

**MASTER OF SCIENCE IN
FINANCE**

**MASTERS FINAL WORK
PROJECT**

EQUITY RESEARCH:
ENCE, ENERGIA & CELULOSA, S.A.

ANTÓNIO NUNO PINTO DIAS RAIMUNDO

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SUPERVISOR:
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Abstract

The objective of the report is to study an investment recommendation for ENCE, Energia & Celulosa, S.A. This report is based on the public information available until 16th October 2020 and it was developed according to the CFA Institute recommendation for the CFA Research Challenge.

ENCE, Energía & Celulosa, S.A. is a Spanish company whose purpose is to produce paper pulp and biomass energy. During the course of Equity Research, I had the opportunity to study this industry which became interesting due to the synergies between paper and forest and renewable energies segment.

ENCE valuation is calculated using a Weighted Average Cost of Capital (WACC) Method through Free Cash Flow to the Firm (FCFF) for the industry, complemented with Free Cash Flow to Equity (FCFE), Multi-Stage Dividend Discount Model (DDM) and a Relative Multiples Valuation.

At the end, the recommendation of this report is to hold the common share with a price target of € 2.44 per share in the end of 2021, which represent an upside potential of 13 % comparing with price of the common share at the report date. This recommendation is based on a high level of risk, since the company is highly exposed on external factors, like wood and Bleached Hardwood Kraft Pulp price fluctuations derived from the actual worldwide crisis. The company is expanding its business segments like, paper pulp production and renewable energy co-generation. This investment strategy will guarantee a sustainable growth for ENCE and its shareholders in the future.

JEL Classification: G10 ; G32 ; G34.

Keywords: Equity Research ; Valuation ; ENCE ; Paper Pulp Industry.

Resumo

O objetivo desta avaliação é estudar uma recomendação de investimento acerca de ENCE, Energia & Celulosa, S.A. Este relatório é baseado em toda a informação pública disponível à data de 16 de outubro de 2020 e foi desenvolvido de acordo com as normas e recomendações impostas pelo CFA Institute no “CFA Research Challenge”.

ENCE, Energia & Celulosa, S.A. é uma empresa Espanhola produtora de pasta de papel e de energias renováveis. Durante a unidade curricular de Equity Research tive a oportunidade de estudar esta indústria, pela qual desenvolvi especial interesse devido às sinergias da indústria do papel e das energias renováveis.

A empresa ENCE foi avaliada através do Método *Weighted Average Cost of Capital (WACC)* para a indústria, confirmado pela avaliação através do Modelo de Dividendos Descontados, bem como, da comparação dos múltiplos de empresas concorrentes.

Após os estudos de avaliação, obtivemos uma recomendação de manter as ações com um preço unitário de € 2.44 no final do ano de 2021, representando uma valorização de 13% face ao preço da ação à data do relatório. Esta recomendação é baseada num nível de risco elevado, visto que a empresa está altamente exposta a várias flutuações de preço das matérias-primas como a madeira e a celulose, decorrentes da crise mundial que vivemos atualmente. A empresa está empenhada em expandir os vários segmentos de atividade, concretamente, a produção de pasta de papel e co-geração de energia renovável. Esta estratégia de investimento irá garantir um crescimento sustentado para a ENCE e para os seus acionistas no futuro.

Classificação JEL: G10 ; G32; G34.

Palavras-Chave: Equity Research ; Avaliação de Empresas ; ENCE ; Indústria de Pasta de Papel.

Acknowledgements

The elaboration of this research would not have been possible without the support of the following people, who were crucial through all this challenging process.

Foremost, I would like to express my gratitude to my supervisor, Professor Victor Barros, for helping me with his vast knowledge and experienced guidance throughout this project.

A special thanks is owed for my parents and my sister, for always inspiring and encouraging me through the most difficult hours. To providing me a privileged education, which I am certain, will help me in my personal and professional future. To my grandparents, who have taught me that working hard is an essential element in achieving happiness. In particular, to my grandfather Alberto, who have showed me the importance of never stop studying, to always be curious and persistent.

To Ana Teresa, for all the unconditional support, patience and above everything else, your love. For making me believe in myself, especially in the most difficult times.

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Masters in Finance

Research Snapshot

Table 1 - Analyst's Risk Assessment

Low Medium **High**

Source - The Author

Table 2 - ENCE Market Data

Market Profile	
Closing Price	2,16 €
52-week price range	1,87 € - 4,07 €
3-Month Average Volume	24,47 €
Shares Outstanding (Mn)	246,3
Market Capitalization (Mn)	532,00 €
BV per share	2,70 €
Free Float	51,74%
ROE	1,38%
D/E	95,04%
P/BV	0,82 €
P/E	32,00 €

Source - Thomson Reuters

Table 3 - ENCE Results

2021F	
Revenue	660,59 €
Cost of Sales	277,45 €
EBITDA	96,62 €
EBITDA Margin	14,63%
EBIT	30,57 €
EBIT Margin	4,63%
Net Income	11,46 €

Source - The Author

Table 4 - ENCE Valuation for 2021F

Valuation	
DCF (FCFF)	2,44 €
Upside Potential	13%
DCF(FCFE)	2,72 €
Upside Potential	26%
DDM	2,59 €
Upside Potential	20%
EV/Sales	2,21 €
P/B	2,60 €
Average	2,41 €
Upside Potential	12%

Source - The Author

Table 5 - Impact on ENCE Price Target by Changes in BHKP Price (€/t) for 2021F

Price Target		
BHKP Price (€/t)	600	2,36 €
	700	2,41 €
	766	2,44 €
	800	2,46 €
	900	2,51 €

Source - The Author

We issue a **HOLD** recommendation for **ENCE, Energía & Celulosa S.A. (ENC)**, with a **price target** of € 2.44 per common share, representing a upside/downside potential of **13 %** from the latest closing price of € 2.16 on 16th October 2020, using a **Discounted Free Cash Flow to Firm Method** with high risk level. This recommendation is based on a combination of macroeconomic and company-specific expected results that place the company in an important position within the industry.

Figure 1 - Historical Share Price of ENCE and IBEX 35 (€)



Source - Thomson Reuters

Recover trend in pulp prices.

