries operate in a broad range of business areas, they always have an opportunity to innovate their products and services.

The impact of these innovations is mainly positive, since new improved products/services bring potential improvements, which can be reflected in people, the environment, and the economy.

The Navigator Company and Secil have innovated in more environmentally sustainable products, and ETSA has continuously invested in the innovation of its industrial processes, leading to an increasingly lower environmental impact due to the decarbonisation of its process.

Semapa Next, the Group's newest company, is undoubtedly the pillar of innovation in the Group. It is dedicated to making selective responsible investments and supporting the growth of startups in Portugal and abroad.

CREATING INNOVATIVE PRODUCTS AND SERVICES

VENTURE CAPITAL

Semapa | **NEXT**

To pursue its goals as an investor in the Series A/B stage, Semapa Next has invested in investment funds that are committed to ESG policies and to the UN Principles for Responsible Investment (PRI). As such, these funds seek to include, in their respective portfolios, investments in companies with positive social and environmental impact. In addition to investment, both funds have initiatives to neutralise CO₂ emissions or support the work of social entrepreneurs.

INVESTMENTS

Last year Semapa Next invested in Oceano Fresco, a company that specialises in sustainable food and is a pioneer in open water clam farming. Oceano Fresco's sustainable clam production promotes the restoration of marine biodiversity and is also a sustainable alternative to intensive fishing as an alternative source of protein.



BUSINESS SUPPORT

In addition to the investment made, Semapa Next also provides support to its portfolio companies, such as Rnters and Overstory.

Rnters is a Portuguese startup which aims at promoting a circular economy through the rental of all kinds of goods. This business model is the cornerstone for Rnters to raise awareness among consumers to reduce excessive and unnecessary consumption and purchases. Besides its core business, Rnters also promotes the 'Firewood Pine' campaign, an initiative held over the festive season, organised by firefighting associations for giving a second life to pine trees that have to be cut down to clear forests.

Overstory offers an Artificial Intelligence platform for real-time analysis of vegetation around the world, provided through satellite imagery, and which helps companies make informed decisions and thus prevent forest fires and power outages that have been plaguing certain areas of the planet due to global warming.

INITIATIVES

Alongside its investment activities, Semapa Next has developed innovation initiatives aligned with sustainability goals. In early 2021, the Company took part in the Global Sustainability Supply Chain Challenge organised by Techstars, joining Equinor, Cargill, The Heritage Group, Temasek and other multinationals. The aim of this challenge was to offer greater visibility to the tracking of sustainable materials in the companies' value chain, both in terms of automation and data, and new materials.

Semapa Next, together with Techstars, also issued a call for startups on the topic of The Future of Food & Food Packaging, with the active participation of The Navigator Company and ETSA. The aim of this challenge was to meet the needs of both companies to identify and collaborate with startups that enable, on the one hand, Navigator to offer sustainable packaging methods and technologies and, on the other ETSA to use alternative proteins and fats (e.g. insects, artificial meat, etc.) with a better environmental impact.

ENVIRONMENT SEGMENT

During 2021, ETSA saw its Innovation, Research and Development unit mature, having strengthened partnerships with various non-corporate entities of the National Scientific and Technological System, particularly in the field of biotechnology, chemical technology, and agrifood.



With a strong focus on sustainability, the circular economy and the optimisation of natural resources, ETSA is betting on research and development and the resulting industrialisation as a key to expand and underscore its national leadership and make its international projection a natural step.

THE PROHY PROJECT

Following on from the Portugal 2020 Co-Promotion project MOREPEP, a productive innovation project called ETSAProHy, financed by the same framework, was submitted and approved, aimed at industrialising the knowledge developed thus far. In 2021 the ETSAProHy project – for which the permits and licences for the construction and industrial operation thereof were in the process of being obtained – finally saw its designs and operation approved by the competent authorities. This new industrial unit will apply innovative technology developed at ETSA to produce three new high added value products for the animal feed market, with a future focus on human food. Its construction and operation will take place throughout 2022 and 2023.

CONCLUSION OF THE MOBFOOD PROJECT

The Portugal 2020 mobilisation project MOBFOOD was successfully concluded in 2021. ETSA worked with dozens of public and private entities in the Portuguese agrifood sector. As a result of this project, networks and interactions were set up with various operators to reduce food waste and recover waste and by-products resulting from this activity.

INNOVATIVE PROJECTS:

In 2021, ETA reinforced its increasingly solid industrialisation of innovation to intensify its strategy to increase and develop a pipeline of innovative products with the start of three Portugal2020 Co-Promotion projects: HealthyPetFood, FishColBooster, and Bugs@Pets. These projects embody ETSA's intention to innovate in the production of new proteins and fats for human food and animal feed from new and equally sustainable sources, such as insects or fish by-products.

The building of knowledge and development of new products underpinned by research and development is aligned and in step with market trends and with the most recent European legislation, both in the reduction of food waste, by strengthening the collection and recovery of vegetable by-products, and in the offer of new, safe and sustainable products in the animal feed market for livestock and pets. Additionally, ETSA also confirmed its ambition to enter higher value-added markets with the acquisition of Tribérica, a company operating in the human food market. The Research and Development Department put forward a strategic analytical control plan that will enable the company to grow in even higher value-added markets.

CEMENT SEGMENT

To fulfil its commitment to sustainability, Secil is working on the design and application of new products, on production processes, and on redefining the economic circuits that promote innovative and sustainable solutions.



RESEARCH NETWORKS

In this regard, Secil is part of the Innovandi Consortium, the GCCA research network that brings together many scientific institutions, cement and concrete producing companies, and technology and equipment suppliers to step up innovation and applied research in concrete production, in view of climate change and decarbonisation.

In Portugal, Secil is a member of the C5Lab Collaborative Laboratory, which also comprises ATIC, Cimpor, IST, and LNEC, established to carry out research and development activities for the decarbonisation of the cement industry

To this end, its main objective is the development of innovative technologies for the sustainable production of cement, mortars, and concrete with a smaller CO₂ footprint, while also encouraging research in new raw materials, alternative fuels, new types of cement, etc.

CCL PROJECT

The CCL project being implemented by Secil has a strong innovation component and involves various university researchers. The outcome of this project has seen or will see 12 patents registered. Some of the sub-projects of the CCL, in particular those concerning alternative fuels, hydrogen and Low Carbon Clinker, are the result of research work, innovation, and development carried out by Secil and its partners.

Secil is also involved in the development of other research projects, such as Beinahand, Becharged, Baterias 2030, Clean4G and onthermalHP, financed by PT2020.

In 2021 Secil was awarded a special mention in the Sustainable Business Award, in the decarbonisation category, for using innovative concrete with cork in the construction of the Lisbon Cruise Terminal, a project developed in partnership with architect and designer João Luis Carrilho da Graça, Amorim Revestimentos, and ITECONS.

In the near future, the company will also invest in innovative hydrogen and synthetic fuel projects.



PULP AND PAPER



As regards Navigator, the activity carried out by RAIZ - Instituto de Investigação da Floresta e Papel (Forest and Paper Research Institute), a non-profit organisation acting in the interest of its members – Navigator and the universities of Aveiro, Coimbra, and Lisbon (the latter through the School of Agronomy) – resulted in a record number of patents (8) and publications (80) in 2021.

Among the contributions made by RAIZ in the forestry area, and specifically in the production of enhanced genetic materials that enable increased forest productivity and resilience to climate change, in 2021 it developed two new clones that offer gains of 40% in terms of tonnes of pulp per hectare of eucalyptus plantation compared to unimproved forests.

NEW PRODUCTS AND NEW BUSINESSES

In 2021, Navigator developed new products and businesses. Fuelled by the third year of the “Inpactus Project - Innovative Products and Technologies from Eucalyptus”, RAIZ presented three potential new businesses under evaluation in the biorefinery area: bioactive compounds from foliage and biomass, bioethanol from bark, and biocompounds (with bioplastics), the latter already in the pre-production stage and included in Navigator’s applications to the Recovery and Resilience Plan (RRP).

In terms of process, RAIZ coordinated or participated in corporate projects aimed at optimising wood consumption and reducing the use of water in pulping, bleaching, and the production of UWF and tissue paper. Industrial waste activities (UpCycling project) were also relevant, in that they contribute to reducing (internal measures) this waste and reprocessing waste to be used elsewhere, in the context of a circular economy.

The highlight of the year, however, both from a business perspective and in terms of contributing to the transition from a linear fossil-based economy to a circular bioeconomy, was the strategic packaging projects. RAIZ’s support for the industrial development of high-yield pulps, using less wood, has seen one patent submitted, and two more are in the pre-submission phase. These pulps are the basis of the new line of gKraft packaging products, launched by Navigator on 1 November.

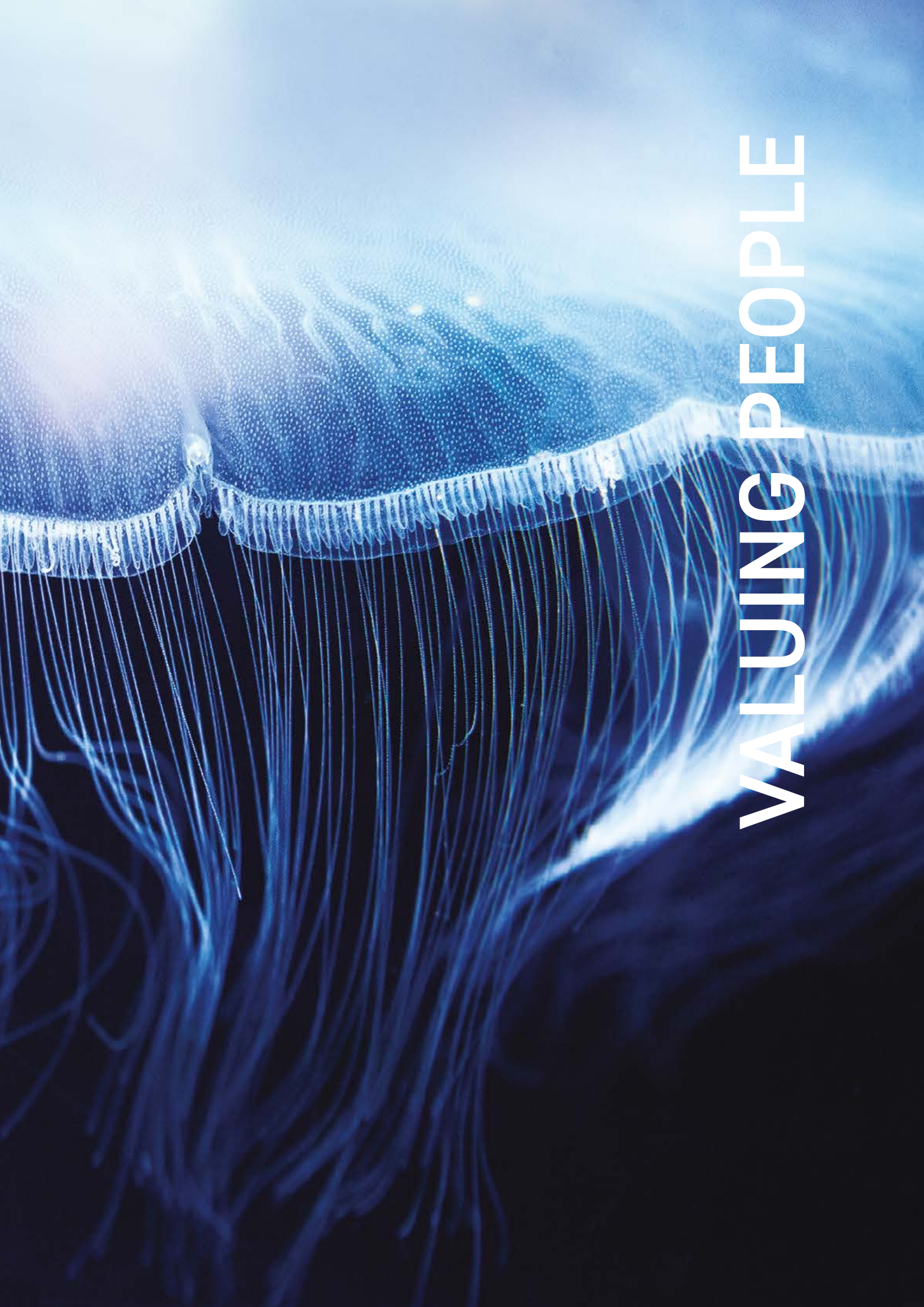
This product range, which is in line with Navigator’s commitment to replacing fossil-based products with renewable, biodegradable, recyclable and carbon-neutral forest-based products, results from an intensive programme carried out by RAIZ, in close cooperation with the Aveiro and Setúbal industrial sites and the Technical Product Department.

In 2021, Navigator also launched an innovative and differentiated tissue product, leveraged by the R&D activities carried out under the Inpactus project, enabling the company to develop in-house expertise, recruit specialised staff, equip laboratories, and work with partner universities with a view to using unbleached pulp in the production of tissue paper. The chemical and morphological characteristics of eucalyptus fibres revealed excellent absorption and softness properties, enabling the submission of a patent application. The team worked with the industrial and commercial tissue segments to launch the Amoos Naturally Soft range.

In the At Home segment, we saw the launch of the Naturally Soft range, with no bleached chemicals, and two new product ranges that use additives – Amoos Aquactive™, with incorporated soap, and Amoos Air Sense™, with perfume-activated beads. In the Away from Home segment, a super absorption range was launched using a different technology that adds air pockets between the two layers of paper, resulting in high performance products. Existing technology was enhanced, in particular at the Cacia site in Aveiro.

LO

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VALUING PEOPLE

5 VALUING PEOPLE

2021 IN NUMBERS



5,695

Employees



27%

of the members of the **Governing Bodies at Semapa Holding** are women



Circa

87.2%

Employees with performance evaluation



Circa

68.3%

Employees under 50 years



We are monitoring the performance of the safety culture that is being implemented. **In 2021 we had:**



mandatory reporting work accidents: **226**
Serious accidents: **7**
Frequency rate: **7.9**
Severity rate: **303.7**

(Includes internal and external Employees at Navigator)



5.1 HUMAN CAPITAL AND TALENT

WHAT IS THE RELEVANCE OF THIS TOPIC?

Human capital is one of the most valuable assets for the Semapa Group, which employs 5,695 people. For this reason, Employee development and growth within the Group companies has long been a priority. Semapa invests in training and capacity building to prepare its Employees for the current and future needs of its businesses. Career paths are designed and planned, including short and medium-term objectives, and Employee performance is assessed to manage their development according to their professional goals, and in line with the needs of the company.

As a holding company, the Semapa Group's Talent Committee addresses human capital and talent issues, where policies, projects and initiatives concerning the Group's Talent Management are presented and discussed.

In 2021, the Human Resources Working Group worked more intensely, holding regular meetings to share initiatives between companies and discuss common issues. This activity has done much to bring companies closer in terms of people management practices and working collaboratively.



ASSOCIATED IMPACTS

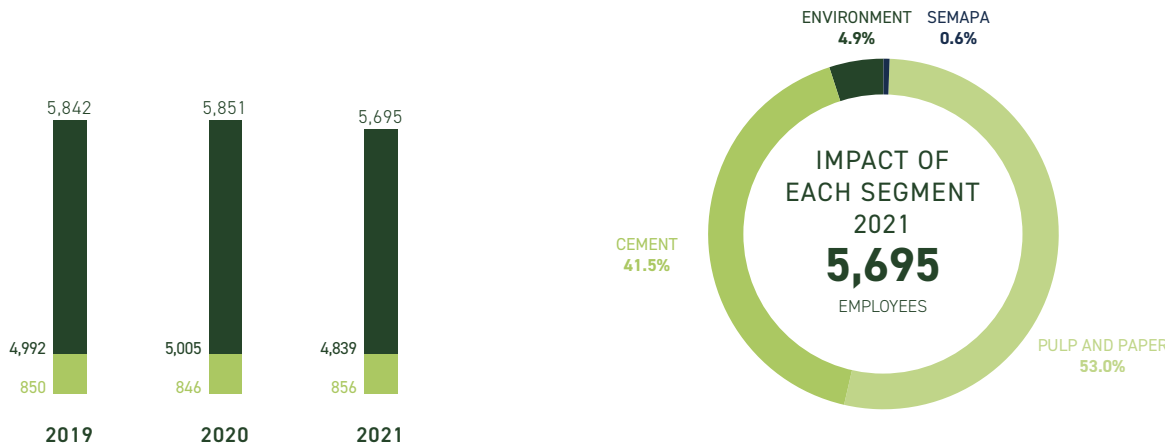
People are a company's most important asset when it comes to achieving goals set. The Group invests heavily in its human resources, implementing initiatives that contribute towards their development and recognition.

Definition of the Semapa Leadership Model in 2021 is one example of the importance placed on having a robust leadership to face today's challenges. This model, which includes a behavioural guide, will be implemented and disseminated in 2022.

The training and capacity building of people is also one of the Group's strategic pillars, which helps to attract and retain talent.



OUR PERFORMANCE

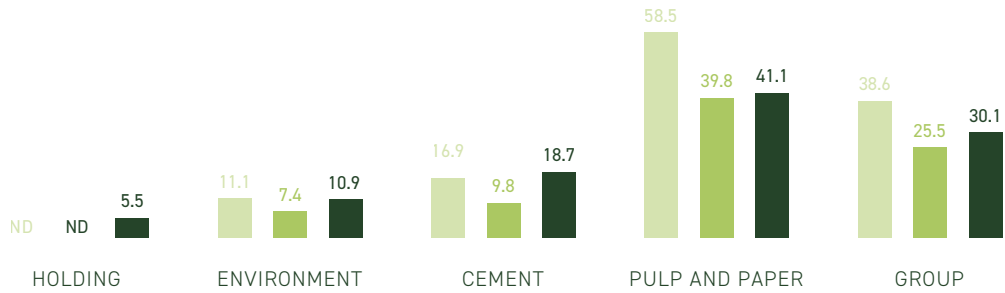


WOMEN MEN

GRI 2-7



HOURS OF TRAINING PER EMPLOYEE



2019 2020 2021

GRI 404-1



INITIATIVES FOR THE DEVELOPMENT OF OUR PEOPLE

THE SEMAPA GROUP



In 2021, not only was a model developed to serve as a behavioural guide for all leaders in the Semapa Group, but a programme was also designed and will be implemented in 2022 and 2023, enabling top managers to work on the behaviours listed in the Semapa Leadership Model and to strengthen/update their role as leaders in the difficult and challenging times in which we live. Additionally, the Semapa Group developed two initiatives in partnership with its subsidiaries worthy of note: Talent Review and Succession Plans.

TALENT REVIEW

In 2021, an assessment was carried out of Semapa and the Group's staff in terms of their potential for growth. This process enabled the Group to create the conditions for everyone to grow in order to develop their best skills.

SUCCESSION PLANS

In 2021, the Group reviewed the succession plans for the positions of all the companies, enabling the forward-looking management and development of potential successors identified.



ENVIRONMENT SEGMENT



TALENT MANAGEMENT

In order to deepen the knowledge of talent in the technical areas, all Employees working in the manufacturing units of the different sites were mapped using the 9-box grid, which enables assessment of the performance of the Company's Employees. This initiative is designed to be periodic and updated on an annual basis, so that we can promote concrete and effective action on organisational and individual development opportunities.

In addition to this initiative, the potential successors of the Group's key executive positions were also identified, thus ensuring the future of the various critical areas in each department.

With regard to performance assessment, individual objectives to be achieved the following year were included in the assessment model for key executive positions. This model was replicated for "non-executives" in some departments, in order to promote more feedback with the teams.

TRAINING

Based on the diagnosis of training needs, 3,063 hours of training were provided in the ETSA Group in 2021:

1. We continued the training started in 2020 for drivers and assistants to increase Employee engagement with the goals of the logistics department, fostering the improvement of operational and service indicators, and reinforcing, among others, the importance of improving service, maintenance, and incidence rates.
2. We reinforced technical training in industrial activities, for Employees allocated to technical areas (pneumatics, electricity, welding, among others).
3. We increased the range of collaborative training actions supported by Office 365 digital tools.
4. In the areas of personal development, of note are the training activities in leadership and team management, and management and negotiation courses.



CEMENT SEGMENT



In 2021, the human resources team went ahead with four projects that aim to ensure that the people management principles, policies and processes at Secil:

- optimise the execution of the business strategy through people performance;
- align individual objectives with strategic and business goals;
- ensure the right people for the right job;
- attract, motivate, retain, and develop talent;
- competitively and equitably recognise and reward performance.

Three of the projects started this year are shown below, and the fourth can be found in the Chapter "Group culture and motivation".

TALENT MANAGEMENT

The aim of Talent Management is to develop a management policy and process that ensures the attraction, development, and retention of the talent required for the strategy and the business. In 2021, the focus was on the Succession Plan for key executive positions and on the definition of the formal talent management cycle and Internal Mobility Policy.

In 2021, we took important steps to promote internal mobility within the Secil Group. The groundwork of this activity includes, first and foremost, helping all Employees identify their strengths and provide training and development in areas of improvement, so that they can achieve higher performance levels and take on new responsibilities and challenges. Secondly, creating a leadership environment that promotes safe and regular feedback on and discussion of personal expectations. Thirdly, openly and regularly matching the company's needs with Employees' needs and desires.

Accordingly, the Human Resources Department promotes talks with department leaders to reinforce the search for internal talent for the positions available within the organisation. In 2021 alone, there were more than 25 mobilities in and between countries across the Group at all levels, including the Executive Board.

PERFORMANCE MANAGEMENT

Performance management ensures alignment between individual, business and strategic objectives, as well as continuous follow up and feedback and recognition of individual input. In 2021, the main outputs of performance management included: the definition of an additional EBITDA global safety objective, showing how important safety is to the Group's performance; the implementation of the Mid-Year Review, which reviews objectives with formal feedback; Year-End Training, which involves training for assessors, implementing an annual and formal discussion on professional expectations, and availability for national and international mobility.

PAY MANAGEMENT

Pay management establishes the guidelines for the compensation and benefits policy with a view to ensuring a level of external competitiveness and internal equity that attracts, motivates, and retains the necessary talent in all markets. In 2021, completion of the job grading of key executive positions are of note.



PULP AND PAPER SEGMENT



The main initiatives in 2021 included, inter alia: the reopening of development programmes aimed at empowering Employees; investing in proximity instruments, such as the performance management model, applied to all Employees; and investing in operational efficiency support programmes, aimed at encouraging greater proximity between Employees and senior management.

Work continued on the mapping of organisational functions, through the implementation of the job family model, aimed at enhancing technical careers, transparency, and simplification. Also of note in 2021 are the tools for valuing our Employees, such as training plans, salary progression plans, and benefits granted.

DEVELOPMENT PROGRAMME

Navigator has sought to develop across the board a set of skills for Employees with management and leadership responsibilities, including the development of relational skills with an impact on the management of their teams. The aim is to make the response to the following challenges more effective:

- dealing with the diversity of teams and leveraging it;
- integrating and retaining new generations;
- ensuring early knowledge transfer;
- fostering a working environment conducive to the exchange of experiences, learning, and innovation;
- communicating the business vision and providing ongoing feedforward.

In this regard, leadership training, the workshop to boost 360-degree feedback, training in communication styles, and the coaching programme are all essential initiatives to improve the balance of skills and clarify the role expected of leadership.





5.2 GROUP CULTURE AND MOTIVATION

WHAT IS THE RELEVANCE OF THIS TOPIC?

Semapa attaches particular importance to the way in which values are experienced and put into practice in the Group, echoing the founder of the Group, Pedro Queiroz Pereira, who said, "Values come before results".

The Group's largest companies have already set forth the values of each company, which are published on the respective websites. Nevertheless, the guidelines of our common values are present in our day-to-day activity, in all the companies and in all countries:

- ethics and integrity, as a way of being and of living;
- respect for people, an attitude of justice and sharing, a collaborative way of working based on trust;
- a consistent public stance that is transparent, but never ostentatious;
- a profound social and environmental awareness, which should inform all our actions;
- innovation and excellence in creating value and in our business ambition.



ASSOCIATED IMPACTS

The motivation and culture of a company are linked to human capital and the retention thereof in the Group.

Good management of motivational and cultural indicators not only has a very positive effect on the well-being of Employees, but also leads to productivity gains for the company.



INITIATIVES THAT PROMOTE CULTURE AND MOTIVATION IN THE GROUP

THE SEMAPA GROUP



SEMAPA TALKS



In 2021, Semapa held four Semapa Talks with renowned speakers, namely Lauri Reuter, "The Future of Food"; Sérgio Rebelo, "Motivation"; Peter Bakker BCSD, "Vision 2050"; and Nuno Moreira da Cruz and Filipe Santos, "Leading with Purpose". These conferences were aimed at the Group's top management and executives and each conference was attended by more than 100 Employees.

SEMAPA NEWS



Also in 2021, Semapa released a video as part of the "Semapa News" initiative, focusing on sustainability in the Group, in which it disclosed the main projects underway in this field in the different companies.

SEMAPA ANNUAL MEETING



In 2021, Semapa held its Management Meeting on "Transforming Faster" online. This initiative was attended by more than 200 managers and was important for sharing breakthrough projects, the Companies' results, and the strategic plans for the year.



ENVIRONMENT SEGMENT



Every year ETSA holds a management meeting where the Group shares its main results, the projects underway, as well as future initiatives it intends to put into practice. These meetings are attended by the Group's main executives, who are invited to share their opinions and give their input on the issues they consider relevant.

The different departments also organise an annual staff meeting, with the same objective of sharing and encouraging the engagement of all Employees.



CEMENT SEGMENT



CULTURE AND CLIMATE PROJECT

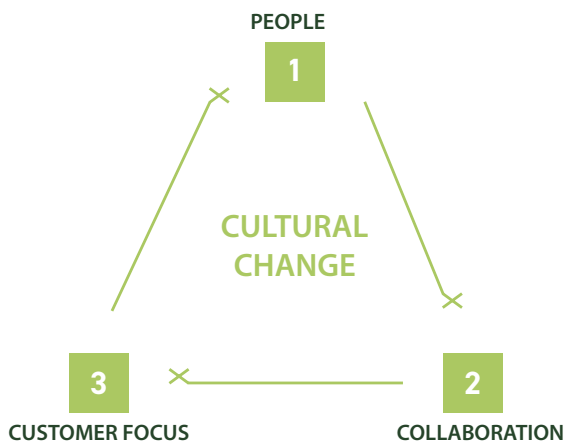
Three years after putting together the Mission, Vision and Values (MVV) for the whole Group, Secil launched the Culture and Climate project in February 2021 in the five countries where it operates – Portugal (which consolidates operations in Cape Verde, Spain, and The Netherlands), Tunisia, Angola, Lebanon, and Brazil. The diagnosis, referred to internally as "Let's talk", was attended by 84% of Employees and reinforced the notion that MVV is already perceived as the culture of the Group. The company also began to measure the Employee satisfaction index – eNPS – Employee Net Promoter Score, in which it achieved an overall score of 35, considered by the benchmark as "very good".



Given that culture is considered to be the essence of the organisation and has a strong impact on the execution of its strategy and on the results achieved, this diagnosis was carried out with the purpose of identifying the behaviours that would need to be reinforced within the MVV in order for the new strategic cycle starting in 2022 to be successful.

Thus, three pillars were defined as the focus of cultural change in the coming years:

1. **People** – developing, empowering and recognising our people;
2. **Collaboration** – fostering collaboration to leverage synergies and agility;
3. **Customer Focus** – driving change focusing on the customer.



Regarding the organisational climate, the action plans to be implemented in 2022 were defined locally for each country.



PULP AND PAPER SEGMENT

One of the objectives of The Navigator Company is to continuously monitor the main motivational drivers of its Employees, in order to improve the suitability of management practices, policies, and processes implemented.



TECHNICAL CAREER PLAN

The new career plan was completed in 2021. This allowed new discreet pay brackets to be put forward, with an impact on the career development of all operational technical staff. This plan covered 1,958 Employees and resulted in an average salary increase of 2%.

IMPROVEMENT OF BENEFITS

Last year, The Navigator Company made an effort to improve the benefits it is able to offer its Employees, such as:

1. **Education** – Navigator invests in children's future by offering allowances for kindergarten, school books, for children with special needs, and study grants.
2. **Health insurance** – Navigator provides health insurance for Employees and their families. In 2020 and 2021, this insurance was revised and now offers better conditions.
3. **Life insurance** – this insurance covers death and total and permanent disability.
4. **Sickness compensation** – in 2021, sickness compensation was extended to all Employees nationwide.

OUTREACH PROJECTS

In 2021, Navigator launched several projects that promoted greater proximity, such as:

1. **Induction and integration process** – Navigator reviewed the induction and integration process, which was relaunched as a pilot process at the end of 2021. To support this project, an induction and integration guide for managers was also developed.
2. **Performance management** – we continued to implement the performance management model, applied across the whole company, which clarifies performance expectations and promotes continuous feedback and development.
3. **Job families** – this new model allows technical and management careers to be valued fairly. It also contributes to the valuing of technical careers, thus enabling people with greater knowledge and maturity to be moved to higher positions within the organisation. This model is applicable to all Employees who are not covered by the new career plan, covering around 1,300 people.
4. **Straight to the Top** – The Navigator Company relaunched the Straight to the Top programme, through two pilots held at two different locations, aimed at mobilising and encouraging Employees to focus their innovation efforts on operations, and presenting ideas with the explicit goal of generating extraordinary economic gains for the Company.



5.3 OCCUPATIONAL HEALTH, SAFETY AND WELL-BEING

WHAT IS THE RELEVANCE OF THIS TOPIC?

Caring for in-house Employees and external staff, whether permanent or temporary, is a priority for all Semapa Group companies. Despite the different levels of maturity of the safety culture, all companies aim at achieving excellence through an interdependent approach, where each Employee takes care of themselves and of others. This safety culture has become even more relevant due to the pandemic situation, given the need to protect each Employee, thus ensuring the smooth running of all operations.

For these reasons, the Semapa Group is focused on taking a common path, with the Safety Working Group (GT) of the Sustainability Committee being the forum for sharing of experiences. This WG therefore carries out the comprehensive monitoring of trends in the various sectors, defines priority issues, and promotes common initiatives, its chief aim being to align the Group's level of excellence.



ASSOCIATED IMPACTS

A health and safety culture fully integrated across the Semapa Group means that business is conducted more responsibly, motivating Employees, improving their performance and health while reducing costs across the Group, thus ensuring a positive impact on business.

The Group's industrial activity may be associated with a short and long-term negative social impact, as work-related accidents and occupational diseases may occur. These negative impacts are the reason why the health and safety structure exists, resulting in the various initiatives described hereafter in the report. That said, the measures implemented always aim at reducing these two main negative impacts.

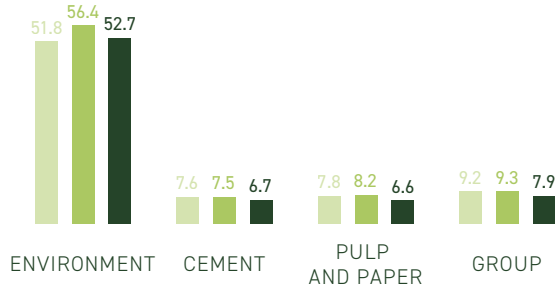
All components associated with well-being management can have positive or negative impacts, as this issue is central to Employees. The lack of a work-life balance is one of the biggest causes of stress and psychological disorders, one of the greatest risks, especially after the pandemic, leading to indefinite sick leave, with a negative impact for the Employee and the company.

None of the measures developed either at corporate level or at the level of Semapa Group companies are regarded as a cost for the Group, but rather as an investment in people, leading to positive impacts throughout its value chain.



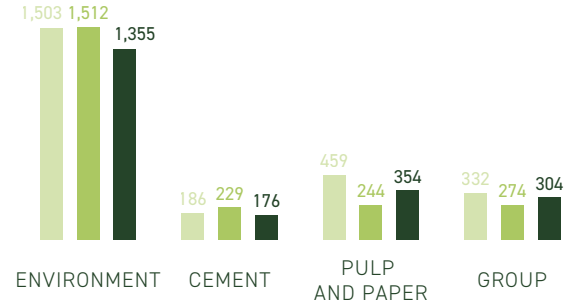
OUR PERFORMANCE

FREQUENCY RATE



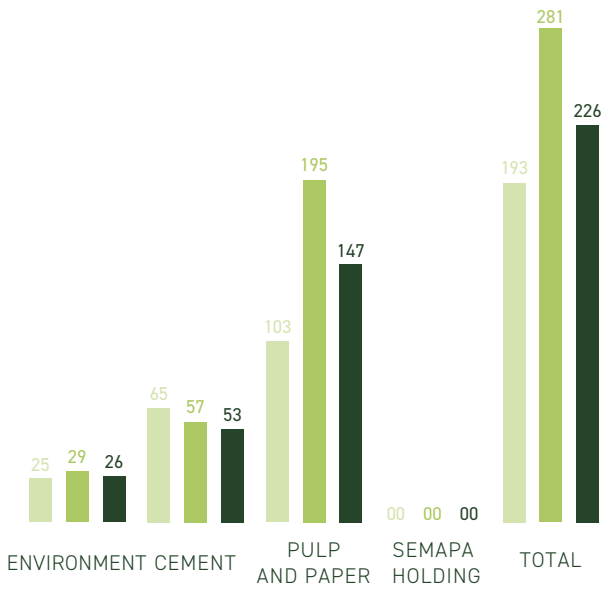
2019 2020 2021

SEVERITY RATE



2019 2020 2021

NUMBER OF ACCIDENTS



2019 2020 2021

GRI 403-9



RESPONSE TO COVID-19

In a year profoundly affected by the pandemic, the Semapa Group remained vigilant and closely involved with all its Employees, implementing its contingency plans and putting in place the measures necessary to deal with this huge challenge, namely by providing large-scale testing throughout the year, reinforcing hygiene measures, and maintaining safe conditions in the workplace.

HEALTH AND SAFETY CULTURE IN THE GROUP

THE SEMAPA GROUP

Health, safety and well-being is a material topic for Semapa and all Group companies.



In 2021, some of the initiatives implemented to improve the health and safety of the Group included the definition of safety roadmaps, safety events and discussions, Safety Walks, "Mission Zero", training in risk perception, conversation rounds, and the recognition and use of the positive safety concept.

April is safety month at the Semapa Group. Several initiatives are held at the various companies, such as the intensification of Safety Dialogues, Conversation Rounds, and various webinars, in particular on health, nutrition, and well-being.

Some topics shared in the WG that also contributed to improving the health and safety culture included:

- psychosocial risk management;
- management of access to factories and facilities by service providers;
- control of alcohol and psychotropic substances.

A concrete result of the conversations held within this WG and taking into account the particular incidence of accidents among Employees in the ETSA logistics area (approximately 54% of the total number of Employees), mainly caused in installations outside ETSA (raw material collection points), enabled the design of an action plan, some actions of which have already been implemented, which we hope will help reduce accidents in this area.

The safety events initiative is common across the companies, addressing actual incidents that have occurred at either of the Group's companies.

ENVIRONMENT SEGMENT



THE ROAD TO SAFETY

ETSA is developing what it calls the Road to Safety, which, despite the pandemic, in 2021 moved forward, founded on three solid principles:

- 1. Being able to work safely;**
- 2. Knowing how to work safely;**
- 3. Wanting to work safely.**

ETSA works together with all areas of the company to improve infrastructures and equipment, using the best technologies available, innovating, developing new processes, updating and adapting working methods and procedures, so that the principle of 'Being able to work safely' is a constant in all our units.



ETSA is also developing a training activity designed to give all our Employees the necessary skills, both at a theoretical and practical level, which will enable them to 'Know how to work safely'. This learning also results from the awareness of the consequences and causes of the accidents and incidents that occurred. These are factors to which ETSA pays careful attention, as they allow the broadening of the knowledge necessary to know how to improve safety and health conditions in its activities.

However, it will never be possible to move forward on the road to safety if we do not offer a motivating environment, urging everyone to be aware that they are all part of ETSA, and that there has to be a cohesive safety culture. In addition to being able and knowing how to work safely, everyone should 'Want to work safely', regardless of their role in the Company. Everyone should know how important it is to move forward on this road to behavioural safety as well.

With the effort made by the Company to Be able and Know how to work safely, and with the commitment of the Employees to Want to work safely, ETSA will be able to move resolutely ahead on its Road to Safety.

CEMENT SEGMENT

CONSEQUENCE MANAGEMENT

Secil has had a consequence management system in place since 2020. This policy aims at defining general criteria for recognition or penalisation in case of incidents – accidents, near misses, or other observed situations.



A work accident assessment committee has been set up in each country to determine whether Employees involved in these situations, taking into account their behaviour, should be penalised or recognised, including their leaders at the various levels.

In 2021, Secil aimed to reinforce recognition rather than penalties in its consequence management and thus strengthen the Positive Safety programme. As a result, the company recognised many of these cases throughout the year, in all countries.

The reporting of near misses, now perceived by all as "gifts", were also recognised and encouraged throughout the Group.

POSITIVE SAFETY

Safety has long been associated only with negative events – accidents at work, fatalities, failures, mistakes, violations, non-compliance, lack of attention, distraction, etc. Therefore, in 2021 we sought to reinforce positive safety.

We know that in order to build the desired path in safety culture, one of the main tools is positivisation, that is, we need to be increasingly more prepared to identify what is right and recognise it. In fact, although we do far more things well than badly, we tend to reinforce and value what is wrong. The Go Card is our tool for making safety positive and contradicting this principle. Praise is 20 times more effective than criticism.

Positive feedback makes the processes of changing habits and consolidating good practices much stronger and more rewarding, not only for those who are recognised, but also for those who recognise. In the end, communication, trust and teamwork are positively influenced.

The combination between identifying and correcting problems, and also praising and recognising achievements makes it possible to implement and preserve a strong safety culture with a focus on care.

PULP AND PAPER SEGMENT

TOWARDS MISSION ZERO

Navigator continues to focus on promoting a culture of safety and has defined the Mission Zero Strategy, which will be implemented between the 2021 and 2023. This strategy has an associated plan that will be regularly and periodically monitored by the Executive Board, the Area Director, and the Company Directors.



PELA SUA SAÚDE
E SEGURANÇA

MONTHLY SAFETY REPORT

Navigator has developed what it refers to as a monthly safety report. This report serves as a tool that enables the setting of proactive goals and facilitates the detailed monitoring of the overall outcomes, not only by industrial site but also by forest area, identifying causes and the main actions underway. In 2021, a review was also carried out to standardise safety signage, ensuring a common layout at all industrial and forestry facilities.

THE HEALTH OF OUR EMPLOYEES

Navigator conducted a major study to reassess the state of health of its Employees, covering more than 800 workers.

This study chiefly analysed their nutrition and diet quality, work-related injuries, level of occupational and leisure physical activity, and ability to work. Mental health components were also assessed, especially during the peak pandemic phase, as well as social aspects (family conditions, such as caring for others).

The results obtained in this broad assessment will allow us to adjust the actions to be developed in the field of occupational health over the next two years.





10



PROTECTING THE PLANET



6 PROTECTING THE PLANET

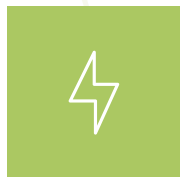
2021 IN NUMBERS



66,657,033 m³
water collected



Emissions (scope 1+2) tCO₂
4,748,987 tCO₂



60,636,875 GJ
energy consumption



54,054 ha
Areas near protected areas or with a high biodiversity index



Raw materials consumed
23,979,157 t
19.6%
raw material from renewable sources



53.7%
of energy from renewable sources



6.1 WATER MANAGEMENT

WHAT IS THE RELEVANCE OF THIS TOPIC?

Water management is one of today's major challenges, as it is a scarce resource shared by all. However, between anthropogenic activities and nature, this resource, although renewable, is limited to the amount available on the planet. Population and economic growth has put a lot of pressure on this resource; it is estimated that by 2030 water consumption will correspond to 40% of the available water on Earth.

The crossover of various factors such as increased consumption, climate change impacts, and the deterioration caused by human activities is creating unprecedented stress levels. Semapa monitors this issue through the Sustainable Resource Use Working Group, sharing best practices among the subsidiaries, since they all contribute to the impact on this resource through their different activities. There is a common alignment of all the companies, with the aim of managing and minimising impacts on water. At the global level of the Semapa Group, the pulp and paper industry makes a very significant use of this resource and has been reinforcing its actions in recent years to minimise its impacts.



ASSOCIATED IMPACTS

Water management is of utmost importance for the whole Group, especially for The Navigator Company, whose business model depends on this resource.

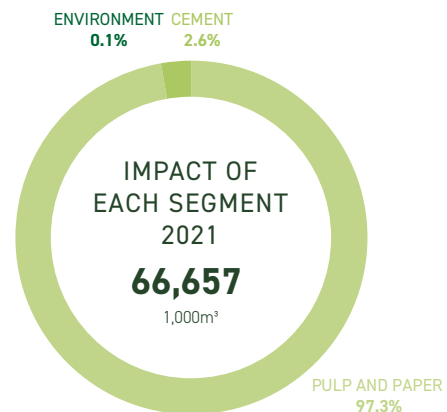
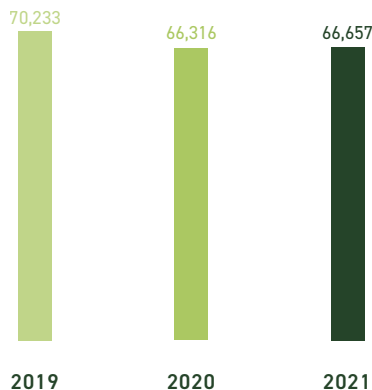
By recognising the importance of water not only for the business but also for everyone, The Navigator Company is cognizant of its use, developing measures to reduce specific water consumption. A good example of this concern is the PRUA (Water Reduction Programme) project, which maximises the reuse and recovery of process water, as well as the management and optimisation of water in all manufacturing activities.

The environmental impacts resulting from poor water management may result in environmental, social and economic losses for the Group and its Stakeholders.



OUR PERFORMANCE

WATER WITHDRAWAL



VOLUME OF WATER (X 1,000 m³)

GRI 303-3

INITIATIVES FOR BETTER WATER RESOURCE MANAGEMENT

ENVIRONMENT SEGMENT



ETSA companies use water primarily for producing steam and washing and disinfecting raw material collection facilities, equipment, and vehicles.

The water used is from the public supply and also sourced from catchment boreholes. Water consumption is monitored in all units on a daily basis and a reduction plan is in place, followed up by an analysis of the associated KPIs.

All steam consumption installations are equipped with automated condensate recovery systems (SARCs). At the Loures facilities, this system was replaced by more modern and more efficient equipment, avoiding the loss of flash steam by recovering high pressure condensates.

CEMENT SEGMENT



The cement manufacturing process requires water for cooling machinery and equipment, for conditioning kiln gases, and for cooling the cement mills. As the cooling systems of machinery and equipment work in a closed circuit, industrial water can be used and reused, significantly reducing process water consumption and minimising the production of liquid effluents. Water is also used for washing, wetting pathways to reduce diffuse emission of particles, the irrigation of green areas, and in the landscape recovery of quarries. In addition to industrial purposes, water is also used for domestic use in the social facilities supporting the operations.

In 2021, the installation of smart meters for monitoring water consumption at the Gabès plant in Tunisia was completed.

With a view to managing water more efficiently, internal guidelines were developed at corporate level for the cement plants, specifying the requirements for monitoring and measuring water consumption, as well as the most relevant performance indicators for the business.