In the last two years the prices have been decreasing due to the structural change in demand and supply. This trend is expected to change in the short-term and Bleached Hardwood Kraft Pulp (BHKP) prices should increase and stabilize after the pandemic is over. Macroeconomic indicators expect an upturn of 6.72 % CAGR in BHKP prices until 2026, moving from € 633/t in 2020 to € 882/t in 2026. The Asian potential to grow in the tissue market and sustained demographic growth constitute a main driver to a constant increase in pulp demand, which will represent an upwards trend in pulp prices.

Efficient cost structure driven by investment strategy.

ENC is currently investing in increasing capacity and efficiency. By 2026 the company expects to have increased its pulp production capacity by 10 %, to 1.3 Mn tonnes. The company is one of the most efficient pulp producers when compared to its peers and expects to increase its efficiency. In 2019, ENC used 2.97 tonnes of wood to produce 1 tonne of pulp, while the average ratio in the market is 3.2 tonnes of wood per tonne of pulp. So, the company expects to maintain that level of efficiency in order to guarantee sustainable results.

Sustainable growth in renewables energy.

The high synergies between paper pulp and biomass energy production make ENC to hold a strong position in the market. The company was one of the first biomass producers and accounts for more than 30% in the Spanish market. The company is currently investing in increasing their position in the market by expanding their production plants. In 2019, ENC approved an investment plan in this segment of € 475 Mn.

Table 6 - ENCE's Brief Profile

ENCE, Energía y Celulosa SA	
Traded	Madrid Stock Exchange
ISIN	ES0130625512
Headquarters	Madrid, Spain
Chairman	José Luís Arregui
CEO	Ignacio de Colemares
Products	Paper Pulp, Renewable Energy and Forestry
Nº of Employees	1.048

Source - Thomson Reuters

Business Description

ENCE Energía y Celulosa, S.A. is a Spanish company dedicated to the production of Bleached Hardwood Kraft Pulp (BHKP), biomass renewable energy and forest management.

The company is headquartered in Madrid and was founded in 1957 as National Pulp Company linked to the former National Institute of Industry. In 1990, after its IPO changed to the actual designation ENCE. Company's shares are listed on the Spanish stock exchange and the continuous market since it was fully privatized in 2001. They are traded in the **Ibex35** and the **Ibex Top Dividend** indices.

ENC **pulp production** capacity is approximately 1.1 Mn tonnes per year, making the company one large producer in Europe. Production happens in two bio factories: **Navia** and **Pontevedra**. Navia bio factory has a production capacity of 605.000 tonnes per year and uses ECF (*Elemental Chlorine Free*) process. While Pontevedra has a 495.000 tonnes capacity per year and the process is TCF (*Total Chlorine Free*), meaning that uses only hydrogen peroxide as bleaching agent. In both bio factories are used raw materials in a way that is respectful to the environment and in accordance with European environmental standards.

The majority of ENC pulp production is intended for the European market. In 2019, total sales were 910.499 tonnes, representing more than 90 % capacity. The main markets served by the firm are Germany, representing 20 % of sales, followed by Iberia with 19 %, other Western European Countries, 11 %, France, 10 %, and Poland, 9 % (Figure 2). Over half of the company's pulp is sold to tissue paper producers. Other customers include manufacturers of specialty paper, printing and writing paper and packaging paper.

In terms of final product, the characteristics of the pulp produced have enabled the company to take part in the tissue paper segment, which represents 58 % of sales in both production mills, as well as in the specialization segment, where 31 % of sales are concentrated (Figure 3).

Another ENC business segment is the **generation of renewable electrical energy** from biomass and, since 2018 also from solar thermal energy. The biomass is used as fuel to generate heat, which drives a turbine, generating electricity. This method allows pulp producers to become more energetically more efficient and earn revenues from the sale of the unutilized energy. The company has a total installed power of 332 MW, of which 269 MW correspond to biomass generation, 50 MW to solar thermal generation and the remaining 13 MW to cogeneration with natural gas. Energy sales increased 13.30 % YoY in 2019, this sector represented 22.84 % of revenue in the same year (Figure 6).

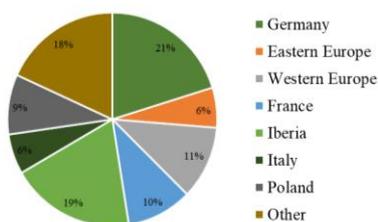
The company runs an energy control center so, does not pass on to third parties the performance of tasks related to this segment. The team in charge for this sector is responsible for the daily and intraday bids for the sale and purchase of electricity from the Operator of the Iberian Energy Market (OMIE), as well as advising the Electrical Network of Spain (REE) and several bodies in the sector. (ENCE, 2019).

ENCE is also responsible for the **management of forests**, their cultivation and maintenance to produce pulp and energy. The main objectives of this segment are:

- Develop wood and biomass production capacity;
- Development of the environment;
- Maintenance of direct and indirect environmental issues.

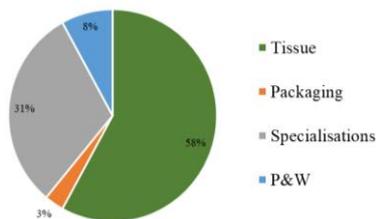
The firm also seeks to promote its knowledge acquired through its activity to collaborate with administrations, forestry associations and other organizations in matters of planning, pest management, plant matter and forest certification. In addition, this sector also includes the production and sale of improved plants in the nurseries that ENCE owns.

Figure 2 - Sales by Country (%)



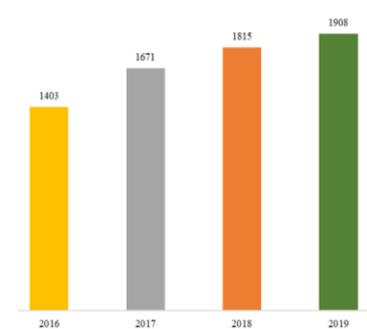
Source - ENCE Report; The Author

Figure 3 - Sales by Destination (%)



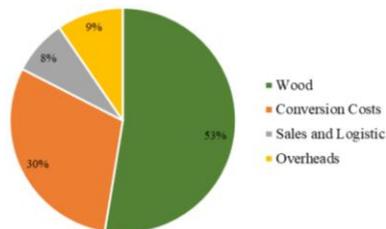
Source - ENCE Report; The Author

Figure 4 - Energy Production (GWh)