PULP AND PAPER SEGMENT



Water is an essential resource for Navigator's processes, both for producing pulp using the Kraft process, and for printing and writing paper.

In the production process, water consumption is essentially linked to the pulp transfer systems and the washing of the different stages of the manufacturing process.

Given the volumes of water used and the consequent effluent discharge flows, efficiency in the use of this natural resource is transversal to the Company's industrial activity, with some results already achieved, but chiefly now focused on the implementation of projects to reduce consumption and optimise industrial operations.



WATER REDUCTION PROGRAMME (PRUA)

Detailed plans have been drawn up at all Navigator's industrial units for the implementation of a number of measures, including investment projects and measures to change procedures, with a view to achieving at the end of each year a reduction in water consumption that, as a whole, will allow the Company to achieve the goals set out in the roadmap by the end of 2030, such as a 33% reduction in specific water consumption, having 2019 as the base year.



DEFINITION OF STRATEGIC GOALS FOR REDUCING WATER CONSUMPTION AT INDUSTRIAL UNITS

Multiannual programmes were defined throughout the year to reduce water consumption at the pulp and paper production units, setting out specific consumption targets to be achieved in the medium term.

We aim to achieve these targets before the end of 2025, so that we can significantly reduce our water abstraction needs, reaching levels which are considered very good in European peer benchmarking.

Thus, levels of progressive efficiency in the use of water resources were defined, which will enable a significant reduction in water abstraction with savings in the final effluent treatment operation.

WHITE WATER TREATMENT PROJECT FOR PAPER MILLS

Navigator, in partnership with FCT NOVA, developed a project to install microfiltration units to treat "white water" from paper mills.

"White Water" is the vehicle for transporting cellulose fibres and other components for manufacturing white printing papers, which, given the concentration of products, need to be periodically purged.

This project will enable the reduction of industrial water abstraction, and improve the specific consumption of our white paper manufacturing units.



6.2 CIRCULAR ECONOMY

WHAT IS THE RELEVANCE OF THIS TOPIC?

Circular economy has been a topic on the Group's agenda in recent years, and has been discussed within the framework of Semapa's circular economy, to enable the sharing of best practices between the companies. As the Group is primarily industrial, the circularity, reuse and recycling of materials has made it possible to obtain high gains in terms of efficiency in the consumption of resources and, consequently, economic gains. All companies are focused on exploring the opportunities that this economic model can bring to their value chains.

ETSA is one of the best examples of a circular economy, with a business model based on the principles of circularity between industries, through the rendering of by-products from the food chain for the production of green energy, but also for the manufacture of feed and fertilisers. Navigator's production model in the pulp and paper segment makes good use of its by-products, from the recirculation of chemicals used for pulp and paper production to the use of biomass resulting from the preparation of wood to produce its own energy. Finally, Secil which, as part of the cement industry is responsible for the largest share of the Group's consumption of raw materials, has a value chain that presents several opportunities in terms of circularity with the incorporation of recycled raw materials and the use of alternative fuels to replace fossil fuels.

ASSOCIATED IMPACTS

The Semapa Group's activities have a wide range of impacts in terms of circular economy, given that the Group comprises three different industrial segments (environment, cement, and pulp and paper).

In the environment segment, a rendering process is in place at ETSA, which is at the heart of the circular economy, more precisely the circular bioeconomy. Rendering is the recycling of food by-products, avoiding the release of GHG emissions into the atmosphere, that would otherwise be disposed of and decomposed in landfills, releasing methane and nitrous oxide, two gases with a high greenhouse effect.

In the rendering process, by-products are processed and transformed into high added value products for the manufacture of compound feeds (pet food and livestock feed) and fertilisers, and for the direct and indirect production of green energy (biodiesel), thus avoiding the use of other resources with a higher carbon footprint, closing the nutrient loop and minimising the loss of natural materials.

Within the scope of its activity, ETSA applies the best available techniques to its processes, namely through the use of renewable fuels, the improvement of energy and water efficiency.

In the cement segment, Secil's main potential negative impacts are those associated with the cement industry, on the one hand due to the consumption of its raw material (limestone and marl) which is not renewable and, on the other, due to the energy intensity of its process, with high fossil fuel consumption.

With regard to raw materials, Secil is taking action to incorporate, where possible, waste or by-products from other industries into its manufacturing process, in the crushing, firing or cement grinding stage, promoting the replacement of natural raw materials with secondary raw materials rich in the oxides required for production. In respect of fossil fuels, Secil already has a remarkable replacement rate of fossil fuels with alternative fuels, such as tyres or refuse derived fuel (RDF).

With regard to the circular economy, the cement industry is a positive example since the main cement manufacturing process does not produce solid or liquid refuse, and all material inputs are integrated during the firing phase into the clinker molecular structure, thus generating no waste or ash.



The small volume of waste generated is collected and upscaled. Cement, for example, is chiefly applied in concrete, which has a long life cycle, at the end of which it can be fully reused, through the processing of construction waste, to be reintroduced into the manufacturing process either of cement, as a secondary raw material, or concrete as a substitute for virgin aggregates, without new thermal consumption.

The water used in the process is essentially applied to cool the system, operating in a closed circuit, with only thermal evaporation losses. It is a dry process, with low water consumption per tonne of material produced.

This circularity of materials leads to long-term environmental benefits, thus avoiding the exploitation of primary natural resources and additional energy expenditure.

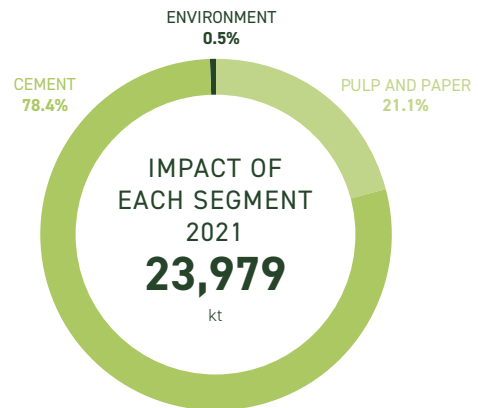
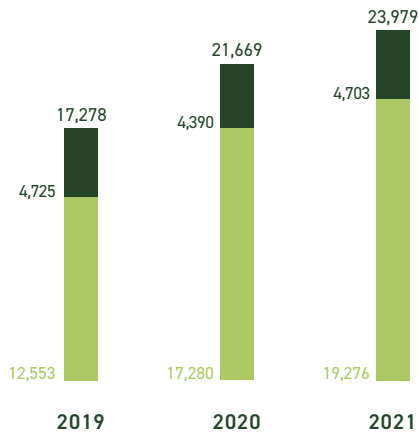
In the pulp and paper segment, The Navigator Company's activities are based on sustainable resource management, one of the pillars of its strategy for creating value responsibly. The Navigator Company promotes the management of adverse material aspects and the maximisation of beneficial material aspects, with a view to minimising the impact on the depletion of resources and encouraging a reduction in the production of waste, its reincorporation in production processes or the internal recovery of waste, namely in energy production processes, and to minimising the use of virgin raw materials and waste and effluent loads, and promoting the replacement of fossil fuels with renewable energy sources.

However, The Navigator Company sometimes faces positive and negative impacts as a result of the optimisation of some production process stages, as is the case of the recent PO3 optimisation project at the Figueira da Foz site. As previously stated, this project enabled an increase in pulp production levels, but made it impossible to process the total lime sludge generated, resulting in a surplus of this by-product, despite also contributing to a decrease in the production of biological sludge thanks to the energy recovery of this waste. These situations require The Navigator Company to constantly seek solutions, synergies, and symbioses, with a view to balancing and increasing the circularity of the waste generated by its operations, thus ensuring high recovery rates.



OUR PERFORMANCE

CONSUMPTION OF RAW MATERIALS



kt

GRI 301-1

RAW MATERIALS NON-RENEWABLE RAW MATERIALS RENEWABLE

THE CIRCULARITY OF OUR VALUE CHAIN

THE USE OF SECONDARY RAW MATERIALS

The by-products of other industries enter our production cycles as raw materials



SUPPLIERS



PRODUCTION

THE USE OF ALTERNATIVE FUELS

We produce energy through alternative fuels in the place of fossil fuels, which may be renewable, such as biomass, or through refuse derived fuels (RDF)



THE USE OF RAW MATERIALS FROM RENEWABLE SOURCES

Some of our production processes use raw materials from renewable sources



PRODUCTS

HIGHLY RECYCLABLE PRODUCTS

Some of our products are recyclable at the end of their life cycle



INITIATIVES TO REDUCE WASTE AND INCREASE THE CIRCULARITY OF MATERIALS/PRODUCTS

ENVIRONMENT SEGMENT



As an economic operator integrated in a circular economy business model, the ETSA Group recently accepted the challenge to participate in a project to collect used coffee pods, for the correct disposal of this waste.

This new activity has several dimensions relevant to the Group. On the one hand, this is a new raw material that adds value to the current portfolio, and proves that it is able to add new lines to the services it provides. On the other hand, it consolidates the competitive advantage associated with the capillary network of collection it has built, which currently comprises more than twenty thousand collection points throughout the country. Finally, it reinforces its position as a circular economy operator, in this case promoting the reuse of plastic, aluminium, and coffee waste, the latter having very interesting properties to be integrated in organic compounds.

Coffee pods are often considered as packaging and separated in the yellow recycling bin (in Portugal, used for plastics, aluminium, Tetra Pack packaging, etc.). However, despite being made of plastic and/or aluminium, these should not be considered as packaging and have a specific destination. They end up being sent for recycling in a specific circuit where, after the coffee waste is removed (for subsequent composting), plastic and aluminium can be recycled.

Thus, it is possible to minimise the environmental impacts resulting from the improper processing of coffee pods, while at the same time raise funds for charitable institutions following the recovery of these products.



CEMENT SEGMENT



SUSTAINABLE BUSINESS AWARD

Secil saw the contribution of one of its products to decarbonisation and circular economy recognised by receiving, in Portugal, the Sustainable Business Award for the concrete solution with cork used in the construction of the Lisbon Cruise Terminal. Developed in partnership with architect João Luís Carrilho da Graça, Amorim Revestimentos and ITECONS, this solution enables savings in virgin, non-renewable natural resources, since it reuses waste from the cork industry as a secondary raw material in the production of concrete, improving its lightness and thermal and acoustic insulation properties, while maintaining its structural strength.

NEW PRODUCT - LOW CARBON CLINKER (LCC)

In 2021 Secil also continued the study and implementation of Low Carbon Clinker, a new product which consists of adding clay to clinker in the cooling phase. As the clay is fired by adding it to the clinker at high temperature, without the need for other fuels, the process allows for an increase in the quantities of material produced, thus reducing energy consumption per unit produced. This low carbon clinker maintains all the physical-chemical properties of conventional clinker, with significant energy reduction in the process, and therefore in carbon emissions. This indirect effect in helping to fight climate change was the topic presented by Secil in the panel on "Decarbonising the Economy" at the BCSD Portugal Annual Conference.



PULP AND PAPER SEGMENT



In 2021 The Navigator Company continued to optimise and improve its processes to ensure the efficient use of resources and, at the same time, promote the circularity of materials and recovery of the associated waste. To this end, it continued the lines of action underway and maintained industrial synergies with other sectors of activity that use its waste as secondary raw materials instead of virgin raw materials, in order to boost the circular economy.

In 2021, it established several strategic partnerships to extend the applicability of the waste generated and increase the circular flow of these materials, which is expected to be consolidated in 2022. Navigator's work towards a circular economy was the topic at one of the editions of BCSD Portugal's "Online Sustainability Conversations".

WASTE

The PO3 optimisation project at the Figueira da Foz industrial site illustrates the high potential for circularity in the pulp and paper production process: in 2021, the production of biological sludge dropped by 80% due to black liquor being incorporated in the evaporation stage, with energy recovery of organic material in the recovery boiler.

In order to cope with the increased production of calcium carbonate sludge resulting from rising pulp production levels at the Figueira da Foz unit, and the pressure placed by the PO3 on the chemical recovery process, in 2021 Navigator continued to partner with Specialty Minerals Inc, enabling 1,650 tonnes of this secondary raw material to be forwarded for the production of precipitated calcium carbonate (PCC), a mineral additive incorporated into Navigator's printing and writing paper (UWF).

Also noteworthy is the positive impact of the declassification of the sand produced in the Navigator's fluidized-bed biomass boilers as a by-product, allowing it to be incorporated into other industrial processes as a substitute for natural source sand used in construction materials. The expansion of the partnership with Secil Britas and Saint-Gobain in Aveiro to all its manufacturing units has enabled Navigator to double the flow of this by-product to be incorporated into the construction industry (around 21.5 thousand tonnes), to increase the circularity of the sand and to minimise disposal in landfill.

CIRCULAR BIOECONOMY

The link between the bioeconomy and circular economy is the basis of Navigator's business. The Company thus subscribed the "CEO Guide to the Circular Bioeconomy" (https://bcsdportugal.org/wp-content/uploads/2021/02/CEO-Guide-to-Bioeconomy_PT-digital-final.pdf) in 2021, published by BCSD Portugal, aimed at promoting a greater understanding of the concept and opportunities of the circular bioeconomy for the private sector by sharing an example thereof. 2021 also saw Navigator join the Circular Bioeconomy Alliance (CBA), set up on the initiative of the Prince of Wales, where Navigator has been working with the European Forest Institute.



6.3 CONSERVATION OF BIODIVERSITY AND ECOSYSTEM SERVICES

WHAT IS THE RELEVANCE OF THIS TOPIC?

Our dependence on biodiversity is clear: all resources such as water, food, raw materials and energy result from interactions with nature and the services they provide to us. For the Semapa Group, the importance of maintaining these interactions is clear, as is the impact it may have on our activities. Aware of this, Semapa created the Biodiversity Working Group, putting this topic on its agenda in order to work globally with all subsidiaries.

In recent years, the subsidiaries have stepped up efforts to minimise the impact of their activities on the conservation of biodiversity and ecosystem services, attaching increasing importance to so-called natural capital. The greatest responsibility on this topic is centred on Navigator and Secil companies, since their activities, principally in obtaining raw materials, directly impact areas with high biodiversity value. Both companies have a number of initiatives underway to maintain ecosystem services and for biodiversity conservation.



ASSOCIATED IMPACTS

To protect and manage biodiversity, first we need to know it and understand its importance and state of conservation. Both Navigator and Secil have identified the potential positive and negative impacts on biodiversity.

The following negative impacts have been identified:



- **Navigator:** disturbance of conservation values, including biodiversity (quantitative change or change in state of conservation), siltation of water courses, reduction in water quality, change in landscape.



- **Secil:** visual and ecological impact, degradation of ecosystems, habitat fragmentation, removal of soil and plant cover, reduction of animal refuges/food, changes in relief and hydrology, and pollution (dust).

The positive impacts include the contribution to knowledge on the subject (with the production of georeferenced data resulting from monitoring); the restoration of ecosystems affected by the activities; the promotion of scientific research; and partnerships with academia or other specialists.

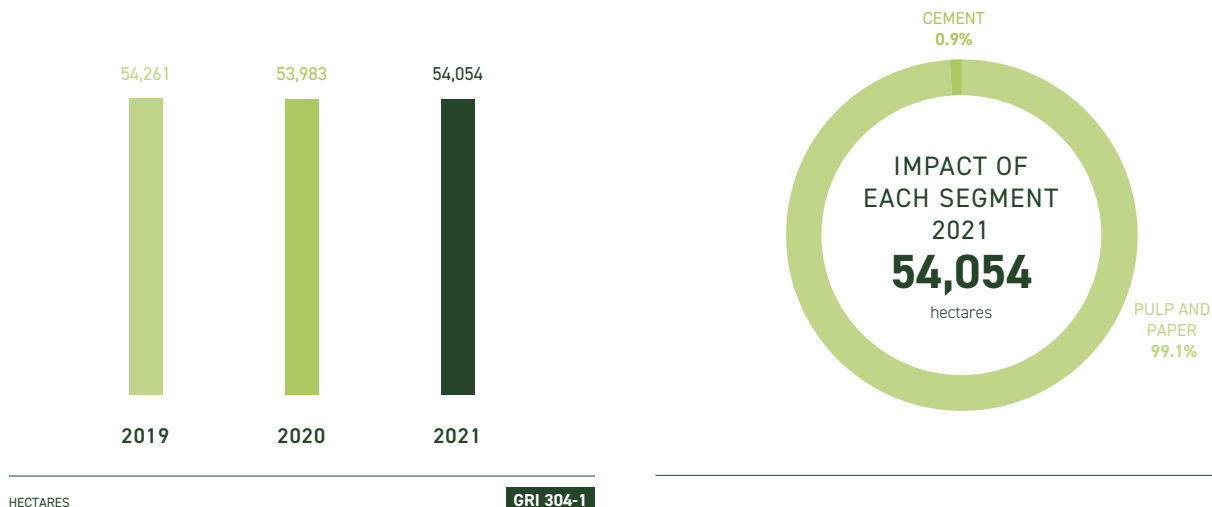
Navigator has defined measures to prevent and mitigate potential negative impacts, as well as measures to help maintain or improve existing biodiversity and the state of conservation thereof. These measures are implemented in forestry projects and operations, from the planning to the execution stages. No significant impacts were recorded in 2021.

As regards Secil, the requalification measures have a more significant role in the quality of habitats.



PERFORMANCE

AREA MANAGED BY THE GROUP



INITIATIVES FOR BIODIVERSITY CONSERVATION AND TO INCREASE NATURAL CAPITAL

The genetic diversity of species of fauna and flora and their habitats, and the relationships between them are the basic elements that make nature and its ecosystems the source of various raw materials and services essential to life and human activities.

The use of natural resources, renewable or non-renewable, is at the core of the Group's activities, particularly in the case of Navigator and Secil. Both companies have developed strategies to assess and mitigate their potential impacts on biodiversity and ecosystem services, at landscape level, and to manage these values with a view to their conservation or restoration.

The initiatives concerning biodiversity and the development of natural capital are presented below according to the Group's three main areas of activity in this area: 1) knowledge; 2) requalification, and 3) dissemination.

CEMENT SEGMENT



Secil is aware of the impact that mining activities can have on the landscape and biodiversity, and of the time it would take for these areas to recover spontaneously (some hundreds of years). Therefore, the company has developed various strategies that are reflected in its Quarry Recovery Plans and Action Plans for the Promotion of Biodiversity.

In 2021, Secil continued its activities under these Plans, especially in areas of high conservation value, with the aim of minimising impacts and accelerating the natural colonisation process. The recovery of the landscape is not only for aesthetic reasons, but also for important conservation purposes, achieved through programmes aimed at the restoration of the structure and functioning of plant and animal communities and of original ecosystems.



KNOWLEDGE

For Secil, the partnerships established with universities are essential for the application of scientific knowledge and applied research in the recovery process of Secil's quarries. Such is the case of the partnership established with the Faculty of Sciences of the University of Lisbon (FCUL), under the scope of which a large team of researchers has been carrying out scientific monitoring of the areas recovered from the Outão quarries as part of several projects. In light of continuous assessment and research and implementation, adaptive ecosystem management has been promoted based on the resilience assessment of over 30 years of ecological restoration at Secil-Outão. The team has faced several challenges in this period, namely:

- soil quality;
- plants to be used in revegetation (suitable species, origin, production, survival, their functional role, interactions established, etc.);
- plant community resilience to disturbance;
- comparison with the reference ecosystem in terms of biodiversity;
- restoration of the structure and functioning of the ecosystem;
- provision of ecosystem services exploited by man.

REQUALIFICATION

The Wildlife Action Plan has also pursued the following objectives:

- create habitats of value for biodiversity;
- provide attractive conditions (vegetation management, water availability, and shelters for animals) for the colonisation thereof in the restored areas;
- create conditions for animals to have access to rehabilitated areas – connectivity.



DISSEMINATION



Also of note is Secil's participation in 2021 in the "We Value Nature 10-Day Business Challenge Event", with a presentation on the topic "Integrating biodiversity value in quarry restoration: Linking business and applied science" (<https://wevaluenature.eu/10-day-challenge-previous-sessions>).

PULP AND PAPER SEGMENT



Navigator is aware of the importance of local management of its areas to ensure a harmonious relationship with communities and the surrounding environment. To this end, it has integrated a conservation strategy into its forest management model that combines prior assessment of the potential environmental and social impacts of the operations identified as having the greatest impact, with a view to ensuring adequate compatibility between production and conservation measures, and an annual biodiversity and ecosystem services monitoring plan.

In 2021, the annual fauna, flora, habitat and water monitoring plan was carried out, with around 12% of the managed forest area still making up areas of conservation interest, and 4,075 hectares listed as habitats protected by the Natura 2000 Network. In the spring and summer, Navigator monitored six properties under its management within the National Network of Protected Areas, namely in Valongo and Monchique. Following on from the work begun in previous years, around 54 hectares were restored in order to maintain or improve the state of conservation of natural and semi-natural habitats.

CONSERVATION

Bird monitoring has provided important information. During autumn and winter, nine nesting sites of the Bonelli's eagle (*Aquila fasciata*) were monitored, with two eagle nestlings nesting in one of them; the successful breeding of one black stork (*Ciconia nigra*) in its nest was monitored, and one goshawk nest was identified, also with breeding success. It was also noted that of the more than 40 nest boxes placed in one of their properties with the aim of creating better conditions for the reproduction of insectivorous species (e.g. the tit and tree-creeper), and also for the control of cork oak pests, the majority (34) were occupied by the great tit (*Parus major*), the Eurasian blue tit (*Cyanistes caeruleus*), and the Eurasian nuthatch (*Sitta europaea*).

REQUALIFICATION

For Navigator, partnerships are also essential to ensure a combination of areas of activity and to boost the success of projects. In an informal partnership with the Faculty of Science of the University of Lisbon, Navigator is overseeing the development of Master degrees in the field of biodiversity gains in land parcels previously occupied by eucalyptus and which are at different stages of restoration. The aim of this partnership is to analyse the outcome of the implementation of ecological restoration actions, aimed at restoring fragments of native habitats in plantation areas, as a tool to mitigate potential impacts on the biodiversity of these areas located in the Vicentine Coast and in the Southwest Alentejo Natural Park.

These areas are particularly important in the Mediterranean context, as water availability is a limiting and crucial factor for the survival of many species in the summer period, and wetlands can act as ecological corridors or source areas for the colonisation of new habitats. Preliminary results indicate that the areas under restoration have average captures of 5.5 individuals per site, compared to 3.5 in eucalyptus, regarding the analysis of the micromammal community.



DISSEMINATION



Case Study - Navigator's action to promote the restoration of areas in the Monchique Special Areas of Bird Conservation (SAC) was one of the case studies illustrating the document supporting the United Nations Decade on Ecosystem Restoration, prepared by the WBCSD's Forest Solutions Group (<https://www.wbcd.org/download/file/12253>).



Navigator co-hosted, sponsored and took an active part in one of the panels of the BCSD Portugal 2021 Annual Conference, focusing on the topic of "Sustainability: challenges for the 20-30 decade". Held in the wake of COP26 and two years after the European Green Deal, the panel, with the title "Acting for Nature", brought into the debate issues such as the challenges of the loss of natural values, and the role of governments and businesses in the transition to a climate-neutral and nature-positive economy, among others (https://bcdsportugal.org/wp-content/uploads/2021/07/Apresentacao-Conferencia_Anuual_2021_BCSD_Portugal_Sponsors_VF.pdf).



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COMMUNITY ENGAGEMENT



7.1 POSITIVE IMPACT

WHAT IS THE RELEVANCE OF THIS TOPIC?

Corporate social responsibility is one of the essential structuring elements of Semapa's performance, both in the carrying out of its direct activity, as well as in the activities carried out through its main subsidiaries, Secil, Navigator, and ETSA.

Heir to the long business tradition of philanthropy and the patronage of the Queiroz Pereira Family, its key shareholder, Semapa develops its own initiatives and supports social responsibility projects in line with the UN Sustainable Development Goals. All these initiatives have a positive impact on the communities where manufacturing and forestry operations are carried out, with about 110,000 ha of forest located in various municipalities around the country. The Group marks its presence with different segments of the population, making a huge contribution to the territorial cohesion of our country.

This is also the modus operandi of the Social Responsibility Working Group, seeking to align the Group on social responsibility matters.



ASSOCIATED IMPACTS

Social responsibility has always been at the heart of the Semapa Group. As this Group is a national reference group, its duty is to share its value with its Stakeholders, something that Semapa has not neglected.

This material topic is mostly associated with impacts that are essentially positive, as all projects are related to community support.

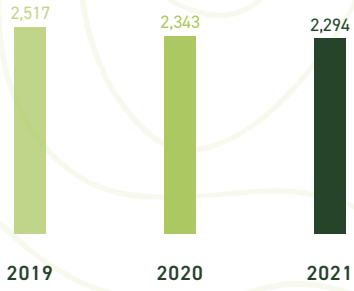
Examples of this distribution of value with its Stakeholders by the Semapa Group include the Nossa Senhora do Bom Sucesso Foundation, founded in 1951, and the establishment of the Pedro Queiroz Pereira Cultural Centre in 2020.

However, the lack of or inadequate relationship with local communities can have negative impacts on reputation and image, as well as on the local economy.



7.2 OUR PERFORMANCE

INVESTMENT IN COMMUNITY



THOUSAND EUROS

GRI 201-1 / GRI 203-1



7.3 INITIATIVES WITH THE COMMUNITIES AND FOR COMMUNITIES

THE SEMAPA GROUP



Semapa has defined as the prime target areas of its direct responsibility the support to the Nossa Senhora de Bom Sucesso Foundation, in Lisbon, dedicated to maternal-infant health, and the Salvador Association, engaged in promoting the social integration of people with motor disabilities.

NOSSA SENHORA DO BOM SUCESSO FOUNDATION

The Nossa Senhora do Bom Sucesso Foundation has been committed to promoting health and human development since 1951. The Foundation is aware of the strategic importance of the early years of life and prioritises health education and early detection and intervention, putting into practice a child health model that inspires society as a whole.

In 2021, 7,411 people benefited from health interventions offered by the Foundation, 88% of whom were children. In particular, 16,535 consultations were provided this year, 30% of which were paediatric, ophthalmological, cardiac, hearing, and oral health screenings. These enabled the detection of deviations and changes allowing, as a rule, timely interventions, taking advantage of the ideal age for intervention.

Access was also guaranteed to everyone who sought its health services. In 2021 the Foundation and its patrons provided 8,064 free or subsidised consultations, 123 medical exams (electrocardiograms, echocardiograms, and gynaecological and obstetric ultrasounds, among others) and 22 dental braces.

Supported by scientific evidence that investing in the access to quality health care during pregnancy and the early years of life represents lifelong health gains and, consequently, brings multiple social and economic benefits for society as a whole, the Foundation and its patrons have effectively and actively contributed to building a healthier and more sustainable society.

SALVADOR FOUNDATION

The Salvador Foundation, founded in 2003 by Salvador Mendes de Almeida, operates in the area of motor disability, fostering the inclusion of people with motor disabilities and developing projects to meet associated needs.



ENVIRONMENT SEGMENT



In 2021, ETSA continued its social mission, financially supporting private charities, cultural and sports associations, and public administration agents of the communities surrounding the various business units of ETSA Group companies.

Throughout the year, ETSA supported social welfare initiatives in the local communities of Santo Antão do Tojal, Pedroso, and Seixezelo, through their respective parish councils, a sports association, the Coruche nursing home, and a private charity located in Santo Antão do Tojal that operates a home for children and young people.

ETSA also continued to provide financial support to environmental non-profit associations.

CEMENT SEGMENT



Secil has, for historical reasons linked to some of its different manufacturing origins, a track record of high social responsibility with the communities where it operates. Over the past 30 years it has also dedicated special attention to supporting the technical and scientific dissemination of knowledge in the civil engineering and architecture fields, not only through the Secil Awards, but also sponsoring seminars, conferences, technical meetings, and the publication of scientific work in these areas of knowledge.

SECIL VOLUNTEER POLICY

Given the pandemic situation and the social needs that followed, in 2020, Secil decided to commemorate its 90th anniversary with a support and volunteer work activity with the Refood Portugal Association. Because of the tribulations of the pandemic, this commemoration was extended over time involving various initiatives, giving rise to the establishment of a Corporate Volunteer Policy for Secil Employees who wish to volunteer in social activities carried out with the institutional support of Secil.

A working group made up of the founding volunteers was established, which designed and submitted a company volunteering policy, and its regulatory framework for approval by the Company. Following on from this, some activities were already carried out with Refood in 2021.

BIOMARES PROTOCOL BETWEEN SECIL AND ICNF

Secil has continued, almost uninterruptedly since 2007, the collaboration and financing protocols with ICNF with the aim of studying and restoring the sea-grass beds of the Luiz Saldanha Marine Park, adjacent to the Arrábida Natural Park.

Sea-grass beds play a critical role in promoting marine biodiversity, in providing refuge for species and for their reproduction, and also act as an important carbon sink.

Secil's long-term support for this project has enabled the ongoing scientific research work of the Centre for Marine Sciences (CCMAR) of the University of the Algarve and ISPA on sea-grass beds, providing long-term scientific data essential for defining measures to safeguard and promote this important ecosystem.



PEDRO QUEIROZ PEREIRA CULTURAL CENTRE

Being committed to socio-environmental responsibility in its activities, in 2020 Supremo Secil Cimentos inaugurated the Pedro Queiroz Pereira Cultural Centre, which aims to promote activities in the community of Adrianópolis, free of charge and for every age, focusing on areas such as education, culture, sports and leisure.

With the lifting of restrictions on social interaction, in-person activities were resumed at the end of 2021. The Centre offered nine different types of classes such as yoga, crochet, muay thai, aerobox, paper handicraft, dancing, singing, resilience group, and handicrafts. In addition to these classes, the Cultural Centre also carried out two volunteer social activities to commemorate Children's Day and Christmas, with a total of 3,759 people taking part in the classes and social activities.

PULP AND PAPER SEGMENT



FOREST PRODUCERS PROGRAMME

This programme seeks to meet the individual needs of landowners, whether Navigator's timber suppliers or not, in order to support them in the management of problems they face, as well as in carrying out their forestry project. The focus of the programme is to promote the responsible management of healthy forest areas. This support is materialised in various ways, including the preparation of the forestry project and the recommendation of technical forestry options, as well as good practices in carrying out forestry operations, minimising environmental and social impacts.

The programme, which already covers more than 4,500 hectares of targeted areas and involves more than 250 landowners, seeks to respond to their needs to improve forest management, and increase the productivity and profitability of eucalyptus stands.

This initiative does not incur costs for the landowner and promotes liaison with the different entities in the forestry sector, such as Forest Producer Organisations and Certification Groups, seeking to ensure regular monitoring of the areas for continuous improvement of forest management, as well as to encourage national wood production.

The close contact with landowners is an opportunity for disseminating and stimulating other industry projects for improving forest management, and increasing certified management areas.



IMPACT OF PROJECT MOZAMBIQUE

Portucel's investment project in Mozambique is a long-term one, involving a value chain that combines the economic dimension of the project with a solid environmental commitment and a Social Development Programme that covers more than seven thousand families in a total investment of more than 5.5 million euros.

The positive outcomes of the project in Mozambique include job creation along the value chain, with various levels of qualification and professional development, and the generation of wealth and added value for the country, along with environmental protection and investment in communities. Stakeholder engagement with the project is achieved through continuous communication, particularly with communities in the project areas, traditional leaders, government entities, and civil society organisations. For example, communication with communities was a priority action in the timber harvesting and export activities, which began in December 2020, with a view to involving these Stakeholders in the various stages of the process, some of which were carried out for the first time in 2021. Timber harvesting and export activities have had and will have a significant impact in terms of jobs and value sharing with communities, as these jobs are mostly created locally. Within the scope of Stakeholder engagement, the visits to the Company's activities by the Governors of Manica and Zambézia Provinces, who were accompanied by the district administrators of the project areas, and the visit by the National Director for the Promotion of Commercial Agriculture are of note.

NEW OPERATING THEATRE AT THE ILE DISTRICT HOSPITAL

Portucel Moçambique contributed with 150,000 US dollars for the construction of an operating theatre at the Ile district hospital in Zambezia Province, responding to a request from local authorities in a district where its forestry and social project is being implemented, bringing benefits to the communities in the surrounding areas. Health is one of the priorities of the Social Development Programme, under the pillar that aims to improve the welfare conditions of families in the project areas. Construction began in March 2021 and will benefit tens of thousands of people.





REPORTING PRACTICES



8.1 MATERIALITY AND SPECIFIC GRI STANDARDS

Process to determine material topics GRI 3-1	2- 3 OUR MATERIAL TOPICS		
Material topics GRI 3-2	GRI 3-3		Specific standards
	Identification of impacts (Associated impacts section)	Impact management (Section Spotlight items)	
The Creation of Sustainable Value	04. VALUE CREATION IN THE BUSINESS 4.1 Sustainable value creation		201
			203
			204
			308
			406
			407
			408
			409
			410
			414
			417
Business Ethics	04. VALUE CREATION IN THE BUSINESS 4.2 Business ethics		2-23
			2-26
			205
			206
			405
			407
			408
			409
			410
			414
			417
Risk Management	04. VALUE CREATION IN THE BUSINESS 4.3 Risk management		-
Human Capital and Talent	05. VALUING PEOPLE 5.1 Human capital and talent		401 404
Group Culture and Motivation	05. VALUING PEOPLE 5.2 Group culture and motivation		-
Water Management	06. PROTECTING THE PLANET 6.1 WATER MANAGEMENT		303
Climate Change and Energy	03. DECARBONISATION, A CORPORATE APPROACH		305
Circular Economy	06. PROTECTING THE PLANET 6.2 CIRCULAR ECONOMY		301
			303
			306
Conservation of Biodiversity and Ecosystem Services	06. PROTECTING THE PLANET 6.3 CONSERVATION OF BIODIVERSITY AND ECOSYSTEM SERVICES		304
Occupational Health, Safety and Well-being	05. VALUING PEOPLE 5.3. OCCUPATIONAL HEALTH, SAFETY AND WELL-BEING		403
Community Engagement	07. COMMUNITY ENGAGEMENT		2-20 2-29
Innovation, Research and Development	04. CREATING VALUE IN THE BUSINESS 4.4 INNOVATION, RESEARCH AND DEVELOPMENT		-



8.2 GRI INDEX 2021

Use statement	Semapa Group reported in accordance with the GRI Standards for the period from 1 January to 31 December 2021.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	N.A.

GENERAL CONTENT	LOCATION
GRI 2: INTRODUCTION	
Concerning the standard published in 2021	
A ORGANIZAÇÃO E AS SUAS PRÁTICAS DE RELATO	
2-1 Organizational details	
Name of the organisation: Semapa- Sociedade de Investimento e Gestão, SGPS, S.A. Head Office: Avenida Fontes Pereira de Melo, no. 14, 10º 1050 - 121 Lisboa Countries where it operates: 01. INTRODUCTION TO THE REPORT Where we are	Page 14-15
2-2 Entities included in the organization's sustainability reporting	
This Report covers the activities of Semapa and its Subsidiaries, namely: ETSA - Investimentos, SGPS, S.A. The Navigator Company, S.A. Secil - Companhia Geral de Cal e Cimento, S.A.	
2-3 Reporting period, frequency and contact point	
This report concerns the results in the period from 1 January 2021 to 31 December 2021, and Semapa publishes its Sustainability Report annually. It should be noted that the period covered by the Group's Financial Report is the same as that of the Sustainability Report. Any questions about the Sustainability Report should be directed to: investors@semapa.pt	
2-4 Restatements of information	
All changes are mentioned in the notes corresponding to each disclosure.	
2-5 External assurance	
01. INTRODUCTION TO THE REPORT About the report	Page 6
10. LIMITED ASSURANCE INDEPENDENT REPORT	Page 162
ACTIVITIES AND WORKERS	
2-6 Activities, value chains and other business relationships	
Semapa does not have direct production activities, and its suppliers are mainly providers of specialised services, with irrelevant impact when compared with the supply chain of the subsidiaries. This is a material topic for the Semapa holding company, as it is an important matter for its subsidiaries. Some initiatives are detailed in chapter 04. VALUE CREATION IN THE BUSINESS 4.1 Sustainable value creation , where further information can be found on the respective websites and/or in the sustainability reports of the subsidiaries.	Page 52

2-7 Employees

	Gender	2019	2020	2021
Permanent & Fixed Term Contract	Men	4,894	4,928	4,822
	Women	831	824	833
	Sub-Total	5,725	5,752	5,655
Temporary and trainees	Men	98	77	17
	Women	18	22	23
	Sub-Total	116	99	40
Total Employees		5,841	5,851	5,695

	Gender	2019	2020	2021
Full-time	Men	4,989	4,967	4,823
	Women	841	838	846
	Sub-Total	5,830	5,805	5,669
Part-time	Men	3	38	16
	Women	8	8	10
	Sub-Total	11	46	26
Total Employees		5,841	5,851	5,695

Note:

Concerning indicator 2-7, it is important to note that The Navigator Company and Semapa holding company do not report data on their Board members herein. It should also be noted the following have been excluded from Employees: Portucel Moçambique and ETSA's new Tribérica unit.

2-8 Workers who are not employees

In 2021, Semapa Group companies had the following workers who are not Employees: (1) ETSA: 0; (2) Secil: 1,875; (3) The Navigator Company: 14,293 and (4) Semapa Holding: 0. These include workers who entered the plant as temporary workers and service providers for cleaning, maintenance and works associated with annual maintenance stop and operation. In the case of Navigator, one-off external workers are also considered.



GENERAL CONTENT

LOCATION

GOVERNANCE

2-9 Governance structure and composition

Semapa adopts - and maintained in 2021 and 2022 - the classic monist model, with management consisting of a Board of Directors, which delegated, once again and under the applicable legal terms in 2018, management powers to an Executive Board, and supervision of the company is the responsibility of an Audit Board and the Statutory Auditor appointed by the general meeting (as are the members of the Board of Directors).

We also wish to highlight that the Executive Officers Committee was set up by the Board of Directors with effect from 1 January 2022, to assist the Executive Board within the scope of the respective delegated powers and, in particular, the duties laid down in its rules of procedure, and is also responsible for issuing non-binding opinions at the request of the Executive Board.

This (new) Committee, which was set up by the Board of Directors, comprises the (two) members of the Executive Board, in office, and the directors of Semapa. To this end, Isabel Viegas, Director of talent management and human resources, and Hugo Pinto, Director of planning, control and strategy, were appointed. As mentioned, the company's top management body is the Board of Directors (BoD), which in 2018 appointed an Executive Board, effective from 1 January 2022, which has only two (executive) directors, Ricardo Pires and Vítor Paranhos Pereira.

The Executive Board is the company's executive management body, and has performed its duties in the scope of the powers entrusted to it by the Board of Directors in 2018, e reinstated at the end of last year, after the Board of Directors reappointed the Executive Board.

It is therefore important to clarify that, at the end of 2021 and as a result of the resignation, effective as of 31 December 2021, of João Castello Branco from his functions as a director and, consequently, from his role as CEO, the Board appointed new members to the Executive Board, with effect from 1 January 2022, and appointed executive director, Ricardo Pires as CEO. Concerning the distribution of functions between the two remaining members of the Executive Board, and although the separation between functions and duties is not rigid the BoD also decided that the functions would be carried out as follows:

(i) Ricardo Pires would be in charge of development and strategic planning and investment policy, legal, corporate governance, management control, human resources and talent management and information technologies, and

(ii) Vítor Paranhos Pereira would lead the financial, accounting, tax and sustainability areas.

As mentioned before, considering the changes made to the Executive Board, the Board of Directors found it appropriate to approve the appointment of a new internal Committee, with effect from 1 January 2022, called the Executive Officers Committee, to assist the Executive Board within the scope of the respective delegated powers, by issuing non-binding opinions and performing, in particular, the duties listed in the respective operating regulations, comprising the members of the Executive Board and the directors of Semapa, having appointed on 1 January 2022 Isabel Viegas, with experience in human resources and talent management, and Hugo Pinto, with experience in development and strategic planning, investment policy and management control. Accordingly, in addition to the Executive Board, with delegated powers to manage and represent the company, the Board of Directors has set up the following internal committees to support the work of the Board of Directors and the Executive Board, which will be operational in 2022: (1) Corporate Governance Committee; (2) Control and Risk Committee, (3) Talent Committee and (4) Executive Officers Committee.

We note, however, that for the purposes of reporting information on Semapa's corporate governance practices and model for the financial year ending 2021, only the Executive Board and the following Internal Committees will be described: (1) Corporate Governance Committee; (2) Control and Risk Committee, (3) Talent Committee, and therefore the Executive Officers Committee is not described, since it was created only with effect from 1 January 2022.

More information in the Annual Report 2021 | Part 3. Corporate Governance Report | Part I - Information on Capital Structure, Organisation and Corporate Governance | B. Corporate Boards and Committees | II. Management and Supervision, paragraphs 15 and following.

**2-10 Nomination and selection of the highest governance body**

The appointment of Semapa's corporate bodies - the Board of Directors, the Audit Board, the Statutory Auditor (the latter on a proposal from the Audit Board), the Remuneration Committee and the Chairman and Secretary of the General Meeting - is the sole and exclusive responsibility of the Company's General Shareholder Meeting, as set forth in Portuguese corporate law.

However, and under the terms of the best corporate governance practices, the Board of Directors created an internal committee, the Talent Committee, with advisory and recommendatory powers in matters of appointments and evaluations, which are described in detail in paragraph 29 of the Corporate Governance Report and in the respective internal and operating regulations provided on the company's website.

The Board of Directors on the other hand approved, published on its website and maintains in force a set of "PRINCIPLES OF THE COMPOSITION OF THE GOVERNING BODIES", with the following content:

"Semapa recognizes the benefits of diversity in its corporate bodies, particularly the Board of Directors and the Audit Board, for ensuring greater balance in its composition, boosting the performance of each member and, together, of each body, improving the quality of decision-making processes and contributing to its sustainable development.

For the promotion of diversity in Semapa, the Board of Directors accepts and acknowledges the following Principles of Diversity as appropriate for the composition of the respective corporate bodies:

- Inclusion of members with distinct academic qualifications and professional experience in various areas, appropriate and relevant to the position to be held;
 - Promotion of gender diversity;
 - Inclusion of members of different ages, combining acquired experiences with new outlooks, and
 - Inclusion of members from different backgrounds or geographical origins".
- As mentioned, this topic is addressed in depth in the company's CGR.

More information in the Annual Report 2021 | Part 3. Corporate Governance Report | Part I - Information On Capital Structure, Organization And Corporate Governance | B. Corporate Boards And Committees | II. Management and Supervision

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2-11 Chair of the highest governance body

The Chairman of the Board of Directors of Semapa, José Fay, is a non-executive director.

2-12 Role of the highest governance body in overseeing the management of impacts

Strategic planning and investments policy is an area that naturally entails more intervention on behalf of the non-executive members and that counts on the substantial involvement of the Chairman of the Board.

Non-executive directors should participate in the definition, by the managing body, of the strategy, main policies, business structure, definition of the purpose and decisions that should be deemed strategic for the company due to their amount or risk, as well as in the assessment of the accomplishment of these actions.

As regards the definition of strategic planning and main policies, the company sought to incorporate and put into practice the Strategic Principles established by the company and laid down in the Corporate Governance Report. In addition, based on the aforementioned Strategic Principles, the company has set Pillars for Sustainability described in the Corporate Governance Report and the Sustainability Report.

Described in the Corporate Governance Report. It is incumbent on the BoD and the Executive Board. The processes are discussed and appraised during the year and, in particular, within the scope of issuing the approval process for the annual report and accounts, the Management Report, the Corporate Governance Report and the Sustainability Report, making any changes deemed relevant.