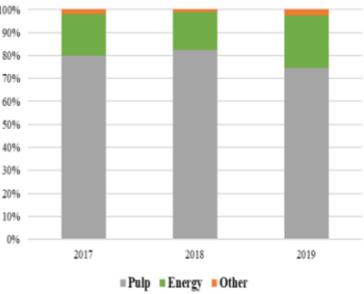
Source - ENCE Report; The Author

Figure 5 - Cost Breakdown (%)



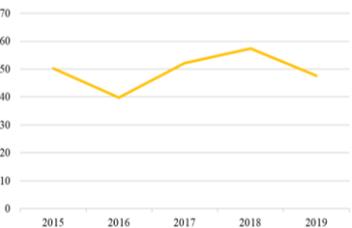
Source - ENCE Report; The Author

Figure 6 - Segments as Percentage of Revenues (%)



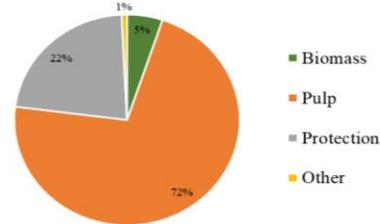
Source - ENCE Report; The Author

Figure 7 - Average Pool Price (€/MWh)



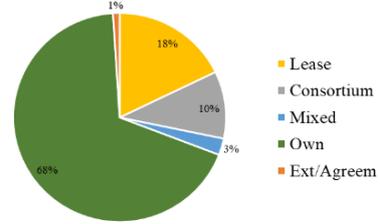
Source - ENCE Report; The Author

Figure 8 - Land Exploration (Ha)



Source - ENCE Report; The Author

Figure 9 - Land's Ownership (%)



Source - ENCE Report; The Author

ENC manages 67.000 hectares (ha) of gross forest area in Iberia. Wood producing areas corresponds to approximately 72 % of the total area, while around 22 % correspond to areas considered for protection and conservation of ecosystems. The remaining percentage is related with the energy segment and other forestry management activities. In relation with the type of ownership ENC owns 68 % of their managed area, 12.000 ha are leased between different entities and approximately 7.000 ha of land are established by a consortium with the same companies (Figure 8). The company supports small suppliers, which represent 94 % of ENCE's suppliers. In 2019, 69 % of the timber purchased by ENC was bought from this business partners. Purchases of timber were worth around € 193 Mn last year, mobilizing almost 2.8 Mn cubic feet of timber.

Company Strategies

A new strategic plan for 2019-2023 was launched, the first objective of investment is pulp production based on different types of wood. With this production process the company expects to obtain maximum performance and the highest quality from the wood; mainly eucalyptus *globulus* and *nitens* and pine. The higher continued demand for pulp makes ENC want to increase their production volume to 1.3 Mn tonnes in 2026. To achieve its objectives, the company invested € 500 Mn in 2019 into various projects to develop the production capacity in the two main bio factories and adapt their processes. Furthermore, ENC has launched in 2019 a plan to reduce costs - by 2026 the company expects to increase efficiency in cash costs of BHKP. Cash costs includes all the expenses incurred to produce pulp: timber, conversion costs, corporate overhead, sales and marketing expenses and logistic costs.

In the short-term, the company wants to improve the properties of the cellulose produced, like dimensional stability, smoothness, opacity, and whiteness stability, as well as, on the development of new non-paper products (ENCE, 2019).

ENC also intends to extend this strategy to the energy segment. The company will include new types of agroforestry biomass to its supply to increase availability and reduce the cost, the company also wants to diversify the technologies that uses to produce renewable energy. In addition, this plan includes the construction of two biomass structures with a capacity of 96 Mw. Together, they will expand by 44 % the total capacity of renewable energy generation until 316 MW.

Shareholder Structure

ENC Board of Directors (BoD) owns 42.70 % of the outstanding shares, of which 0.54 % are directly owned and 42.16 % belong to corporations that have their shares on behalf of a Board Member of ENC. Bestinver Management SA owns 3.12 % of the shares, Invesco Limited holds 1.10 %, while 1.34 % are treasury stock and the remaining 51.74 % are free float (Figure 7). Mr. Ignacio de Colmenares is the currently Chief Executive Officer (CEO) and Vice-President of ENC, however, does not hold shares of the company, participating only as executive board member since 2010. Mr. Juan Luis Arregui is the Chairman of the Executive Commission and the Board of Directors owning 29.28 % of the shares, held by the company Retos Operativos XXI, S.L. Mr. Victor Urrutia is a Board Member and Proprietary owning 6.34 % of shares through the company Asúa Inversiones, S.L. The third biggest stockholder is D. José Ignacio Comenge that owns 6.01 % of shares, held by La Fuente Salada, S.L. where he is the president of the company.

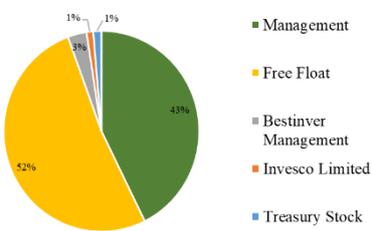
ENC corporate governance is based on an effective internal system that includes and applies both the regulatory requirements in this area and the principles and recommendations most widely accepted as best practices for good governance. It also regularly reviews its compliance with the recommendations of the Good Governance Code of the National Securities Market Commission (CNMV).

Table 7 - ENC Shareholders

Shareholders	
Mr. Juan Luis Arregui Retos Operativos XXI, S.L.	29.44%
Mr. Victor Urrutia Asuá Inversiones, S.L.	6.34%
D. José Ignacio Comenge La Fuente Salada, S.L.	6.38%
Bestinver Management	3.12%
Invesco Limited	1.10%
Treasury Stock	1.34%
Board Members with < 3%	0.54%
Free Float	51.74%

Source - ENCE Report; The Author

Figure 10 - Shareholder Structure (%)



Source - ENCE Report; The Author

Figure 11 - Governance Structure



Source - ENCE Report; The Author

Management & Corporate Governance

The highest decision-making bodies and governing of ENC are the **General Shareholders' Meeting** that represents all shareholders, and the **Board of Directors**, responsible for the representation, governance, and supervision of ENC management. The BoD has different Committees to guarantee maximum efficiency in the supervision of the duties. Composition of the Bodies:

- **Board of Directors** – is composed of 14 members.
- **Executive Commission** – responsible for determined matters appointed by the BoD, and it is composed of 6 members.
- **Audit Commission** – this is the body responsible for guarantee regulatory compliance, financial transparency and assessing risks that may affect the company. It is composed of 5 members.
- **Appointments and Remuneration Commission** – this commission is responsible for appointing, evaluating and remunerating board members. It is composed of 5 members.
- **Sustainability Commission** – this is the entity responsible for the non-financial information and corporate social responsibility. It is constituted by 6 members.

Moreover, at the executive level, there is the **Compliance Committee** directed by the Audit Commission, the **Sustainability Committee** reporting to the Sustainability Commission and to complement the corporate bodies there is the **Management Committee**.

ENC's BoD is composed by diverse professionals as of 2019 it is constituted by 14 members and two non-member secretaries. 57 % of Board members are independent, 36 % are proprietaries and 7 % executive (Figure 12). The average length of service on the board is 6.8 years and the average age of the members is 61.5 years old. 29 % of board members are women, however the BoD established that, by 2020YE, the number of female directors should represent at least 30 % of board members.

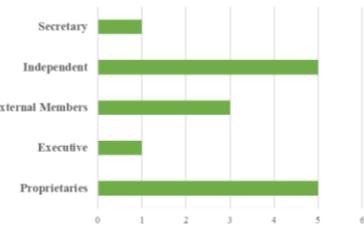
The Appointments and Remuneration Committee, headed by Mr. José Carlos del Álamo (Non-Executive Director), and the BoD have the power to propose and report on the appointment, re-election and removal of Board Members, so that, once the proposal has been approved by the Board, it is submitted to the decision of the General Shareholders' Meeting. Board Members hold office for a maximum period of three years and may be re-elected once or more times during that period.

Sustainability Policy

In 2018, the BoD approved the Sustainability Policy to reinforce the commitment in Corporate Social Responsibility. This reflects the company's intention to develop sustainable management and become a reference in value creation based on the sustainable use of renewable natural resources and the contribution of a circular economy. To ensure the success of this strategic plan, ENC has a budget of € 125 and € 225 Mn, representing around 30 % of the total CAPEX, to invest during the projected plan improving factors like reliability, flexibility, environmental excellence, and safety of its facilities.

In the production lines the priority is the promotion of sustainable wood certification both in ENC's forest management and the minimization of odor and noise near the bio factories. Regarding the sector of energy, the company prioritizes the promotion of a circular economy and revitalizing rural areas.

Figure 12 - Board of Directors Composition



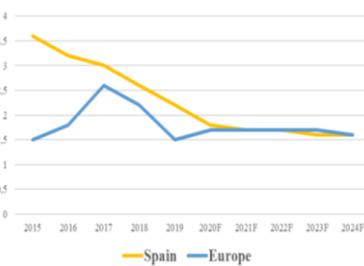
Source - ENCE Report; The Author

Figure 13 - ENCE's CSR Compromise



Source - ENCE Report; The Author

Figure 14 - Real GDP Growth (€)



Source - ENCE Report; The Author

Figure 15 - BHKP Price (€/t)



Source - ENCE Report; The Author

Pontevedra Social Plan is a project that includes several investments and projects associated with the environment, which contribute to the economic development of Pontevedra and Galicia. The plan consists in allocate financial assistance in cultural, environmental, sports and economic initiatives. Collaboration with Navia Town Council is an agreement that boosts employment and patronage in Navia, Asturias. The priority for contracting local suppliers, the development of professional skills through internships with university graduates. In line with this plan, ENC is collaborating too with San Juan del Puerto Town Council developing actions to promote the environment protection, generate employability and improving the life quality of local citizens.

Environmental Plan

Over the last decade, ENC made significant efforts to minimize environmental impacts on **air quality**. In collaboration with the University of Santiago de Compostela the company minimized Pontevedra and Navia bio factories odors in 99.40 % approximately.

Numerous projects are being carried out to reduce **noise** and **vapor emissions** around the perimeter of both factories. The reduction of these gases improves the visual impact of ENC's installations and increases life quality of the community.

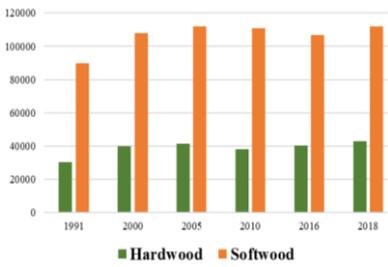
This project is being developed with the objective of increasing the level of water reuse and minimizing the **water consumption**. This technology will reduce the volume of effluent to the Pontevedra estuary by 40 % and to use only 60 % of the flow currently consumed from the Lerez River.

Industry Overview

Paper & Forest industry has a variety of players in a sector relatively concentrated with medium and large firms around the world. Nowadays pulp is the most abundant raw material worldwide and it is categorized in **Bleached Softwood Kraft Pulp (BSKP)**, **Birch Hardwood Kraft Pulp (BHKP)** and **Bleached Chemi-Thermo Mechanical Pulp (BCTMP)**. BSKP has a higher quality and it is mainly produced in North America and Scandinavia. BHKP has lower quality however it is more cost-efficient. It is mainly produced in LATAM, Asia and Iberia. BSKP have been consumed twice more than BHKP. Paper industry includes newsprint, printing and writing paper packaging paper, household and sanitary paper and other paper and paperboard. Around 61 % of all the paper production is for corrugated material and printing & writing paper.

One of the most important **key drivers of profitability** is pulp price. Average pulp price is (-21 %) YTD 2019 at 931 \$/ton in 2019 (BSKP) or 826 €/ton (BHKP) in 2019 (Figure 15). The average pulp price since 2013 was 813 \$/ton or 683 €/ton. Another key driver of profitability is the **European Market Paper Price** – A4 B-copy, which was in a downtrend in 2019, the YTD 2019 price is 911 €/ton (+ 6,9 % YoY). The average price in 2013 was 835 €/ton. Finally, the industry is also an **energy-intensive sector**, which may also impact profitability. Although energy costs are rising worldwide, by improving process efficiency, the industry has become more energy self-sufficient by generating more than 50 % of its primary energy from biomass. The Paper & Forest industry is a **mature industry**, meaning that, there is little growth. Improving the internal efficiencies and extending the successful products has way more focus than reinvesting or developing. The **global M&A activities** in this sector continuous declining over the years. Comparing the first 3Q of 2019 with the first 3Q of 2018, the total deal value declined 74 %. The total deal volume declined 19 %. Which leads to the conclusion that there is occurring a lack of large deals. The average deal size declined 71 %.