More information in the Annual Report 2021 | Part 3. Corporate Governance Report | Part I - Information On Capital Structure, Organization And Corporate Governance | B. Corporate Boards And Committees | II. Management and Supervision

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2-13 Delegation of responsibility for managing impacts

In the scope of sustainability, an ad hoc committee has been set up by the Board of Directors, with various working groups to address specific matters, which has developed its activity under the supervision of the Executive Board and transversally involving all the group's companies. As a result of this activity, the company publishes its "Sustainability Report" every year which, from a consolidated perspective, and in response to the legal requirements introduced by Decree Law No. 89/2017 of July 28, provides a detailed analysis of the company's approach and commitment to sustainability issues. Thus, and through this organization, Semapa's management delegates the monitoring of the management and analysis of impacts resulting from the various matters included and dealt with in these forums, in terms of sustainability, without prejudice to the reporting of its conclusions and ongoing monitoring of this area by the Executive Board. In turn, by adhering to and fulfilling the aforementioned strategic principles and according to the more detailed provisions in this Sustainability Report, the company guarantees its long-term success, and with a significant contribution to the community at large.

More information at 02. CORPORATE SUSTAINABILITY MANAGEMENT | 2.1 Governance

Page 22



GENERAL CONTENT	LOCATION
2-14 Role of the highest governance body in sustainability reporting	
<p>The Board of Directors approves the sustainability report (including material topics). The Executive Board reviews it after submission by the Sustainability Committee. If in agreement it sends it for approval to the Board of Directors.</p>	
<p>More information in the Annual Report 2021 Part 3. Corporate Governance Report Part I - Information On Capital Structure, Organization And Corporate Governance B. Corporate Boards And Committees II. Management and Supervision</p>	Page 86
2-15 Conflicts of interest	
<p>The company has a Regulation of Conflicts of interests and related party transactions, which establishes the rules that govern conflicts of interest and related party transactions to which the company is a party, in addition to the internal mechanisms that the Company has in place to ensure compliance with the international accounting standard (IAS) 24 (Related Party Disclosures). It is applicable without prejudice to the Company's obligations and of its Directors concerning Inside Information, the legal framework of company business with directors and the internal Regulation on the Reporting of Irregularities, to which we also refer and may send if deemed necessary, and other relevant legislation.</p>	
<p>This regulation was amended due to the changes arising from Law 50/2020 of August 25 and by resolution of the Board of Directors of December 16, 2020, with a favourable and binding opinion of the Audit Board, and now they include the applicable legal and regulatory framework in force on this matter.</p>	
<p>This regulation is available on the company's website.</p>	
<p>According to the Regulation on Conflict of Interest and Related-Party Transactions, the transactions between the company and related parties, qualified as such in accordance with the international accounting standards adopted under Regulation (EC) no. 1606/2002 of the European Council and Parliament of July 19, namely IAS 24 (Related Party Disclosures), are subject to the following approval procedures, to which we make reference:</p>	
<p>More information in the Annual Report 2021 Part 3. Corporate Governance Report Part I - Information On Capital Structure, Organization And Corporate Governance B. Corporate Boards And Committees II. Management and Supervision</p>	Page 86
2-16 Communication of critical concerns	
<p>In addition to the rules of procedure and functioning regulations of the bodies and committees, there is also an internal Regulation on the Reporting of Irregularities to which we also refer. As is amply described in the Corporate Governance Report, Semapa's corporate governance is based on sound principles of good and permanent coordination between the various governing bodies and internal committees and all their members, by implementing procedures for sharing information flows and holding regular meetings between the various bodies and committees (executive and non-executive).</p>	
<p>We therefore refer once again to the Corporate Governance Report.</p>	
<p>Critical concerns are discussed in the appropriate forums, namely the Board of Directors, the Audit Board and, when necessary, with the participation of the representative of the Statutory Auditor and the Control and Risk Committee, which includes two directors - the CFO/executive director, an independent non-executive director and the Director of Accounting and Taxes - and the Corporate Governance Committee, which includes the Chairman, a non-executive director and the Legal Director/Company Secretary. The main risks and concerns underlying the activity of the company and the group it heads is amply described in the Corporate Governance Report in the section on INTERNAL CONTROL AND RISK MANAGEMENT. This is a system that was implemented in 2018 and has been closely monitored, which Deloitte has supported with counselling. This topic, as noted, is described and reported at length and accurately in the Corporate Governance Report.</p>	
<p>More information in the Annual Report 2021 Part 3. Corporate Governance Report Part I - Information on Capital Structure, Organisation and Corporate Governance C. Internal Organisation II. Notification of irregularities (Whistleblowing)</p>	Page 111
2-17 Collective knowledge of the highest governance body	
<p>2021 Annual Report Part 3. Corporate Governance Report Part I - Information On Capital Structure, Organization And Corporate Governance B. Corporate Boards And Committees II. Management and Supervision</p>	Page 86



GENERAL CONTENT

LOCATION

2-18 Evaluation of the performance of the highest governance body

This topic has been detailed in the Corporate Governance Report in the respective chapter. In any case, and in an effort to streamline, introduce and simplify, we should highlight the specific process of annual performance assessment for the payment of variable remuneration to executive directors, and we refer to the relevant chapter of the Corporate Governance Report on this process.

On the other hand, there is also a self-assessment process of the BoD and its committees and their members carried out autonomously and under the relevant recommendation of the IPCG code, as provided in the Regulations of the Board of Directors and the Regulations of the Talent Committee. Therefore, the Board of Directors, monitored by the Talent Committee, shall assess annually its performance, as well as the performance of its committees and of the executive directors, taking into account compliance with the company's strategic plan and budget, risk management, its internal functioning and the contribution of each member to this end, and the relationship between the company's bodies and committees. The Talent Committee monitors the overall assessment of the Board of Directors' performance, as provided by its regulation. Evaluations are carried out with a guarantee of impartiality and independence by the bodies with competence in this area. With regard to setting variable remuneration, according to the annual performance assessment, the CEO or the Chairman, as the case may be, intervenes, as well as the Talent Committee and, finally, the Remuneration Committee, as described in the Corporate Governance Report. As for the annual assessment, it is conducted by the BoD and the Talent Committee, as described in the Corporate Governance Report. This discussion takes place in the proper forums and as frequently as deemed necessary. An example of this is the setting up in 2022 of the Executive Officers Committee, which was a response by the Board of Directors to the reshuffling of the Executive Board and because it was felt to be appropriate and pertinent to provide Semapa's Executive Board an internal consultative and support committee, thereby strengthening its operations and response capacity. This decision reflects the stance of the Board of Directors as a dynamic and critical body, which proposes changes during the year it deems relevant and appropriate, according to the specific situation of the company and its corporate governance.

2-19 Remuneration policies

2021 Annual Report | Part 3. Corporate Governance Report | Part I - Information On Capital Structure, Organization And Corporate Governance | D. Remunerations and the remuneration report.

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2-20 Process to determine remuneration

2021 Annual Report | Part 3. Corporate Governance Report | Part I - Information On Capital Structure, Organization And Corporate Governance | D. Remunerations and the remuneration report |

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The voting results are reported/published on the Semapa website at: https://www.semapa.pt/sites/default/files/assembleias/Summary%20of%20the%20Minutes%20of%20the%20General%20Meeting_0.pdf

2-21 Annual total compensation ratio

The ratio in 2021 was 19.7.

STRATEGY, POLICIES AND PRACTICES

2-22 Statement on the sustainable development strategy

01. INTRODUCTION TO THE REPORT | Open Letter to Stakeholders

Page 10

2-23 Policy commitments

01. INTRODUCTION TO THE REPORT | Our DNA

Page 12

2-24 Embedding policy commitments

04. VALUE CREATION IN THE BUSINESS | 4.2 Business ethics

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GENERAL CONTENT	LOCATION
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2-25 Processes to remediate negative impacts

2021 Annual Report | Part 3. Corporate Governance Report | Part I - Information on Capital Structure, Organisation and Corporate Governance | C. Internal Organisation | II. Communication of Irregularities and III. Internal control and risk management

Page 112

The new Regime for the Prevention of Corruption was published at the end of 2021, and regulated (under the National Anti-Corruption Strategy 2020-2024) as follows (coming into force in mid-2022): (i) L 93/2021, of 20 Dec - General Regime for the Protection of Whistleblowers - (ii) DL 109-E/2021, of 9 Dec - Creates the General Regime for the Prevention of Corruption. The main issues to be analysed and implemented in Semapa and the Group are as follows:

Implementing a whistleblowing channel and (ii) analysing which measures should be created within the scope of the program for normative compliance with these regulations and subsequent articulation with the various Directorates: (1) Plan for the prevention of risks of corruption and related crimes (PPR); (2) Code of conduct; (3) Internal training programmes on these matters; (4) Appointment of a compliance officer and (5) Creation of an evaluation system covering internal control mechanisms and monitoring of the implementation of the PPR. However, as mentioned before, this matter will only be analysed and implemented in 2022, while in 2021 the regime described in the Corporate Governance Report in the relevant chapter was in force.

2-26 Mechanisms for seeking advice and raising concerns

See, in particular, in the 2021 Corporate Governance Report the sections on Risks, Whistleblowing, Conflicts of Interest and Related Party Transactions. See also the Regulations on Ethical Principles of the Company that are published on our website.

More information in the 2021 Annual Report | Part 3. Corporate Governance Report | Part I - Information on Capital Structure, Organisation and Corporate Governance | C. Internal Organisation | II. Communication of Irregularities and III. Internal control and risk management

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2-27 Compliance with laws and regulations

There were no significant events nor fines paid resulting from non-compliance with laws and/or regulations.

2-28 Membership associations

Semapa participates actively in the following associations:

- AEM - Associação de Empresas Emitentes de Valores Cotados em Mercado
- Business Roundtable Portugal Association
- Portuguese Institute of Corporate Governance (IPCG)

STAKEHOLDER ENGAGEMENT

2-29 Approach to stakeholder engagement

02. CORPORATE SUSTAINABILITY MANAGEMENT | 2.2 Relationship with Stakeholders

Page 27

2-30 Collective bargaining agreements

	ETSA	Secil	The Navigator Company	Semapa Holding
Number of employees	280	2,362	3,021	32
Number of employees with collective bargaining agreements	0	2,231	1,689	0
Proportion of employees with collective bargaining agreements	0.0%	94.5%	55.9%	0.0%

Note:

In comparison with the previous year, The Navigator Company adopted a new methodology, as until 2020 only unionised Employees were considered, and since 2021 all Employees with collective bargaining agreements are considered.

MATERIAL TOPICS	LOCATION
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GRI 3: MATERIAL TOPICS

Concerning the standard published in 2021

3-1 Process to determine material topics

08. REPORTING PRACTICES | 8.2 GRI Index 2021 | Materiality and specific GRI standards

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3-2 List of material topics

08. REPORTING PRACTICES | 8.2 GRI Index 2021 | Materiality and specific GRI standards

Page 117

3-3 Management of material topics

08. REPORTING PRACTICES | 8.2 GRI Index 2021 | Materiality and specific GRI standards

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SPECIFIC CONTENTS

LOCATION

ECONOMIC PERFORMANCE

GRI 201: ECONOMIC PERFORMANCE

Concerning the standard published in 2016

201-1 Direct economic value generated and distributed

SEMAPA CONSOLIDATED - GRI 201-1	2019	2020	2021
Direct economic value generated	2,328,433	1,966,260	2,228,306
Revenues	2,328,433	1,966,260	2,228,306
Direct economic value distributed	1,984,842	1,628,916	1,792,879
Operating costs	1,529,718	1,288,514	1,389,223
Employee wages and benefits	240,748	217,299	248,317
Payments to providers of capital	161,375	126,887	125,027
Payments to government	50,484	-6,127	28,019
Community investments	2,517	2,343	2,294
Economic value retained	343,592	337,344	435,426

Thousand euros

04. VALUE CREATION IN THE BUSINESS | 4.1 Sustainable value creation

Page 52

201-2 Financial implications and other risks and opportunities due to climate change

The Semapa Group is committed to decarbonising its operations. The possible increase in the cost of energy purchase (fuel or electricity), associated with the decarbonisation of the economy is one of the financial implications that the Group may face in the coming years.

Another financial implication that the Group must take into account are the costs in the ETS market with CO₂ licences. While a ETSA is currently not covered by the EU ETS, in the future the legislation may change and small installations, not currently covered, may also pay for CO₂ emissions.

On the other hand, The Navigator Company and Secil are already feeling the effects:

		2019	2020	2021
Secil	Number of CO ₂ emission licences	2,515,733	2,423,234	2,349,520
	Market value (thousand euros)	61,686	79,288	189,489
The Navigator Company	Number of CO ₂ emission licences	267,222	516,319	620,805
	Market value (thousand euros)	6,552	16,894	50,068

In view of the costs which ETSA may incur in the future, and which The Navigator Company and Secil are currently incurring, all three Semapa Group companies are implementing emission decarbonisation roadmaps. These roadmaps present themselves as the Group's main plans not only to contribute as much as possible to global decarbonisation and thus to greater stability of the energy grid, but also to avoid costs associated with emissions allowances.

All costs associated with decarbonisation plans are explained in the chapter

03. DECARBONISATION, A CORPORATE APPROACH

Page 38

201-3 Defined benefit plan obligations and other retirement plans

This information is available in the Annual Reports of the subsidiaries.



SPECIFIC CONTENTS	LOCATION
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201-4 Financial assistance received from government

	2019	2020	2021
Tax Incentives/Credits	5,936	6,589	11,472
Subsidies	263	440	562
Support for research, development and investment	2,434	2,355	2,560
Total (thousand euros)	8,633	9,384	14,594

Note:

It should be noted that until 2020 this indicator concerns only figures reported by The Navigator Company, which accounted for 74% of the Semapa Group's revenue. In 2021 the Group's response includes all Subsidiaries, and the 2019 and 2020 figures have been adjusted accordingly.

GRI 202: MARKET PRESENCE

Concerning the standard published in 2016

202-1 Ratios of standard entry level wage by gender compared to local minimum wage

	Gender	2021
ETSA	Men	103%
	Women	103%
Secil	Men	100%
	Women	100%
The Navigator Company	Men	107%
	Women	107%
Semapa Holding	Men	172%
	Women	162%

Note:

It should be noted that this ratio, in the case of Secil, is only calculated for Portugal.

GRI 203: INDIRECT ECONOMIC IMPACTS

Concerning the standard published in 2016

203-1 Infrastructure investments and services supported

Indirect economic impacts resulting from investments in infrastructure and services were not systematically assessed. The corresponding figures for investment in the community are presented in indicator 201-1.

203-2 Significant indirect economic impacts

EKPMG conducted in 2018 a new study for The Navigator Company on the potential impact of the Aveiro site tissue mill on the socio-economic development of this region in 2020, and the findings were reported at the Sustainability Forum held in October 2018.

The results of the study suggested that 650 indirect and induced jobs have been created and there had been an impact on the GDP of 50 million euros, at an indirect and induced level, in addition to an increase in the use of local suppliers.

SPECIFIC CONTENTS

LOCATION

GRI 204: PROCUREMENT PRACTICES

Concerning the standard published in 2016

204-1 Proportion of spending on local suppliers

	ETSA			Secil			The Navigator Company			Semapa Holding		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Total number of suppliers	739	701	864	ND	ND	7,759	7,454	6,756	7,172	608	657	739
Local suppliers	95%	95%	96%	ND	ND	92%	76%	76%	74%	91%	90%	91%
Foreign suppliers	6%	5%	4%	ND	ND	8%	24%	24%	26%	9%	10%	9%
Total purchases from suppliers (thousand euros)	14,132	13,723	17,570	ND	ND	553,397	1,521,225	1,158,577	1,382,341	6,917	6,905	7,110
Purchases from local suppliers	97%	98%	98%	ND	ND	78%	74%	77%	74%	74%	85%	87%
Purchases from foreign suppliers	3%	2%	2%	ND	ND	22%	26%	23%	26%	26%	15%	13%

Note:

Since Secil began reporting this indicator in 2021, this information is not available for 2019 and 2020.

GRI 205: ANTI-CORRUPTION

Concerning the standard published in 2016

205-1 Operations assessed for risks related to corruption

Semapa holding has been working since 2019 on an operation to develop a risk management and control system that applies to the Group, a plan which can be found briefly in this document and in detail in Semapa's 2020 Sustainability Report.

In 2021, the Semapa Group will not submit any of its operations to corruption risk assessment.

205-2 Communication and training on anti-corruption policies and procedures

The Semapa Group has developed risk management and control systems and communicated anti-corruption procedures to its Employees, although the Group did not conduct any specific training in this area in its subsidiaries in the last year.

The Navigator Company has kept the ethics and compliance training programme in the area of anti-corruption.

205-3 Confirmed incidents of corruption and actions taken

In 2021 no corruption event was recorded.

GRI 206: ANTI-COMPETITIVE BEHAVIOUR

Concerning the standard published in 2016

206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices

Administrative proceedings were filed with the Department of Commerce (USA) for international trade laws in respect of paper exports from Portugal to the United States, and Navigator is not acting in breach of competition laws.

An anti-dumping duty is applied to exports from Portugal to the United States of certain types of paper marketed by Navigator. In the last period for which a final rate was set (2017-2018), it amounted to 4.37%. Still in 2020, the rate for the first review period (2015-2017) was also made final, which was set at 1.67%. As a result of the final assessment of these rates, as previously mentioned, excess deposit amounts were reimbursed to the Company. In the beginning of 2021, the rate for the third review period (2018-2019) was also assessed, and set at 6.75%. That is also the rate applied to the deposits that the Company has to make for in each export. These deposits are subject to further adjustment as new decisions are issued and confirmed by the Department of Commerce.

Note:

Answer according to The Navigator Company's reply.



SPECIFIC CONTENTS	LOCATION
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GRI 207: TAX

Concerning the standard published in 2019

207-4 Country-by-country reporting

The Semapa Group's key activities consist of holding shares or own funds and providing administrative, management or support services. The Semapa Group conducts its business essentially in Portugal, and the business relating to Semapa's non-resident subsidiaries is immaterial, as set forth in Note 6 to Semapa's Separate Financial Statements.

ENVIRONMENTAL PERFORMANCE

GRI 301: MATERIALS

Concerning the standard published in 2016

301-1 Materials used by weight or volume

Units (tonnes)	2019	2020	2021
ETSA	122,950	121,900	126,100
Secil	12,054,197	16,840,723	18,788,142
Navigator	5,101,062	4,706,846	5,064,915
Total	17,278,209	21,669,468	23,979,157

Note:

The figures reported in previous years have been updated

301-2 Recycled input materials used

Units (%)	2019	2020	2021
ETSA	100.0%	100.0%	100.0%
Secil	2.6%	7.8%	5.3%
Navigator	0.0%	0.0%	0.0%

Note:

It should be noted that, for this indicator, The Navigator Company only considers recycled fibre materials as recycled in relation to the total fibre used.

SPECIFIC CONTENTS	LOCATION
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GRI 302: ENERGY

Concerning the standard published in 2016

302-1 Energy consumption within the organisation

Consumption of energy from non-renewable sources (GJ)	2019	2020	2021
ETSA	126,127	120,340	143,952
Secil	12,901,195	15,581,477	16,519,257
Navigator	12,922,614	12,264,687	9,811,472
Semapa Holding	ND	1,017	1,308
Total	25,949,936	27,967,521	26,475,989
Consumption of energy from renewable sources (GJ)	2019	2020	2021
ETSA	258,242	269,229	268,724
Secil	3,983,906	203,703	305,704
Navigator	25,805,941	29,101,758	31,962,573
Semapa Holding	ND	0	0
Total	30,048,089	29,574,690	32,537,001
Consumption of purchased energy (GJ)	2019	2020	2021
ETSA	29,313	29,480	30,841
Secil	2,194,273	2,087,856	2,119,988
Navigator	4,728,956	4,893,745	4,651,165
Semapa Holding	ND	461	400
Total	6,952,543	7,011,542	6,802,393
Energy sold (GJ)	2019	2020	2021
ETSA	0	0	0
Secil	0	0	0
Navigator	5,233,438	5,959,408	5,178,509
Semapa Holding	ND	0	0
Total	5,233,438	5,959,408	5,178,509
Total energy consumption (GJ)	2019	2020	2021
ETSA	413,682	419,049	443,517
Secil	19,079,374	17,873,036	18,944,949
Navigator	38,224,074	40,300,782	41,246,701
Semapa Holding	ND	1,478	1,708
Total	57,717,130	58,594,345	60,636,875

Notes:

As part of the calculation of the carbon footprint in 2021, ETSA updated its data on energy consumption in 2019 and 2020.

302-3 Energy intensity

Energy intensity (GJ/t)	2019	2020	2021
ETSA	3.4	3.4	3.5
Secil	ND	1.9	2.0
Navigator	12.6	13.4	12.5



SPECIFIC CONTENTS	LOCATION
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302-4 Reduction of energy consumption

Energy intensity (GJ/t)	2019	2020	2021
ETSA	11,888.0	5,836.0	-15,604.0
Secil	ND	ND	ND
Navigator	47,961.0	48,524.0	51,184.0

Notes:

At ETSA the negative value shows an increase in consumption.

GRI 303: WATER AND EFFLUENTS

Concerning the standard published in 2018

303-1 Interactions with water as a shared resource

06. PROTECTING THE PLANET | 6.1 Water management

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303-2 Management of water discharge-related impacts

Every Semapa group company complies with all legislation that respects this topic and all discharged water is subjected to a primary/secondary treatment before being sent to the environment.