Figure 16 - Global Consumption of BHKP and BSKP (tonnes)



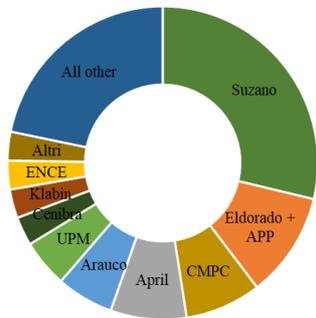
Source - ENCE Report; The Author

In Europe, 12 companies generate revenues of more than € 1 Bn, and the 5 biggest companies have revenues of more than € 10 Mn. Hence, we conclude that the major companies in the industry, as well as in Europe as globally, are reasonably concentrated.

Considered this information, the market can be considered an **oligopoly**, with some elements of a monopolistic competition. There are a few significant players and more smaller players, the product is homogeneous and the barriers to enter the market are high, because of initial investment requirements.

Paper is a stable product. The **product life cycle** of paper is mature, since it is an old well-used product and advertisement is less necessary. Influence on the price is limited. In this industry there are two types of end consumers: companies and individuals. Individuals have no switching costs, so will not be loyal to the product. However, companies buy paper in bigger amounts which might lead to higher switching costs. The major reason for consumers not to switch supplier is the reason it is a homogeneous product.

Figure 17 - Global Market Share for BHKP (%)



Source - ENCE Report; The Author

Products might be different, but all based on **pulp**. Those products are corrugated material, printing & writing paper, paperboard for packaging, tissue paper, newsprint and wrapping paper. The first three cover 75 % of the total production worldwide. There are not many opportunities in differentiating the products.

Table 8 - PEST Analysis

PEST
Political: High environmental regulations focused on water and air pollution.
Economic: High impact in exchange rates since the industry operates globally.
Social: Increase of population leads to increase in demand but environmental and sustainability
Technological: Necessary to decrease the negative impact of the process/manufacturing on the environment and increase cost efficiency.

Source - The Author

Table 9 - SWOT Analysis

SWOT
Strengths
Strong market based in Europe
Efficient Margins
Synergies
Weaknesses
Sensitivity to price fluctuations
Price takers
Regulations and laws
Opportunities
Emerging markets
Incentives for renewable energy
Expand forests
Threats
M&A trend
Recycled paper
Regulation

Source - The Author

Demand Drivers

Structural demographic changes, **environmental** changes and **resource scarcity** are today's main drivers of demand. There has been a shift in consumer choice mainly due to the increased awareness of sustainability, plastic decomposition, and the shift to a digitalization era. In 2017 the global consumption of paper and paperboard was 423.3 Mn metric tonnes with a 5-year CAGR of 0,7 %, this, as a result of the negative CAGR of the types of printing/writing paper (23 % consumption) and newsprint (5 % of consumption). Tissue and containerboard increased.

China and the USA had 43 % of the global consumption. Nonetheless, China has a paper consumption per capita of 78 kg, US and Japan consumed more than 200 kg per capita. The demand for paper board has contributed to an increase of 1.3 % in the global paper industry generating a revenue of € 333 Bn. This demand allowed to reach a € 11.9 Bn of market revenue worldwide. To the next decade, the global pulp and paper market size is expected to increase to 86.700 Mn at a CAGR of 4.6 %. All these reasons are giving a rise in demand of non-wood pulp production as a fiber source for pulp.

The Impact of Coronavirus in Demand

Global economy suffered a significant shock due to the problem of Covid-19. From the Paper & Forest industry point of view this problem will **negatively affect** the segment of **packaging**. Large companies have announced that are expecting a decrease in revenues this year because of Corona Virus epidemic. This moment is complex and unpredictable so, as consequence, the demand for pulp to make packaging products will suffer considerable losses. The mentioned segment represented 3 % of sales of ENC, while the tissue business was 58 % for 2019. The possible loss in packaging can result in a **positive demand** impact for **tissue**. Health officials worldwide highlighted the importance of hygiene and disinfection in the combat to contain the virus. This represents an optimistic opportunity for the demand of towel and tissue products.

Supply Drivers

North America, Asia, and Europe account for the **main producers** in the world being Asian countries the largest paper producers worldwide. The global production is 419.69 Mn metric tonnes. China and the USA are the largest 45 % of global production. China produces 99.3 Mn tonnes of pulp yearly, followed by the USA with 75 Mn tonnes. Europe represents 25 % of the global production, mainly concentrated in Finland and Sweden (23 Mn tonnes) and Germany (22 Mn tonnes).

Export & Import Considerations

Paper & Pulp are among the major export's commodities in the world. In 2018, global sales from export paper were approximately € 130 Bn. Germany is the leader in the export, followed by the USA, Finland, and Sweden. The value of global exports accelerated by 9.7 % YoY from 2017 to 2018. European countries exported the most paper, 56.20 % of globally exports. Asian exported 25.1 % and North America 14.7 % of the worldwide paper. The market for imported paper had a cost total of around € 160 Bn. From 2017 to 2018, purchases expanded by 7.7 %. Like in exports, Europe is the major leader, meaning 49 % of global purchases. Asian imported 23.4 % and North America 16.8 % of worldwide imported paper. Among these continents, the fastest-growing markets for paper since 2014 were China (up 43.9 %), India (up 13.9 %) and Poland (up 11.8 %).

Table 10 - Top 5 Exporters and Importers

Rank	Exporter	Paper Exports (€)	% World Total
1.	Germany	20,1 billion	12,60 %
2.	China	17,5 billion	11,00 %
3.	U.S.A.	14,7 billion	9,30 %
4.	Finland	8,1 billion	5,10 %
5.	Sweden	8,0 billion	5,10 %

Rank	Importer	Paper Imports (€)	% World Total
1.	U.S.A.	16,3 billion	10,20 %
2.	Germany	13,7 billion	8,60 %
3.	France	7,9 billion	4,90 %
4.	United Kingdom	7,0 billion	4,40 %
5.	Italy	6,3 billion	3,50 %

Source - The Author

Competitive Positioning

The peer companies contain mainly European based companies, which operate globally. 5 peer companies were chosen, of which UPM and Stora Enso are the largest in terms of revenue, followed by Mondi. Navigator, Altri and ENCE are almost 10 times smaller. The companies with the smallest revenues have the highest EBITDA and Operating Margins. This might indicate that there is no profit on scaling. Two of the five companies have greater ROCE than ROE. This might indicate to an intelligent use of debt. All 5 companies operate mainly in Europe.

Peer Companies

Altri

Altri is a leading Portuguese Bleached Eucalyptus Kraft Pulp (BEKP), Dissolving Pulp (DWP) maker and a renewable energy producer. Currently, the company has three mills with a nominal annual capacity of more than 1 Mn tonnes. Europe is the main market player with 80 % of sales, Asia (9 %) and other (11 %). In terms of pulp use, tissue paper producers are the main customers, with a share of 52 %, followed by printing and writing (22 %), specialties (14 %) and others (12 %).

Navigator

Navigator has four industrial units in Portugal. Navigator manages the whole process chain, from planting trees to final distribution worldwide. The 4 main businesses: production of pulp, paper, tissue, and energy. Navigator has the capacity to produce 1.6 Mn tons of paper per year, being the biggest producer of writing and printing paper in Europe. It is also the top manufacturer of bleached eucalyptus pulp. The group is also responsible for the production 4 % of Portugal's power production. Navigator exports to 130 countries. Navigator's main markets are Europe (64 %) of sales, Africa (12 %), Middle East (10 %) and North America (9 %).

CMPC

CMPC produces and markets solid wood products, pulp, paper, tissue, personal care, and packaging products in Latin America. The company has 45 different operating factories throughout South America present in 8 countries. CMPC is the 2nd largest market pulp producer and its sales reach 45 countries. The main market of the company is South America, North America, Europe, and Asia.

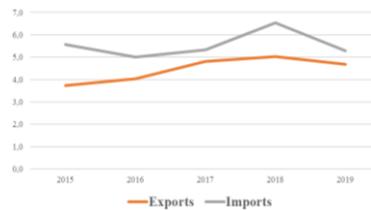
Suzano

Suzano is a Brazilian company that is a global reference in the development of products made from planted eucalyptus forests and one of the largest vertically integrated producers of eucalyptus pulp and paper in Latin America. Its product portfolio includes coated and uncoated printing and writing paper, paperboard, tissue paper, market pulp and fluff pulp. The company has a total of ten mills and a production capacity of 10.9 Mn tonnes of paper pulp. Suzano market is based in South America, North America, Europe, and Asia.

Stora Enso

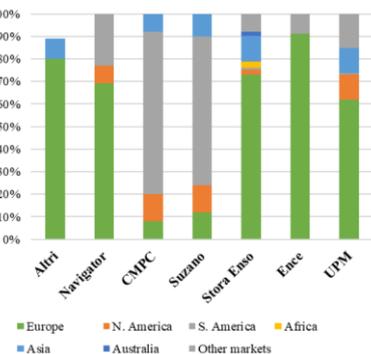
Stora Enso is the second largest paper producer of renewable solutions based on paper in Europe with an established customer base and a wide product portfolio for print and office use in more than 30 countries. The raw materials are renewable, recyclable, and fossil-free. This provides them with knowledge to address the global megatrends of bio economy. The share of sales of new products and services has risen from 1.5 % in 2015 to 9 % in 2018. They operate mainly in Europe. The segments are as follows: paper (29 %), consumer board (25 %), packaging solutions (13 %), biomaterials (16 %), wood products (15 %).

Figure 18 - Total Value of Exports and Imports in Europe (€)



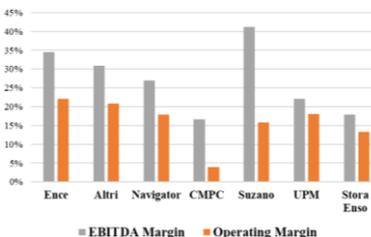
Source - The Author

Figure 19 - Revenue per Continent (%)



Source - The Author

Figure 20 - Margins of Peer Companies (%)



Source - The Author

UPM Kymmene

UPM-Kymmene Oyj is a Finnish group structured into 6 separate business groups supported with forest-based bioindustry. UPM has 54 production plants and is present in 46 countries. Europe is the largest market accounting for 62% of total sales and their market capitalization was € 11.813 Mn in FY18. Business segments are writing paper (41.2 %), pulp (25.4 %), packaging (16.8 %), labeling (13.1 %) and energy (3.4 %).

Porter's Five Forces

Bargaining Power of Suppliers *Moderate*

This industry has a pool of global suppliers with strong relationships. Since wood is the most important cost, the main purpose is to have a high retention rate of supplier as they would face switching cost in an unstable bargaining situation. This might balance the position if sourcing condition get affected.

Threat of Substitutes *Low*

The paper consumption in Europe has stagnated, as a result of the economic slowdown and structural developments. End users swung more and more toward electronic communication. However, this lifestyle change is offset by growing demand in packaging and hygiene papers, mainly due to demographic trends in Europe. Additionally, within the industry, BHKP is the main pulp used in paper production with 53 % of the global production market. As an alternative, BSKP, recycling paper and cotton can substitute BHKP. However, the cost-efficiency of BHKP makes it very attractive for manufacturers.

Bargaining Power of Buyers *Significant*

Most companies concentrated in this industry are medium to large firms, by this we conclude a list of well-known global group of buyers with high environmental policies and high standard regulations. However, there is a small differentiation between producer's products and the switching costs are not significant. So, the bargaining power of buyers are high.

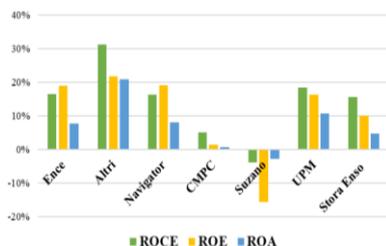
Threat of New Entrants *Low*

P&P industry participants benefits from a brand recognition build and maintain throughout time; high capital expenditures comprise the major component that hinder the possibility to compete as a new member. In order to harvest and profit from this natural raw material companies must fulfil high environmental requirement to get the certifications, restricting the prospect for additional actors.

Competition within Industry *Significant*

This industry can be considered as a highly competitive oligopoly. Companies are forced to develop highly efficient processes to decrease the company's operations costs. The supply and demand over the years is in equilibrium. If additional plants get build, prices of pulp will decrease. This industry is very sensitive in that aspect. Furthermore, barriers to exit are high, which means that companies are willing to ask low prices to stay in the industry.