More information in chapter 06. PROTECTING THE PLANET | 6.1 Water management

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303-3 Water withdrawal

	Segment	2019	2020	2021
Surface water (m ³)	ETSA	0	0	0
	Secil	158,114	205,421	196,853
	Navigator	42,716,117	39,299,457	38,894,889
	Semapa Holding	0	0	0
	Subtotal	42,874,231	39,504,879	39,091,742
Groundwater (m ³)	ETSA	62,836	68,365	77,395
	Secil	1,394,971	1,390,008.8	1,331,554
	Navigator	25,759,890	25,197,713	25,921,968
	Semapa Holding	0	0	0
	Subtotal	27,217,697	26,656,087	27,330,917
Third-party water (m ³)	ETSA	2,727	2,202	2,470
	Secil	73,272	85,974	172,197
	Navigator	64,528	66,000	59,038
	Semapa Holding	567	584	669
	Subtotal	141,094	154,760	234,374
Total withdrawal (m³)		70,233,022	66,315,725	66,657,033

Note:

The Semapa Group's total water withdrawal figures were updated for 2019 and 2020, due to the inclusion of Semapa Holding's consumption.

303-4 Water discharge

	Segment	2019	2020	2021
Total discharged water (m ³)	ETSA	89,822	91,708	96,349
	Secil	360,094	372,282	381,465
	Navigator	55,045,000	54,487,000	54,302,000
Total discharged water (m³)		55,494,916	54,950,990	54,779,814



SPECIFIC CONTENTS	LOCATION
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303-5 Water consumption

Units (m ³)	2019	2020	2021
Total	14,737,539	11,364,151	11,876,550

GRI 304: BIODIVERSITY

Concerning the standard published in 2016

304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.

Units (ha)	2019	2020	2021
ETSA	0.0	0.0	0.0
Secil	490.5	490.5	490.5
Navigator	53,770.0	53,492.0	53,563.0
Total	54,260.5	53,982.5	54,053.5

304-2 Significant impacts of activities, products and services on biodiversity

06. PROTECTING THE PLANET | 6.3 Conservation of biodiversity and ecosystem services

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304-3 Habitats protected or restored

Navigator was responsible in 2021 for recovering or restoring 4,128.93 ha of habitats. At the same time, Secil Portugal is responsible for restoring 55 hectares of habitat in Portugal, with the support of universities, using a range of ecological restoration methodologies.

Some of the initiatives carried out in this area are described in chapter **06. PROTECTING THE PLANET | 6.3 Conservation of biodiversity and ecosystem services**

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304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations

	2019	2020	2021
Critically endangered	3	4	4
Endanger	13	13	13
Vulnerable	27	31	36
Almost threatened	19	20	21
Of little concern	168	180	182

In 2021, the increase was mostly due to the flora on the Red List of Vascular Flora in Portugal.

Note:

This indicator is answered based only on The Navigator Company data.



SPECIFIC CONTENTS	LOCATION
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GRI 305: EMISSIONS

Concerning the standard published in 2016

305-1 Direct (Scope 1) GHG emissions

Units (tCO ₂)	2019	2020	2021
ETSA	10,040	9,705	11,395
Secil	3,816,659	3,632,933	3,610,579
Navigator	752,023	739,799	574,199
Total	4,578,722	4,382,438	4,196,173

Note:

ETSA has updated the figures reported for 2019 and 2020 as, following its calculation of the carbon footprint, it has reviewed emission factors in order to reinforce the reliability of the measurement. It should also be noted that the data for Secil's three years are already post-ETS verification. Secil's emissions are gross. In 2020 and 2021, The Navigator Company changed its method for measuring direct emissions, which resulted in less emissions in 2021 compared with 2020. It is also important to note that 2019 and 2020 data is already updated post-ETS verification.

305-2 Energy indirect (Scope 2) GHG emissions

Units (tCO ₂)	2019	2020	2021
ETSA	3,446	2,230	1,557
Secil	252,921	184,175	161,481
Navigator	ND	337,184	389,776
Total	256,367	523,589	552,814

Note:

ETSA has updated the figures reported for 2019 and 2020 as, following its calculation of the carbon footprint, it has reviewed emission factors to reinforce the reliability of the measurement. It should also be noted that the calculation method used at Secil and The Navigator Company is location based and at ETSA it is market based.

305-4 GHG emissions intensity

Units (tonnes)	2019	2020	2021
ETSA	0.08	0.08	0.09
Secil	0.85	0.84	0.84
Navigator	0.25	0.26	0.18

Note:

Secil's emissions are gross. Navigator has updated its figures for 2020, as part of the 2021 ETS verification.

305-5 Reduction of GHG emissions

Units (tCO ₂)	2019	2020	2021
ETSA	0	1,551	534
Secil	ND	ND	ND
Navigator	418,375	336,212	384,598
Total	418,375	337,763	385,132



SPECIFIC CONTENT

LOCATION

305-6 Emissions of ozone-depleting substances (ODS)

There are no emissions.

Note:

This data is not available for Secil.

305-7 Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions

Units (t)	2019	2020	2021
Secil	8,363	6,666	8,216
Navigator	2,336	2,492	1,777
Total	10,699	9,158	9,993

GRI 306: WASTE

Concerning the standard published in 2020

306-1 Waste generation and significant waste-related impacts

06. PROTECTING THE PLANET | 6.2 Circular economy

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306-2 Management of significant waste-related impacts

06. PROTECTING THE PLANET | 6.2 Circular economy

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306-3 Waste generated

Units (t)	Category	2019	2020	2021
ETSA	Hazardous	240	244	259
	Non-hazardous	13,435	13,702	12,916
Secil	Hazardous	ND	ND	746
	Non-hazardous	ND	ND	26,126
Navigator	Hazardous	1,247	1,269	563
	Non-hazardous	384,701	394,228	397,439
Total	Hazardous	1,487	1,513	1,568
	Non-hazardous	398,136	407,930	436,480

Note:

Secil began measuring this indicator in 2021.

306-4 Waste diverted from disposal

Units (t)	Category	2021
ETSA	Hazardous	0
	Non-hazardous	11,588
Secil	Hazardous	596
	Non-hazardous	24,560
Navigator	Hazardous	394
	Non-hazardous	280,185
Total	Hazardous	991
	Non-hazardous	316,333

Note:

It is only reported for 2021, as in 2019 and 2020 the indicator was not reported at this level of disaggregation.



SPECIFIC CONTENT

LOCATION

306-5 Waste directed to disposal

Units (t)	Category	2021
ETSA	Hazardous	259
	Non-hazardous	1,328
Secil	Hazardous	150
	Non-hazardous	1,566
Navigator	Hazardous	168
	Non-hazardous	126,316
Total	Hazardous	577
	Non-hazardous	129,211

Note:

It is only reported for 2021, as in 2019 and 2020 the indicator was not reported at this level of disaggregation.

GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT

Concerning the standard published in 2016

308-1 New suppliers that were screened using environment criteria

The Semapa Group has been working towards an increasingly sustainable supply chain, and consequently a more environmentally responsible one. Secil is currently developing a code of conduct for suppliers, which it expects to conclude in 2022, while The Navigator Company has published a code of conduct for suppliers. The content of this code is very consistent with the procurement documentation, highlighting concerns about environment, safety, human rights and fundamental labour rights issues, whose acceptance by suppliers is reinforced.



SPECIFIC CONTENT	LOCATION
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SOCIAL PERFORMANCE
GRI 401: EMPLOYMENT

Concerning the standard published in 2016

401-1 New employee hires and employee turnover

2019	Gender	Employees joining			Employees leaving		
		<30	30-50	>50	<30	30-50	>50
Turnover rate by age		35%	9%	1%	14%	5%	10%
Turnover rate by gender	Men	10%			7%		
	Women	6%			9%		
Total turnover rate		9%			8%		

2020	Gender	Employees joining			Employees leaving		
		<30	30-50	>50	<30	30-50	>50
Turnover rate by age		20%	6%	2%	12%	6%	11%
Turnover rate by gender	Men	6%			7%		
	Women	9%			15%		
Total turnover rate		6%			8%		

2021	Gender	Employees joining			Employees leaving		
		<30	30-50	>50	<30	30-50	>50
Turnover rate by age		30%	9%	2%	12%	7%	13%
Turnover rate by gender	Men	8%			9%		
	Women	12%			10%		
Total turnover rate		8%			9%		

Note:

In this indicator, The Navigator Company does not include Board Directors.

401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

Some of the Group's companies such as Semapa Holding and The Navigator Company offer specific benefits to full-time Employees that are not offered to temporary Employees or those on the premises part-time, such as: Life insurance, health insurance, pension fund or school support allowances.



SPECIFIC CONTENT	LOCATION
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401-3 Parental leave

		2019	2020	2021
No. of employees who took parental leave in the reporting period	Men	105	103	152
	Women	23	30	51
	Sub-Total	128	133	203
No. of employees who returned to work after parental leave	Men	105	103	150
	Women	23	30	52
	Sub-Total	128	133	202
No. of employees who returned to work and remain in the company after 12 months	Men	126	100	147
	Women	16	24	48
	Sub-Total	142	124	195
Rate of return to work	Men	100%	100%	99%
	Women	100%	100%	102%
	Sub-Total	100%	100%	100%
Retention rate (12 months)	Men	120%	97%	98%
	Women	70%	80%	92%
	Sub-Total	111%	93%	97%

GRI 403: OCCUPATIONAL HEALTH AND SAFETY

Concerning the standard published in 2018

403-1 Occupational health and safety management system

Some of the Group's companies, namely The Navigator Company and Secil, have an Occupational Health and Safety Management System. Currently The Navigator Company and Secil have already completed the transition process to ISO 45001. It should be noted that Secil has already made this same transition in both Portugal and in Lebanon, while the remaining locations have kept OSHAS 18000 certification, except for Brazil.

403-2 Hazard identification, risk assessment and incident investigation

Environment Segment

Identification of risks	<p>methodology based on task analysis and monitoring, on the behaviour of workers while performing their tasks, on interviews with workers, and on information and documentation provided by ETSA.</p> <p>The risk assessment considers the risk control measures already implemented and provides for 4 levels of risk (low, moderate, high and very high), and safety measures shall apply to moderate/high/very high risk levels.</p> <p>The list of safety measures (based on risk assessment, security audits and legal requirements) prioritises the implementation of actions associated with higher risk levels. Technical, organisational and collective protection measures to the detriment of others.</p> <p>Risk assessment is reviewed annually or whenever there are changes to processes, equipment, work places (with repercussions on safety), or work accidents / occupational diseases occur, or the results of monitoring actions so justify. The implementation of safety measures is monitored internally at the meetings held by area/unit supervisors, and through periodic audits, carried out by the company providing occupational safety services.</p> <p>The dissemination of information on hazards/risks is done through training and the online publishing of related documents. In the case of vulnerable workers (e.g. foreign workers), in order to overcome the language barrier the use of simplified language in communications with them is ensured.</p>
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SPECIFIC CONTENT	LOCATION
Quality of the process	Company providing safety services is duly authorised by the Authority for Work Conditions (ACT). The technical team holds certification (CAP) of advanced Occupational Safety Technician. Unit supervisors are trained: Employer's Representative (with programme drawn up in accordance with the ACT).
Integration of the results of the processes into the enhancement of the OHSMS	The organisation does not have an OHSMS.
Hazard reporting processes available to Employees	The workers are always consulted about the safety conditions during the safety visits/audits, and during training. Worker consultation actions are also carried out, as provided for in the legal regime for the promotion of safety and health at work (and other specific legislation on OHS). The MAIS ETSA programme has also been implemented (based on the collection of suggestions for improvement of infrastructures, equipment, processes, etc. made by workers).
Processes that allow Employees to protect themselves from situations that they believe may cause injury or disease	The workers and the managers (of the area/unit) are aware of the employer's general obligations (considering what is provided in the legal regime for the promotion of health and safety at work). They are communicated through OHS training.
How are Employees protected against possible reprisals in the light of whistleblowing under the two points above	ETSA is committed to ensuring legal compliance in all aspects of its activity, namely in its OSH obligations.
Incident investigation procedure	<ol style="list-style-type: none"> 1. In the event of an incident/accident, the employee and the supervisor prepare an internal accident report (that is sent to HR and the occupational safety service company). 2. If applicable, HR completes /sends the report to the insurance company. 3. The company providing safety services contacts each claimant, and where necessary goes to the site to assess with the latter the causes of the incident/accident and discuss safety measures to be implemented. 4. The final report includes description of the accident, analysis of causes, measures, those responsible for implementation and the need to review the risk assessment process. A list of incidents/accidents is drawn up and actions are laid down for them, which allows the implementation status of the measures to be monitored. <p>Internal meetings are held periodically (involving area/unit supervisors) to ensure that implementation is monitored. External safety services are also monitored periodically. The measures are set by giving priority to technical, organisational and collective protection measures over others.</p>
Cement Segment	
Risk identification	Through hazard and risk assessment at every site.
Quality of the process	Qualified training for OHS technicians and training for workers on OHS.
Integration of the results of the processes into the enhancement of the OHSMS	Internal and external audits are carried out as part of the management systems. Occupational hazard situations are also evaluated to review the risk assessment. New projects and improvements are also inputs for hazard and risk assessment. The risk assessment is reviewed periodically and continuously improved.
Hazard reporting processes available to Employees	Through safety procedures, namely the reporting of incidents or near misses, which are encouraged and recognised. Every country has a select committee with a defined composition, which assesses work accidents and ensures decision-making in consequence management.



SPECIFIC CONTENT	LOCATION
Processes that allow Employees to protect themselves from situations that they believe may cause injury or illness	There is a STOP and GO card policy intended to authorise all workers to identify things that should not be done and things that are correctly done. The right of refusal is embedded in the philosophy of the STOP/GO card.
How are Employees protected against possible reprisals in the whistleblowing under the two previous points	Through safety procedures, namely the reporting of incidents or near misses, which are encouraged and recognised. Every country has a select committee with a defined composition, which assesses work accidents and ensures decision-making in consequence management.
Incident investigation procedure	For each accident there is an accident investigation report, which sets out the mandatory requirements and rules to be followed for the reporting, classification and investigation of safety events. Recommendations and lessons learned are drawn up and disseminated through alerts to the entire Group. Health and Safety meetings are held regularly at various levels of the company where this information is presented and discussed.
Pulp and Paper Segment	
Identification of risks	The Navigator Company has a procedure that it applies across the company sites and/or forestry areas and to all direct employees, contractors or third parties. The purpose is to identify the hazards associated with all the activities that take place in the Company, to evaluate and control the risks, providing guidelines for their identification, evaluation and recording and setting priority levels for their management.
Quality of the process	According to the Portuguese law only duly certified (Grade IV and VI) Occupational Health Safety Technicians can perform this assessment. However, this process must be carried out with the participation of all those involved and who carry out the tasks on a daily basis and are exposed to the resulting dangers. Thus, Hazard Identification and Risk Evaluation is always conducted by the operational teams, under the supervision of a qualified Safety expert.



SPECIFIC CONTENT	LOCATION
Integration of the results of the processes into the enhancement of the OHSMS	This assessment is translated into risk assessment matrices that are reviewed on a regular basis (at least once a year) or there is an event, when there are new raw materials, processes, products, when there are changes in legislation, among others. Employees involved are informed of changes (in cases where they do not participate directly in the revision of the matrix).
Hazard reporting processes available to Employees	There is an event reporting system that covers all situations, from accidents resulting in absence to near misses. The information is sent automatically and the reporter does not need to identify himself.
Processes that allow Employees to protect themselves from situations that they believe may cause injury or illness	All Employees know that they may refuse to carry out high-risk tasks, which could cause injury if mitigation measures are not taken. Navigator has implemented various procedures that provide guidance on these situations, including the procedure for authorising work requiring prior risk assessment and in which the entire team involved is informed about the measures that must be taken.
How are Employees protected against possible reprisals in the light of whistleblowing under the two points above	Employees have free access to the safety teams and can always report dangerous or high-risk situations anonymously. There are also OHS Committees and/or trade unions that report on the concerns of Employees regarding OS&H at meetings called for this purpose.
Incident investigation procedure	Incident Reporting and Investigation which determines how incidents should be classified and reported, which investigation team is appointed, the root causes that led to the incident and the corrective measures to be implemented, Stakeholders and deadlines. These reports are widely disseminated in the Company which allows different sites with similar operations/tasks to assess and discuss whether a similar event could occur and whether the actions identified can also be implemented. These reports result often in lessons learnt, which must be analysed and actions implemented across the company. There is a global procedure for Hazard Identification and Risk Assessment that not only lays down the methodology, but also the mitigation measures to be implemented. This global procedure is relatively new and is being implemented. Once all sites have been assessed, it will be possible to compare and standardise this assessment, quantification, analysis and set measures allowing internal benchmarking to be carried out. It will also be possible to identify among the risks assessed those which are most significant for Navigator and thus to set priorities.

Semapa Holding

Although Semapa Holding's employees are exposed to considerably lower levels of risk, occupational safety is also one of the items on its agenda.

Work-related hazards are identified and presented in the annual OHS report that is written up by a contractor. These are presented to the company's management and an action plan is set up, and shall include the measures to be implemented and the deadline for implementing the corrections.

Semapa also subcontracts specialized companies in this area for identifying opportunities for improvement. In 2021 lack of evacuation signs was identified and, as a result, a company was hired to assay the number of signs and the layout required in order to comply with legal requirements.

Although there is no specific procedure in place all Employees are encouraged to report the hazards or potential hazards directly to their line manager.

Every year Semapa analyses the annual OHS report comparing it with the previous year's report.



SPECIFIC CONTENTS **LOCATION**

403-3 Occupational health services

	ETSA	Secil	The Navigator Company
Health services	<p>Health services are delivered through: (a) Assessment and control of occupational hazards inherent to each position; (b) Initial/ periodic/ occasional clinical assessment in order to ensure competence for performing the relevant functions; (c) Prevention of occupational disease; (d) Development of health promotion activities; (e) Fitness cards, and organizing and keeping clinical records and other information on the worker up to date; (f) Collaborate in risk control activities, suggesting prevention and protection measures and (g) Monitoring the working conditions of workers in more vulnerable situations.</p>	<p>Health services are largely provided by occupational medicine. Safety services monitor health-related hazards, such as: (a) total, breathable dust and silica; (b) noise, (c) vibrations and keep an action plan for eliminating or reducing the risks.</p>	<p>Navigator has dedicated teams to support operations. In addition to risk assessments that are carried out periodically or following incidents or changes to facilities, products, conditions, standards, legislation, etc., this team also carries out regular inspections and audits. There is also a set of corporate initiatives aimed at improving working practices across the board, procedures and conditions to ensure healthier and safer operations.</p>
Quality assurance	<p>To ensure the quality of this service, it is delivered by a specialised external company with accredited competences. Access to this service by workers is done through clinical evaluation and with specific recommendations for each job.</p>	<p>The quality of this service is ensured through external and internal audits, communicating to employees hazards and risks and occupational disease, holding regular meetings with workers and monitoring the action plans laid down.</p>	<p>The link between OHS teams and occupational medicine ensures full information sharing, which includes risk assessment and monitoring chemical, physical, biological and ionising radiation agents. By sharing this information, the medical teams are aware of the risks of each employee and monitor other complementary parameters during the regular appointments. The medical teams pay regular visits to the industrial units together with the OHS teams. This allows them to jointly assess conditions on the ground and validate measures to be implemented.</p>



SPECIFIC CONTENT

LOCATION

Semapa Holding

A medical fitness sheet is made annually, after complementary diagnostic tests, electrocardiogram and follow-up consultation have been conducted on the worker.

Every year, the company schedules a medical team visit the facilities to conducts blood tests and carry out complementary diagnosis exams. These are analysed by the doctor at a follow-up appointment, which also take place during working hours. Where the employee needs monitoring on a permanent basis, he/she is referred to his/her family doctor.

403-4 Worker participation, consultation, and communication on occupational health and safety**Environment Segment**

The organisation does not have an OHS management system. Information/communication is ensured by sharing of OHS documentation published online, and documents atr posted on the premises and on staff management boards. Communication is also ensured through OHS training sessions held.

Concerning consultation/participation, actions are carried out to consult workers, as provided for in the legal regime for the promotion of health and safety at work (and other specific OHS legislation). The MAIS ETSA programme has also been implemented (based on the collection of suggestions for improvement of infrastructures, equipment, processes, etc. made by workers). There are no joint workers' committees.

Cement Segment

At Secil there are many ways to communicate with Employees, in particular through the surveys carried out to workers regularly, meetings of the workers' committee or with workers' representatives on OHS issues and the safety notice boards in the units on which relevant information is posted.

Joint management-worker committees meet in several countries, with the frequencies laid down locally. In general they are in charge of assessing all issues concerning OHS. Some examples: To recommend penalty/ recognition actions arising from work accidents or other situations observed; To suggest corrective and preventive actions with a view to reduce hazards, work accidents and improve the health of Employees; Suggest or give advice on prevention programmes and monitoring of Health and Safety at Work; Promote and suggest training actions in the area of Health and Safety; Discuss the quality and comfort of Personal Protective Equipment (PPE).

Pulp and Paper Segment

Since 2020, Navigator has been consulting all Employees through a survey that is published on the intranet. This survey is carried out twice a year and everyone is called to complete it. Several OHS components are addressed, namely in terms of hazards and risks, conditions in the workplace, communication of monitoring results, knowledge of procedures, training needs, quality of PPE, etc. The survey's results are published so that everyone has access to the information and for taking up measures according to the answers provided. Navigator also consults the Health and Safety Committees on every site (if any).

All sites (with the exception of Vila Velha de Rodão and the forestry areas) have OHSS committees. They meet regularly, at least once a year. It is the responsibility of these committees to discuss risk assessments, hazards and procedures, and to communicate the concerns of Employees. The composition of these committees is laid down in Portuguese legislation, which The Navigator Company complies with and implements.



SPECIFIC CONTENT

LOCATION

403-5 Worker training on Occupational Health and Safety

Environment Segment

All workers have received OHS training, on the following topics: Legal Framework; Basic Concepts of Safety and Health at Work; Duties and Responsibilities of Workers and Employer; Statistics of Accidents at Work; Hazards and Risks of the Workplace; Prevention and Protection Measures; Manual Handling of Loads; Personal Protective Equipment; Safety Instructions; Safety Signage; Safety Data Sheets. Within the scope of specific hazards, the following were addressed: chemical risks, biological risks, safety of machinery and work equipment, and manual handling of loads.

ETSA also assesses training needs through actions carried out to consult workers, as provided for in the legal regime for the promotion of health and safety at work (and other specific OSH legislation). The external safety services drew up a training programme based on the legal requirements for training (laid down by the regulations on health and safety at work), based on the information reported by the workers (collected in training sessions, audits, etc.), and on the knowledge of the activities carried out. The programme is managed by HR. External services assist in prioritising the training to be delivered.

All training is free of charge and is always delivered during working hours.

Cement Segment

There are different types of training on OHS. Some training is compulsory due to the legal requirements and some can be attended voluntarily, namely in the area of behavioural and leadership safety. There is induction training in OHS for new internal and external staff. There is communication of risk assessment results. In 2021, specific training was delivered, as part of the group's safety objectives, on risk perception, involving all countries and around 2,553 Employees.

Pulp and Paper Segment

All new Employees undergo an induction programme where the various safety topics are covered.

The recycling of Safety training is also ensured, and in 2022 the training plan in this area will be topped up, since in 2020 and 2021 this was not possible due to limitations related to the pandemic. In the case of more critical areas where the risks are higher, awareness/training is reinforced by the local OHS team. In order to access Navigator, external workers must receive specific training developed by the Portuguese pulp and paper companies (CELPA) that we call CSIP (Paper Industry Security Card). If they have not attended the training they are barred from entering the premises. Where special work/projects are to be carried out, training is delivered focusing on the most relevant topics.

Navigator's Learning Centre offers Employees a range of training courses on various safety issues. Some of the online training modules provided by the Learning Centre will be considered compulsory and other modules are being developed using new technologies (augmented reality, for example) to motivate Employees to attend and participate.

Navigator has been developing with the training area a grid of skills for each function, identifying the training that each employee must receive on the basis of the tasks that they are required to perform and the validity of the information. This project will be developed in 2022.

Navigator has currently set mandatory training courses, which is according to the national legislation.

Occasionally complementary training is delivered, as was the case in 2021, when Directors, area managers, supervisors and other managers attended training on Civil and Criminal Liability in OHS.

It should be noted that the OSH training is provided free of charge to Employees, and if it is taught outside working hours Employees are paid for it.

Semapa Holding

Self-protection measures are being implemented, including fire drills (evacuation exercises) and first-aid training. It should also be noted that all training needs of the Employees at the Semapa Holding company are assessed annually, following receipt of the annual OHS report. All training in this area is free of charge and delivered during working hours.



SPECIFIC CONTENT

LOCATION

403-6 Promotion of worker health**Environment Segment**

The company ensures curative medicine services are available in all of its facilities and for all its workers. This service facilitates access to medical services, without the need for workers to go to Health Centres or see other doctors, and without the need to travel.

Cement Segment

There are occupational medicine services for all workers. All plants have medical posts. In some cases there is both occupational medicine and curative medicine. Health insurance is widespread.

There is also a plan for periodic consultations and examinations. This plan is monitored and action is taken on deviations from the plan to ensure full compliance.

Pulp and Paper Segment

Navigator has an Occupational Health, curative medicine and a permanent nursing team in the industrial and forestry areas, and all Navigator employees have access to these services. All sites are equipped with a Medical Post which Employees can contact with their needs.

The Company also has an OH team consisting of a psychologist, a nutritionist, a social worker and 5 physiotherapists. This team, in partnership with the medical team (Occupational and Curative), develops health and well-being programmes, and assesses and monitors Employees who need support in any of the areas.

This team is also in house and offers its services at the medical posts. It should also be noted that the OH team develops more comprehensive programmes with Employees, such as: physical activity at work, sleep analysis, eating in shifts, social measures, etc. Every year in October, Navigator celebrates health month, when it organises a number of initiatives to bring the workforce into closer contact with its operations, always resulting in excellent feedback.

Semapa Holding

The company puts at the disposal of its employees health insurance with a coverage that can be extended to the other members of the household for a fee below the market price. Additionally, every week a GP is available for prescriptions and complementary examinations.

403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships**Environment Segment**

It was found that a considerable number of accidents, which occurred in the logistics area (involving drivers), took place mainly at collection points, the raw material is collected. Many of these accidents were associated with access conditions to the collection sites, the cleanliness and organisation of the sites, the operation and maintenance of the equipment used for storing the raw material and the typ of packaging. The external safety services and logistics and commercial area supervisors created a self-adhesive poster, which was affixed at the collection points, drawing attention to best practices for entering the sites, maintenance and cleaning of the equipment and packaging of the raw material. The poster calls for the collection points to provide a safe and healthy working environment for ETSA's workers.

Cement Segment

Secil has a zero harm policy for its Employees, subcontractors and the community in which it operates. The identification of the hazards and the assessment of risks arising from its activities is the cornerstone for the prevention and mitigation of negative impacts on all Employees. The list of identified hazards and dangers and their assessments must be reviewed and updated. Furthermore, the implementation of the action plan with mitigation measures will help reduce negative impacts of these risks and hazards.

Pulp and Paper Segment

The approach in these areas is not differentiated as OHS is a function of the entire organisation and it is managed by the company, although every site has a local OHS Coordinator and OHSS team.



SPECIFIC CONTENT

LOCATION

403-8 Workers covered by an occupational health and safety management system

At The Navigator Company, 96% of Employees and other workers are covered by certified OHSMS: 100% being covered by a non-certified OHSMS. In 2021, 89% of Semapa Holding 's employees will be covered by a certified OHSMS. ETSA does not have an OHSMS.

403-9 Work-related injuries

	2019	2020	2021
Number of fatalities resulting from accidents at work	2	0	2
Number of serious accidents	1	6	7
Number of accidents at work	193	281	226
Rate of fatalities resulting from accidents at work	0.1	0.0	0.1
Rate of serious accidents (excluding fatalities)	0.1	0.3	0.4
Rate of accidents at work of compulsory reporting	13.4	15.9	12.5
Frequency rate	9.2	9.3	7.9
Severity rate	332.1	274.2	303.7

Note:

To calculate safety indicators, Navigator includes the universe of internal and external Workers. It should also be noted that Secil changed its methodology in 2021, bringing its safety report into line with the GCCA (the sector's association) guidelines, and no longer records accidents that happen off site. Thus, the 2019 and 2020 data have been updated according to this new methodology. ETSA has updated the data for 2019 and 2020. The frequency rate is a consolidated figure that does not include Semapa Holding company, only the three Subsidiaries: Navigator, Secil and ETSA.

Methodological notes on the formulas used:

Frequency rate = (No. accidents resulting in absence / No. hours worked) x 1,000,000

Severity rate = (No. work days lost/ No. hours worked) x 1,000,000

Rate of fatalities resulting from accidents at work = (no. deaths resulting from work-related accidents/no. of hours worked) x 1,000,000

Rate of serious accidents at work* (excluding fatalities) = (Serious work-related accidents (excluding fatalities)/ no. of hours worked) x 1,000,000

*requires an injury from which the worker takes + 6 months to fully recover, or never recovers (e.g. amputation)

Ratio of work accidents with mandatory reporting* = (work accidents/no. of hours worked) x 1,000,000

*All accidents at work

SPECIFIC CONTENTS	LOCATION
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403-10 Work-related ill health

	2019	2020	2021
Number of fatalities resulting from occupational disease	0	0	0
Number of cases of occupational disease reported	10	11	9
Number of cases of occupational disease confirmed	0	0	2

Note:

It should be noted that the figures presented above refer only to company Employees and not to external Workers. It should also be noted that, in the case of the indicator "Number of occupational diseases confirmed", The Navigator Company only has data for 2021.

GRI 404: TRAINING AND EDUCATION

Concerning the standard published in 2016

404-1 Average hours of training per year per employee

	2019	2020	2021
Men	39.4	27.0	30.6
Women	34.2	16.1	27.3
Board of Directors	2.9	0.4	0.5
Top Management	22.2	8.5	16.7
Senior Managers	42.4	21.2	39.4
Middle Managers	45.9	16.9	18.2
Administrative Staff	ND	ND	15.9
Performers	37.9	28.2	32.8
Total	38.6	25.6	30.1

Note:

It should be noted that for the calculation of this indicator The Navigator Company does not include the Board of Directors.

It should also be noted that until 2020 ETSA was reporting administrative staff together with performers. In 2021 ETSA separated the two functions.

404-2 Programs for upgrading employee skills and transition assistance programs

The Semapa Group has made an effort to ensure the development of its Workers' skills and to deliver retirement transition assistance programmes. The best example of this is the Navigator Company, where all Employees are covered by a training plan which evolves in line with their changing needs. In 2021, the Learning Centre platform was still one of the most important tools for the development of Employee skills. Transition assistance programmes include the Navigator Company's ongoing rejuvenation Programme, aimed at compensating Employees who want to leave the company early, thus supporting them in their new professional or personal challenges.

Also in this area, Semapa Holding has made an effort to respond to requests to leave before retirement date from long-serving Employees who have always demonstrated great engagement and commitment to the company. In these cases, Semapa Holding signs agreements offering much more than the legal requirements, it monitors their situation, both before they leave and in the following months, thus ensuring a smooth transition.

404-3 Percentage of employees receiving regular performance and career development reviews

	2019	2020	2021
Semapa Holding	100%	89%	100%
Secil	59%	68%	71%
Navigator	98%	97%	99%
ETSA	100%	100%	100%

Note:

It should be noted that for the calculation of this indicator, The Navigator Company does not include the governing bodies.



SPECIFIC CONTENTS	LOCATION
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY	

Concerning the standard published in 2016

405-1 Diversity of governance bodies and employees

Subsidiaries	Governance Bodies				
	Gender		Age		
	Men	Women	<30	30-50	>50
ETSA	100%	0%	0%	33%	67%
Secil	100%	0%	0%	33%	67%
The Navigator Company	77%	23%	0%	15%	85%
Semapa Holding	73%	27%	0%	36%	64%
Semapa Next	100%	0%	0%	100%	0%

Professional Category	Gender	2019	2020	2021
Top Management	Men	85.1%	84.9%	80.4%
	Women	14.9%	15.1%	19.6%
Senior Managers	Men	67.1%	67.8%	66.2%
	Women	32.9%	32.2%	33.8%
Middle Managers	Men	83.3%	77.7%	73.6%
	Women	16.7%	22.3%	26.4%
Administrative Staff	Men	64.0%	56.7%	60.7%
	Women	36.0%	43.3%	39.3%
Performers	Men	94.4%	95.4%	93.0%
	Women	5.6%	4.6%	7.0%
Total	Men	85.4%	85.5%	84.5%
	Women	14.57%	14.5%	15.5%

Professional Category	Age	2019	2020	2021
Top Management	<30	0.6%	0.0%	0.0%
	30-50	37.0%	34.5%	40.2%
	>50	62.3%	65.5%	59.8%
Senior Managers	< 30	11.1%	7.9%	7.3%
	30-50	60.9%	62.0%	63.5%
	>50	28.0%	30.2%	29.2%
Middle Managers	<30	7.8%	8.2%	8.4%
	30-50	49.0%	55.4%	59.9%
	>50	43.1%	36.4%	31.7%
Administrative Staff	<30	13.9%	12.1%	14.7%
	30-50	50.4%	48.4%	50.7%
	>50	35.7%	39.4%	34.6%
Performers	<30	13.0%	10.8%	9.7%
	30-50	56.1%	56.9%	59.6%
	>50	30.9%	32.3%	30.7%
Total	<30	11.9%	10.0%	9.4%
	30-50	54.5%	55.7%	58.9%
	>50	33.6%	34.3%	31.7%



SPECIFIC CONTENT

LOCATION

405-2 Ratio of basic salary and remuneration of women to men

	ETSA	Secil	Navigator	Semapa Holding	Semapa Next
Board of Directors	N.A.	N.A.	0.28	0.29	N.A.
Top Management	0.87	0.91	0.68	1.18	N.A.
Senior Managers	1.17	0.97	0.75	0.79	1.06
Middle Managers	N.A.	0.93	0.66	0.83	N.A.
Administrative Staff	0.73	1.06	N.A.	N.A.	N.A.
Performers	0.78	0.98	0.88	1.49	N.A.

Note:

It should be noted that for the calculation of this indicator, Secil and The Navigator Company use salaries paid in Portugal only.

Navigator and Semapa do not include the category "Administrative staff".

It should also be noted that for this indicator, as for indicator 405-1, Employees of Semapa Next have been separated from Semapa Holding, in order to ensure greater data transparency.

GRI 406: NON-DISCRIMINATION

Concerning the standard published in 2016

406-1 Incidents of discrimination and corrective actions taken

No discrimination incidents were recorded.

GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

Concerning the standard published in 2016

407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk

This risk is not identified in any operation or supplier.

GRI 408: CHILD LABOUR

Concerning the standard published in 2016

408-1 Operations and suppliers at significant risk for incidents of child labour

This risk is not identified in any operation or supplier.

GRI 409: FORCED OR COMPULSORY LABOUR

Concerning the standard published in 2016

409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour

This risk is not identified in any operation or supplier.

GRI 410: SECURITY PRACTICES

Concerning the standard published in 2016

410-1 Security personnel trained in human rights policies or procedures

Respect for human rights is embedded in the activities of all Group companies and extends to service providers and suppliers, as reflected in guiding documents such as the codes of conduct. Group companies subcontract security services. In Semapa's case, security guards receive comprehensive training in five-year cycles.

GRI 413: LOCAL COMMUNITIES

Concerning the standard published in 2016

413-1 Operations with local community engagement, impact assessments, and development programs

In Chapter **07. COMMUNITY ENGAGEMENT**, some of the activities carried out across the Group are highlighted. However, they are described in greater detail in the sustainability report of each subsidiary.



SPECIFIC CONTENTS	LOCATION
GRI 414: SUPPLIER SOCIAL ASSESSMENT	
Concerning the standard published in 2016	
<p>414-1 New suppliers that were screened using social criteria</p> <p>The Semapa Group has been working towards an increasingly sustainable supply chain, and consequently a more socially responsible one. Secil is currently developing a code of conduct for suppliers, which it expects to conclude in 2022, while The Navigator Company has published a code of conduct for suppliers. The content of this code is very consistent with the procurement documentation, highlighting concerns about environment, safety, human rights and fundamental labour rights issues, whose acceptance by suppliers is reinforced.</p> <p>It should also be noted that in two years ETSA has more than tripled the proportion of suppliers who have undergone due diligence processes for social impacts, and in 2021 a third of new suppliers had already been checked for fit and proper requirements.</p>	
<p>414-2 Negative social impacts in the supply chain and actions taken</p> <p>The Semapa Group has been working towards an increasingly sustainable supply chain, and consequently a more socially responsible one. Secil is currently developing a code of conduct for suppliers, which it expects to conclude in 2022, while The Navigator Company has published a code of conduct for suppliers. The content of this code is very consistent with the procurement documentation, highlighting concerns about environment, safety, human rights and fundamental labour rights issues, whose acceptance by suppliers is reinforced.</p> <p>ETSA has increased the number of suppliers evaluated for social impacts, and in 2021 25 evaluations have been performed.</p>	
GRI 415: PUBLIC POLICY	
Concerning the standard published in 2016	
<p>415-1 Political contributions</p> <p>Semapa Group did not make contributions to political parties.</p>	
GRI 417: MARKETING AND LABELLING	
Concerning the standard published in 2016	
<p>417-1 Requirements for product and service information and labelling</p> <p>In the Semapa Group, labelling and product information requirements are important due to the nature of the products. While Secil and ETSA require all packaged products to be labelled, The Navigator Company does not require this, except for Tissue and products bearing logos such as Ecolabel, FSC, PEFC, among others.</p>	
<p>417-2 Incidents of non-compliance concerning product and service information and labelling</p> <p>The Semapa Group has not identified cases of non-conformity concerning labelling of products and services.</p>	
<p>417-3 Incidents of non-compliance concerning marketing communications</p> <p>The Semapa Group has not identified any cases of non-compliance concerning marketing communications.</p>	

8.3 DNFI CORRESPONDENCE TABLE (DISCLOSURE OF NON-FINANCIAL INFORMATION)

This table matches the contents of the Semapa Group 2021 Sustainability Report with the elements required in the report template for disclosure of non-financial information, as recommended by the CMVM (Portuguese Securities Market Commission). This template, concerning companies issuing securities admitted for trading in regulated markets, results from the applicable legal framework.

PART I - INFORMATION ON THE POLICIES ADOPTED

CHAPTERS	SUBCHAPTERS	CORRESPONDENCE OF CONTENT	LOCATION
A. INTRODUCTION	1. Description of the Company's overall sustainability policy, highlighting any changes to the previously approved policy.	SR 2021: ABOUT THE REPORT and Chapter 2	Page 6 and Page 22
	2. Description of the methodology and the grounds for applying it to the reporting of non-financial information, as well as any changes that have occurred in relation to previous years and the reasons for them.	In accordance with GRI Standards SR 2021: ABOUT THE REPORT	Page 6
B. CORPORATE MODEL	1. General description of the Company's/ Group's business model and form of organisation, indicating the main business areas and markets in which it operates (if possible, with recourse to organisational charts, graphs or functional tables).	SR 2021: OUR DNA 2021 ANNUAL REPORT	Page 17
C. CORE RISK FACTORS	1. Identification of the main risks associated with the subjects reported and arising from the Company's activities, products, services or business relationships, including, where appropriate and whenever possible, the supply and subcontracting chains.	SR 2021: Chapter 4.3 and 8.2 (GRI 2-12 and 2-23) 2021 Annual Report: Corporate Governance Report 2021 Part 1. C. III.	Page 64 and 117 Page 112
	2. Indication of how these risks are identified and managed by the Company.		
	3. Explanation of the internal functional division of responsibilities, including the corporate bodies, commissions, committees or departments responsible for identifying and managing/monitoring the risks.		
	4. Explicit statement of the new risks identified by the Company in relation to what was reported in previous years, and the risks that are no longer reported.		
	5. Statement and brief description of the main opportunities that are identified by the Company in the context of the topics reported.		



CHAPTERS	SUBCHAPTERS	CORRESPONDENCE OF CONTENT	LOCATION
D. POLICIES IMPLEMENTED		SR 2021: Chapters 2, 3 and 6.	Pages 22, 38 and 92
		1. Description of the Company's strategic objectives and the main actions taken to achieve them.	
i. Environmental policies		SR 2021: Chapter 3, 6 and 8.2 (GRI 301 to 305).	Pages 38, 92 and 117
		2. Description of key performance indicators set.	
		3. Assessment of the degree of realisation of such objectives, in relation to the previous year, at least by reference to: <ul style="list-style-type: none"> i. Sustainable use of the resources ii. Pollution and climate change iii. Circular economy and waste management iv. Biodiversity protection 	Page 117
ii. Social and tax policies		SR 2021: Chapter 2.1	Page 22
		1. Description of the Company's strategic objectives and the main actions taken to achieve them.	
		SR 2021: Chapter 7 and 8.2 (GRI 201-1, 203-1, 204-1, 413 and 414).	Pages 108 and 117
		2. Description of key performance indicators set.	
		3. Assessment of the degree of realisation of such objectives, in relation to the previous year, at least by reference to:	
		SR 2021: Chapter 7 and 8.2 (GRI 201-1 and 204-1).	Pages 108 and 117
		i. Community engagement	
		SR 2021: Chapter 8.2 (GRI 414).	Page 117
		ii. Subcontracting and suppliers	
		SR 2021: Chapter 8.2 (GRI 414).	Page 117
	iii. Consumers		
	SR 2021: Chapters 4.1 and 7.	Pages 52 and 108	
	iv. Responsible investment		
	SR 2021: Chapter 2.2 and 8.2 (GRI 2-29).	Pages 27 and 117	
	v. Stakeholders		
	SR 2021: Chapter 8.2 (GRI 207). Annual Report 2021	Page 117	
	vi. Taxes		



CHAPTERS	SUBCHAPTERS	CORRESPONDENCE OF CONTENT	LOCATION
iii. Employees and gender equality and non-discrimination	1. Description of the Company's strategic objectives and the main actions taken to achieve them.	SR 2021: Chapters 2 and 4.2	Pages 22 and 61
	2. Description of key performance indicators set.	SR 2021: Chapter 8.2 (GRI 2- 7 and 405).	Page 117
	3. Assessment of the degree of realisation of such objectives, in relation to the previous year, at least by reference to:		
	i. Employment	SR 2021: Chapter 5.1 and 8.2 (GRI 2-5, 2-30, 404-1, 405, 406).	Pages 75 and 117
	ii. Labour organisation	SR 2021: Chapter 5.1	Page 75
	iii. Health and safety	SR 2021: Chapter 5.3 and 8.2 (GRI 403)	Pages 84 and 117
	iv. Social relations	SR 2021: Chapter 8.2 (GRI 2- 30).	Page 117
v. Training	SR 2021: Chapter 5.1 and 8.2 (GRI 205-2 and 404).	Pages 75 and 117	
vi. Equality:	SR 2021: Chapter 4.2 and 8.2 (GRI 401-3 and 405). Principles of diversity: https://www.semapa.pt/en/investidores/governo/principiosdiversidade	Pages 61 and 117	
iv. Human Rights	1. Description of the Company's strategic objectives and the main actions taken to achieve them.	SR 2021: Chapter 4.2	Page 61
	2. Description of key performance indicators set.	SR 2021: Chapter 8.2 (GRI 2- 23, 407, 408 and 409).	Page 117
	3. Assessment of the degree of realisation of such objectives, in relation to the previous year: i. Due diligence procedures ii. Risk prevention measures iii. Legal proceedings		