Figure 21 - Profitability of Peer Companies (%)



Source - The Author

Figure 22 - Porter's Five Forces



Legend:

- 1- Insignificant
- 2- Low
- 3- Moderate
- 4- Significant

Source - The Author

Investment Summary

Figure 23 - EBITDA, EBIT, Net Income Forecast (€)



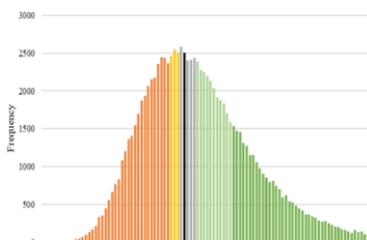
Source - The Author

Table 11 - Valuation Summary (2021F)

Valuation	
DCF (FCFF)	
Enterprise Value	1 367,71 €
Net Debt	766,35 €
Equity Value	601,36 €
Number of Shares Out.	246,30
Price Target	2,44 €
Share Price (16/10/2020)	2,16 €
Upside potential	13%
DDM	
Price Target	2,59 €
Share Price (16/10/2020)	2,16 €
Upside Potential	20%
Relatives Valuation	
EV/Sales	2,21 €
P/B	2,60 €
Average	2,41 €
Upside Potential	11%

Source - The Author

Figure 24 - Monte Carlo Simulation



Source - The Author

The final recommendation for ENC stands for **HOLD**. With a **price target** of € 2.44 per common share at the end of 2021, using a **FCFF Method** with an **upside potential** of 13% with **high-risk**. The recent drop in the BHKP (\$/t) price, the structural change in the demand and supply market in line with the recent crisis justify the high-risk exposure of this investment.

ENC is a main player in the **European market** so, the company, as a price-taker, is highly exposed to the influence of the Asian market that are pressuring paper pulp prices. However, the recent investments of the company to increase capacity and production/capacity effectiveness will boost ENC's **revenues** in the future by **7.73 % CAGR**. We anticipate an increase in the demand for tissue and hygienic paper products which represent more than 50 % of ENC's sales. In 2021F the firm is expected to return to profits around € 11.5 Mn after the loss of € 9.8 Mn in 2020. The expected synergies between pulp production and energy are highly significant for the next years to come. By the end of the valuation period sales from biomass energy re expected to represent approximately 25 % of total sales.

We estimate a recover regarding financial ratios between 2020F – 2026F. The company expects to maintain their debt structure in order to face better this uncertain future. D/E ratio is expected to be 1.19 in 2020F and 1.11 in 2026F. The D/EBITDA ratio is expected to decrease from 12.07 in 2020F to 3.87 in 2026F. Also, ROA will increase from -0.57 % to 4.41 % from 2020F - 2026F and ROE from -1.51 % to 11.39 % in the same period. EPS will increase in gradually like company's revenues. ENC plans to keep their **dividend policy** which includes a **payout ratio** of approximately **50 %**, consequently DPS will increase at 15.68 % CAGR until the end of the valuation period.

To evaluate ENC, we used different methods, two absolute and a relative valuation approach. Our final price of € 2.44/sh with an upside potential of 13 % was computed using DCF Method through the **FCFF** as the main valuation method. As a complement we computed the price target using a **Multi-Stage Dividend Discount Model**, which delivered us a share price of € 2.59/sh, representing an upside potential of 20 %. We also used the **market multiples** as a complement to our price target, which delivered an EV/Sales of € 2.21/sh and P/B of € 2.60/sh. This represents an **average of € 2.41/sh** indicating an upside potential of 11 % and corresponding to our initial recommendation of **HOLD**.

Our expectations are that FCF should reach a Terminal Value of € 1662 Mn between 2020F - 2026F. These will be driven by the increase in EBITDA Margin and the increase in operational cash flow results, along with a constant CAPEX strategy of approximately € 139 Mn until the end of the period, totalizing a € 970 Mn investment in capital expenditures.

In this industry it is important to pay attention to global productive capacity and changes in market share preferences. New plants have major impact on the supply/demand balance, which influences the market price. If capacity increases faster than the market growth, lower prices will be established. The price of BHKP is set in USD (\$) and ENC's costs are in EUR (€), meaning that revenues are influenced by the EUR/USD exchange rate. Possible fluctuations in the exchange rate can have negative impacts on company sales. To quantify this impacts we performed a Sensitivity Analysis and Monte Carlo Simulation.

Table 12 - BHKP Price (\$/t) vs. Exchange Rate

Change in Average Exchange Rate EUR/USD	Change in BHKP Price (\$/t)								
	400	500	600	700	766	800	900	1 000	1 100
0,48	2,51 €	2,64 €	2,78 €	2,92 €	3,01 €	3,06 €	3,20 €	3,33 €	3,44 €
0,68	2,38 €	2,46 €	2,54 €	2,63 €	2,70 €	2,73 €	2,83 €	2,93 €	3,03 €
0,88	2,31 €	2,37 €	2,43 €	2,49 €	2,53 €	2,56 €	2,63 €	2,70 €	2,78 €
1,08	2,27 €	2,32 €	2,36 €	2,41 €	2,44 €	2,46 €	2,51 €	2,57 €	2,63 €
1,28	2,25 €	2,28 €	2,32 €	2,36 €	2,38 €	2,40 €	2,44 €	2,48 €	2,53 €
1,48	2,23 €	2,26 €	2,29 €	2,32 €	2,34 €	2,35 €	2,39 €	2,42 €	2,46 €
1,68	2,22 €	2,24 €	2,27 €	2,29 €	2,31 €	2,32 €	2,35 €	2,38 €	2,41 €

Source - The Author

Valuation

Forecast Analysis

Total Revenue is the sum between Pulp Sales, Forest Management, Energy Sales linked to Pulp and Energy Sales linked to Biomass. The Pulp Sales represent the main driver of total revenue because on average correspond to more than 50 % of revenues.

Pulp Sales are expected to increase for the forecasted period due to the increase in pulp capacity to 1.3 Mn tonnes until 2026. For 2020, the company expects to increase the production capacity ratio by 9 % leading sales revenue to an improvement. Despite of the actual crisis caused by **Covid-19** we assumed that pulp sales, in tonnes, will increase in the present year. Due to the fact that demand increased for tissue paper segment for the production of hygiene products. We assumed that, for the rest of the period the production capacity ratio will maintain the value from 2020 and that the sales to production indicator will be approximately 100 % until 2026. To estimate **Pulp Average Price**, we followed Fastmarkets RISI, a trusted price reporting and market analysis provider, Hawkins Wright, and Brian McClay forecasts. Pulp price is decreasing since 2018 and next year it is expected to continue the same movement. However, in 2021 and 2022 RISI's estimates an increase in BHKP (€/t) price of around 12 % YoY. As consequence, pulp sales revenue should grow significantly in that period. After that, prices will stabilize, and pulp sales are expected to decrease approximately 2 % in 2023 and then increase again by 2024.