CHAPTERS	SUBCHAPTERS	CORRESPONDENCE OF CONTENT	LOCATION
v. Fighting corruption and attempted bribery	1. Preventing corruption: measures and instruments adopted to prevent corruption and bribery; policies implemented to deter employees and suppliers from adopting such practices; information on the compliance system indicating the respective function supervisors, if any; indication of legal proceedings involving the Company, its directors or employees related to corruption or bribery; public procurement measures adopted, if relevant.	SR 2021: Chapter 8.2 (GRI 2- 23, 2-26 and 205) 2021 Annual Report: Corporate Governance Report 2021: Part 1. C. II.	Page 117 Page 111
	2. Prevention of money laundering (for issuers subject to this regime): measures to combat money laundering; indication of the number of cases reported annually.	SR 2021: Chapter 4.2 and 8.2 (GRI 2-23, 2- 26 and 205). 2021 Annual Report: Corporate Governance Report 2021: Part 1. C. II.	Pages 61 and 117 Page 111
	3. Codes of ethics: indication of any code of ethics which the company has signed or implemented; indication of the respective mechanisms for its implementation and monitoring of compliance, if applicable.	SR 2021: Chapter 4.2 and 8.2 (GRI 2-23, 2- 26 and 205). 2021 Annual Report: Corporate Governance Report 2021: Part 1. C. II.	Pages 61 and 117 Page 111
	4. Management of conflicts of interest: measures to manage and monitor conflicts of interest, namely requiring managers and employees to sign declarations of interest, conflicts and impediments.	SR 2021: Chapter 8.2 (GRI 2- 15). 2021 Annual Report: Corporate Governance Report 2021: Part 1. C. II.	Page 117 Page 111



PART II - INFORMATION ON STANDARDS / GUIDELINES FOLLOWED

1. IDENTIFICATION OF STANDARDS/ GUIDELINES FOLLOWED FOR REPORTING NON-FINANCIAL INFORMATION	<p>Identification of the standards/guidelines followed in the preparation of the non-financial information, including the respective options and other principles considered in the Company's performance, if applicable.</p> <p>If the Company mentions the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030, highlight those which the Company is committed to achieving, indicating the measures taken each year to meet the goals set for each of these SDGs. In other words, identify actions, projects or concrete investments for meeting the SDGs.</p>	<p>GRI Standards: SR 2021: GRI Index</p>
2. IDENTIFICATION OF SCOPE AND METHODOLOGY FOR CALCULATING THE INDICATORS	<p>Description of the scope and methodology (including calculation formula) for calculating the indicators provided, and of the reporting constraints.</p> <p>Whenever possible, presentation of a table of correspondence between the indicators presented and the principles or objectives considered, indicating the site where the information is detailed (e.g., the page of the separate report for the disclosure of non-financial information, the annual report, other documents or the Company's website).</p>	<p>SR 2021: GRI Index</p>
3. EXPLANATION FOR NOT IMPLEMENTING POLICIES	<p>Where the Company does not implement policies with respect to one or more topics, the reporting of non-financial information provides an explanation for this.</p>	
4. OTHER INFORMATION	<p>Additional items or information that are not addressed in the previous paragraphs, but are relevant for understanding, contextualising and justifying the importance of the non-financial information disclosed, particularly with regard to networks/consortia of entities linked to issues of sustainability and responsibility of the organisations that it is a member of/ belongs to, whether at national or international level, and sustainability commitments that the Company has voluntarily undertaken, at local or global level.</p>	<p>SR 2021</p>



8.4 CORRESPONDENCE TABLE OF THE WORLD ECONOMIC FORUM CORE STAKEHOLDER CAPITALISM METRICS

PILLAR	THEME	METRICS	ALIGNMENT TO GRI
Principles of Governance	Governing purpose	Setting purpose	GRI 2-12
	Quality of governing body	Governance body composition	GRI 2-9
			GRI 405-1
	Stakeholder engagement	Material issues impacting Stakeholders	GRI 2-12
			GRI 2-29
	Ethical behaviour	Anti-corruption	GRI 205-2
GRI 205-3			
Risks and opportunity oversight	Integrating risk and opportunity into business process	No associated GRI	
Planet	Climate Change	Greenhouse Gas (GHG) Emissions	GRI 305-1,2 and 3
		TCFD implementation	No associated GRI
	Nature loss	Land use and ecological sensitivity: Land use and ecological sensitivity focused on protected areas or with high biodiversity value.	GRI 304-1
Freshwater availability	Water consumption and withdrawal in water-stressed areas	GRI 303-3 and 4	
People	Dignity and equality	Diversity and inclusion: Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g. ethnicity).	GRI 405-1 and 405-2
		Pay equality: Wage gap between men and women, ethnic minorities and majorities, and other relevant equality areas.	
		Wage level: Ratios of standard entry level wage by gender compared to local minimum wage.	GRI 202-1
		Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO.	GRI 2-21
	Health and well-being	Risk of incidents of child labour forced or compulsory labour	GRI 408-1 and 409-1
		Health and safety: The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries; main types of work-related injury; and the number of hours worked.	GRI: 403-9
Skills for the future	An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers.	GRI 403-6	
	Training (no.) hours of training per employee	GRI 404-1	
	Training (€) investment in training per employee	No associated GRI	



PILLAR	THEME	METRICS	ALIGNMENT TO GRI
Prosperity	Employment and wealth generation	Absolute number and rate of employment: Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region and Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.	GRI 401-1
		Economic contribution: Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by: Revenues, Operating costs, Employee wages and benefits, Payments to providers of capital and Payments to government.	GRI 201-1
		Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period.	GRI 201-4
		Financial investment contribution: Total capital expenditures (CapEx) <i>minus</i> depreciation, supported by narrative to describe the company's investment strategy.	No associated GRI
		Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders.	No associated GRI
	Innovation of better products and services	Total R&D expenses Total costs related to research and development	No associated GRI
	Community and social vitality	Total tax paid: The total overall tax borne by the company, including corporate income taxes, property taxes, non-creditable VAT and other sales taxes, employer-paid payroll taxes, and other taxes that constitute costs to the company, by category of taxes.	GRI 201-1 and 207-4



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RESPONSE TO THE EUROPEAN TAXONOMY



9.1 EUROPEAN TAXONOMY

Regulation (EU) No 2020/852 of the European Parliament and of the Council of 18 June 2020 introduced a new concept, Taxonomy, establishing a framework for the concept of sustainable investment.

The Taxonomy acts as a standardised and compulsory classification system to determine which economic activities are considered 'environmentally sustainable' in the European Union.

The Taxonomy is based on a classification system of economic activities, using the Statistical Classification of Economic Activities in the European Community (NACE) supplemented by the creation of new categories where this is not sufficiently precise.

In this context, in 2021 the EU published a catalogue of activities considered eligible for two environmental objectives:

- climate change mitigation; and
- climate change adaptation.

In 2022, using data corresponding to the 2021 financial year, the EU established a reduced disclosure obligation, according to which only shares of economic activities eligible for Taxonomy and ineligible in terms of turnover (TURNOVER), capital expenditure (CAPEX) and operating expenditure (OPEX) must be disclosed. The assessment and disclosure of whether eligible activities are classified as Taxonomy-aligned will be mandatory, in principle, from 2023 onwards, regarding data from the 2022 financial year.

To assess whether an activity is Taxonomy-aligned, it is necessary to check whether or not it is described in Annexes I and II of Commission Delegated Regulation (EU) No 2021/2139, as only those activities can be eligible for Taxonomy. This list of activities is not definitive and is expected to be updated by the UE, progressively integrating other activities that were not considered in the initial list.

Taxonomy-aligned activities can be further broken down according to the main objective they seek to achieve:

- substantial contribution to climate change mitigation (Annex I to Commission Delegated Regulation (EU) No 2021/2139; Article 10 of Regulation (EU) No 2020/852 of the European Parliament and of the Council of 18 June 2020).
- substantial contribution to climate change adaptation (Annex II to Commission Delegated Regulation (EU) No 2021/2139. Article 11 of Regulation (EU) No 2020/852 of the European Parliament and of the Council of 18 June 2020).

It is sufficient for an activity to fall into one of these categories for it to be considered eligible, although it may also comply with both.



ELIGIBLE ACTIVITIES

According to the analysis of Semapa Group activities, the following activities were identified as falling within the scope of the activities set out in Annexes I and II of Delegated Regulation (EU) No 2021/2139:

Activity	Segment	NACE codes
3.7 – Cement production	Cement:	C.23.51
4.8 – Production of electricity from bioenergy	Pulp and paper	D35.11
4.20 – Co-generation of heat/cold and power from bioenergy	Pulp and paper	D35.11 and D35.30



The Group's activities included in the eligible activities essentially correspond to the grey cement production activities in the cement segment and to the co-generation activities and power generation from bioenergy in the pulp and paper segment.

The emphasis of the Taxonomy at this stage is on the most carbon and green energy-intensive industries, which is why a relevant part of the Group's activities, namely pulp and paper production and the activities in the environment segment are not yet provided for in Annexes I and II of the Delegated Regulation, and therefore cannot be encompassed in the Semapa Group's eligible activities.

As such, the following activities have been excluded from the eligible activities, as they are not listed in the aforementioned Annexes I and II:

- Navigator's pulp and paper production activities (pulp and paper segment);
- the Secil Group's production and sale of white cement, ready-mix concrete, aggregates, mortar, concrete precast products, and hydraulic lime (cement segment);
- the collection and rendering of animal by-products and edible oils of the ETSA Group (environment segment).



PROPORTION OF ELIGIBLE ACTIVITIES

As defined by the Taxonomy, the amounts reported were calculated in accordance with Semapa's Consolidated Financial Statements for the year ended 31 December 2021, which were prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union. As this is the first year of application of the Taxonomy, comparative figures are not presented.

The EU Taxonomy requires companies to disclose how they have avoided duplication in the consideration of eligible economic activities (numerator), i.e. in determining turnover, capital expenditure, and operating expenses. The Semapa Group determined eligible expenses on the basis of its financial and analytical accounting, and ensured that cost elements were considered only once when calculating the indicators.

TURNOVER

(unaudited figures)

(million euros)	Pulp and paper	Cement	Environment	Holdings	Consolidated
Total turnover:	1,595.7	495.7	40.0	-	2,131.4
Turnover of Eligible Activities	113.2	297.5	-	-	410.8
% Eligible Activities	7.1%	60.0%	0.0%	-	19.3%

The amounts shown in the first line of the previous table (denominator of the calculation of the ratio of eligible activities) correspond to the consolidated amount of services rendered, sales and other operating income determined on the basis of the consolidated financial statements as at 31 December 2021 (note 2.1).

The turnover of the eligible activities, as mentioned above, corresponds only to those activities of the Group that were provided for in Annexes I and II of the Delegated Regulation.

CAPEX

(unaudited figures)

(million euros)	Pulp and paper	Cement	Environment	Holdings	Consolidated
CAPEX	87.5	69.2	3.9	0.2	160.8
CAPEX of Eligible Activities	13.3	50.4	1.0	-	64.7
% Eligible Activities	15.2%	72.9%	24.4%	-	40.2%

The amounts shown in the first line of the previous table (denominator of the calculation of the ratio of eligible activities) correspond to the sum of acquisitions of assets of property, plant and equipment, intangible assets, and right-of-use assets in 2021, disclosed in notes 3.2, 3.3 and 3.5 to Semapa's consolidated financial statements. For the purposes of calculating this ratio, additions of intangible assets related to the acquisition of CO₂ licenses were excluded, since it was not actually acquisition of licenses, but licenses attributed to the Group, and their classification as intangible assets results only from the accounting policy adopted by the Group in the absence of a specific accounting standard for the treatment of CO₂ licenses. It should also be noted that the ratio of the cement segment is negatively influenced by the fact that in the period new usage rights associated with long-term port concession contracts were recognised in the amount of around 8 million euros.

The CAPEX amounts shown in the second line of the previous table (numerator of the calculation of the ratio of eligible activities) correspond to investments allocated to activities classified as illegible. These amounts include investments such as:

PULP AND PAPER

- a new biomass boiler at the Figueira da Foz industrial site;
- photovoltaic plants in Setúbal and Figueira da Foz;
- conversion of the lime kiln at the Setúbal industrial unit to replace fossil fuel with biomass;
- investments associated with the Aveiro and Setúbal Biomass Power Plants;
- investments related to the programme for the reduction of water consumption; and
- investments associated with the Group's environmental plan;

CEMENT

- The Clean Cement Line Project aims at developing and demonstrating a new cement production technology. This project includes four R&D sub-projects aimed at eliminating dependence on fossil fuels, increasing energy efficiency, producing own energy, integrating the digitalisation process, and reducing CO₂ emissions. These innovations will promote the development of low carbon clinker production and consequently the creation of a range of low carbon footprint cements; and
- Replacement of gas pipelines, coke dispensers, and gas analysers.

ENVIRONMENT

- System to optimise steam consumption; improve IVEB effectiveness; and replace the fleet with new generation vehicles with lower CO₂ emissions.



OPEX

(unaudited figures)

(million euros)	Pulp and paper	Cement	Environment	Holdings	Consolidated
OPEX	89.3	34.5	1.3	-	125.1
OPEX of Eligible Activities	12.8	22.5	0.1	-	35.4
% Eligible Activities	14.4%	65.1%	9.0%	-	28.3%

The amounts shown in the first line of the previous table (denominator of the calculation of the ratio of eligible activities) correspond to the following expenses determined on the basis of the consolidated financial statements as at 31 December 2021:

- unfunded research and development expenditure;
- renovation/maintenance costs of buildings and other facilities;
- maintenance and repair costs;
- short-term lease expenditure and other unfunded lease expenditure; and
- other expenditure directly related to the maintenance of property, plant and equipment or investment properties.

The OPEX amounts shown in the second line of the previous table (numerator of the calculation of the ratio of eligible activities) correspond to OPEX allocated to activities classified as eligible. These amounts include OPEX such as:

PULP AND PAPER

- Expenditure on research and development of new products and applications associated with forestry and innovative industrial processes, with a view to developing and adopting new technologies in the area of sustainable production processes and products, as well as in biotechnology, biorefining, and bioproducts, with a view to reducing the incorporated carbon content of the Navigator Group's solutions;
- Unfunded maintenance costs necessary to operate the co-generation and biomass power plants;
- Other expenditure associated with technologies and products dedicated to the reduction of GHG emissions;

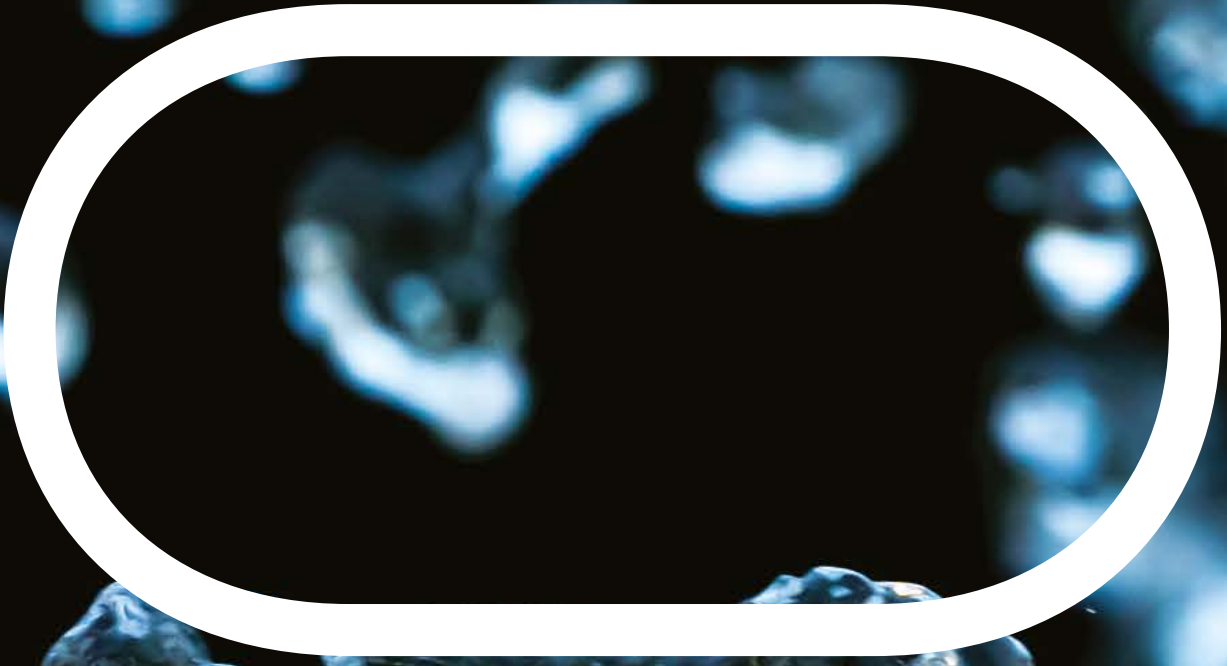
CEMENT


- Expenditure relating to the Cement Application Development Centre (CDAC), for the research and development of new cement products and applications, and innovative industrial processes for cement production, with a view to developing and adopting new technologies in the Group in the area of sustainable production processes and products, aimed at reducing the incorporated carbon content of the Secil Group's solutions;

ENVIRONMENT

- Optimisation of compressed air systems and fuel combustion in steam boilers.

As part of the Group's strategy and of its sustainability goals, parallel efforts are being made to actively follow the principles associated with the other pillars of the Taxonomy, applicable from the next financial year, in particular the transition to a circular economy, the protection of ecosystems and biodiversity, the prevention and control of pollution, and the sustainable use and protection of water and marine resources.



A dynamic background featuring a splash of water against a dark blue, almost black, backdrop. The water droplets are captured in mid-air, creating a sense of movement and freshness. The lighting highlights the individual droplets, giving them a crystalline appearance.

INDEPENDENT LIMITED ASSURANCE REPORT



INDEPENDENT LIMITED ASSURANCE REPORT FOR SEMAPA – SOCIEDADE DE INVESTIMENTO E GESTÃO, SGPS, S.A.

(Free translation from a report originally issued in Portuguese language. In case of doubt the Portuguese version will always prevail.)

Introduction

We were engaged by the Board of Directors of da **Semapa – Sociedade de Investimento e Gestão, SGPS, S.A.** (the Entity) to provide limited assurance on whether nothing has come to our attention that causes us to believe that the sustainability information included in the Sustainability Report for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with the requirements of the GRI Standards and that the Entity has not applied, in the sustainability information included in the Sustainability Report for the year ended 31 December 2021, the GRI Standards.

Responsibilities of Management

Management is responsible for:

- For the preparation of the sustainability information, included in the 2021 Sustainability Report, in accordance with the Global Reporting Initiative Standards (Information);
- For the design, implementation and maintenance of an appropriate information and internal control system to enable the preparation of information that is free from material misstatement, whether due to errors or fraud;
- For the prevention and detection of fraud and errors and for the identification and ensuring that Semapa complies with laws and regulations applicable to its activities.
- Ensuring that Management and staff involved with the preparation of the Information are properly trained.



Our responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed.

We conducted our engagement in accordance with International Standard on Assurance Engagements other than Audits or Reviews of Historical Financial Information – ISAE 3000 (Revised) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and the other standards and technical guidance issued by the Portuguese Institute of Statutory Auditors (Ordem dos Revisores Oficiais de Contas). These Standards require that we plan and perform the engagement to obtain limited assurance about whether nothing has come to our attention that causes us to believe that the sustainability information included in the Sustainability Report for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with GRI Standards and that the Entity has not applied, in the sustainability information included in the Sustainability Report for the year ended 31 December 2021, the GRI Standards.

We applied the International Standard on Quality Control 1 and accordingly we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Portuguese Institute of Statutory Auditors (including international independence standards), (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We conducted our engagement in accordance with International Standard on Assurance Engagements other than Audits or Reviews of Historical Financial Information – ISAE 3000 (Revised) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and the other standards and technical guidance issued by the Portuguese Institute of Statutory Auditors (Ordem dos Revisores Oficiais de Contas). Our engagement was planned and performed with the purpose of obtaining limited assurance about whether nothing has come to our attention that causes us to believe that the sustainability information included in the Sustainability Report for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with GRI Standards and that the Entity has not applied, in the sustainability information included in the Sustainability Report for the year ended 31 December 2021, the GRI Standards.

A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of information presented in the 2021 Sustainability Report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Interviews with senior management and relevant staff at corporate and operational level concerning sustainability strategy and policies for material issues, and the implementation of these across the business;
- Interviews with relevant staff responsible for preparing the information of the sustainability information for the year ended 31 December 2021;
- Comparing the information presented in the Entity's Sustainability Report for the year ended 31 December 2021 to corresponding information in the relevant underlying sources to determine whether all the relevant information contained in such underlying sources has been included in the Report; and



- Reading the information presented in the Sustainability Report to determine whether it is in line with our overall knowledge of the Entity.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement, and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the sustainability information included in the Sustainability Report for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with the requirements of the GRI Standards and that the Entity has not applied, in the sustainability information included in the Sustainability Report for the year ended 31 December 2021, the GRI Standards.

Restriction on the use of our report

Our Limited Assurance Report is issued solely for the information and use of the Board of Directors of Semapa - Sociedade de Investimento e Gestão, SGPS, S.A. in connection with the release of the 2021 Sustainability Report and should not be used for any other purpose. We accept or assume no responsibility and deny any liability to any party other than the Entity for our work, for this independent limited assurance report, or for the conclusions we have reached.

30 March 2022

KPMG & Associados -
Sociedade de Revisores Oficiais de Contas, S.A.
(no. 189 and registered at CMVM with no. 20161489)
represented by
Paulo Alexandre Martins Quintas Paixão
(ROC no. 1427 and registered at CMVM with no. 20161037)



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ISIN: PTSEM0AM0004 | LEI: 549300HNGOW85KIOH584 | Ticker: Bloomberg (SEM PL); Reuters (SEM.LS)

TECHNICAL SUPPORT
Stravillia Sustainability Hub

DESIGN AND DEVELOPMENT
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