Forest Management and **Energy Sales linked to Pulp** performance depends directly on pulp sales. To forecast both segments revenues, we used a 3-year historical average as percentage of pulp sales. Forestry business represents 3.57 %, while energy sales accounts for 14.69 % of pulp sales.

Energy Sales linked to Biomass is part of a long-term strategy from the company. ENCE's objective is to develop the operational result by 2026. Together with the objective we assumed a growth rate of 5.20 % YoY until 2026.

Cost of Sales is expected to increase from € 252 Mn in 2020 to € 394 Mn in 2026, representing a CAGR of 7,73 %. The company has maintained approximately the same ratio throughout the years of activity so, we based our assumption in the 5-year historical average cost of sales as percentage of revenues. We assumed that from 2020F - 2026F this value would represent around 40 % of sales.

Personnel Expenses represented, in the last 5 years, an average of 11.31 % of revenues. We predict that the staff cost will increase due to inflation. In recent years, the minimum wages have been increasing so, it is expected that for the coming years the total average wages of the company will increase.

D&A are expected to increase due to the energy long-term strategy which includes the construction of two biomass structures and remaining investment is this sector. We based our forecast in the 5-year historical average of depreciation and amortization, depletion of forestry reserves, impairment of gains/losses on fixed assets and other non-ordinary operating gains/losses.

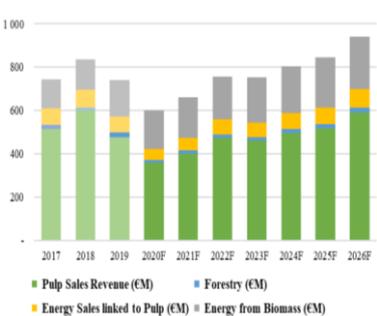
ENC has maintained its commitment to obtain sustainable financing for the investments seen in its Strategic Plan. Specifically, ENC has set itself the objective of maintaining the structural financing instruments for each business. It was assumed **debt** grows at 5% YoY until 2023F and from 2024F onwards 1% YoY, because the company has liquidity issues. This is reflected in Cash Flow Statement where cash flow from operating activities need to meet investment and financing

Figure 25 – Total Revenue (€) vs. Growth Rate (%)



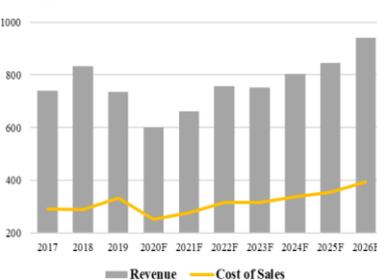
Source - The Author

Figure 26 – Total Revenue by Segment (€)



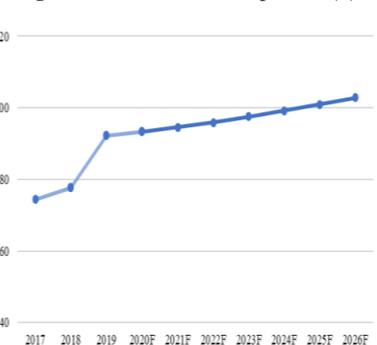
Source - The Author

Figure 27 - Cost of Sales (€)



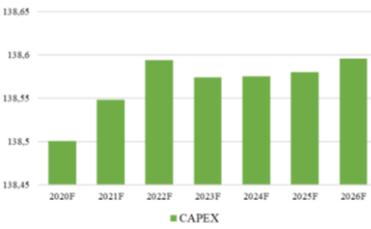
Source - The Author

Figure 28 - Personnel Expenses (€)



Source - The Author

Figure 29 - CAPEX Forecast (€ Mn)



Source - The Author

activities. If the company does not finance itself will not accomplish the minimal target of € 30 Mn in C&CE and will not fulfill its financial obligations.

The Group is committed to increase production capacity at its industrial complexes in Navia and Pontevedra. In 2019 the company invested € 20 Mn in the pulp business. **Capital Expenditures** in the Renewable Energy segment in connection with the ongoing construction of two biomass power plants in Huelva and Puertollano, amounted to € 10.4 Mn on 31 December 2019. Through 2019 - 2026 ENC will be doing the following investments: (1) process adaptation to produce hygienic absorbent products in Navia (€ 45 Mn); (2) flexible production between dissolving pulp or BHKP (€ 450 Mn), and (3) increase renewable energy business (€ 475 Mn). Having in mind the recent crisis, we assumed that these investments will be extended until 2026F. Besides, the total CAPEX of € 970M was assumed to be equally distributed throughout the valuation period (Appendix 10).

Table 13 - ENC Market Profile

Market Profile	
Share Price (16/10/2020)	2,16 €
Shares Outstanding (Mn)	246,3
Market Capitalization (Mn)	532 €

Source - Company Data

ENC **dividend policy** contemplates the distribution to its shareholders of an amount equivalent to approximately 50 % of the company y earnings. Historically, ENC has always paid dividends for its shareholders. Even with a negative Net Income of € - 140.9 Mn, meaning an EPS of € - 0.572 in 2014, the company paid a dividend of € 0.08, so that is what we assumed to 2020F. To forecast dividend payments in the rest of the period, we considered the historical payout ratio of 50 % (see Appendix 13).

DCF Assumptions

The DCF follows a **Weighted Average Cost of Capital (WACC)** approach using a FCFF model with a constant growth rate during the valuation period.

$$WACC = k_e * \frac{E}{E + D} + k_d * \frac{D}{E + D} * (1 - T)$$

The WACC rate computed for 2021F is 4.47 % (Table 16).

The **Cost of Equity (Re)** is the rate of return that stakeholders require for a company.

$$K_e = R_f + \beta * ERP$$

The Re rate computed for 2021F is 7.19 % (Table 14).

For the **Risk-Free Rate (Rf)** we consider a normalized 10-Year Germany Government Bond Yield using 10-year monthly average, which is 0.843 %.

The **Unlevered Beta (βu)** of the industry is 0.86 and it is based in the average of peer companies (Appendix 14).

Beta Levered (βL) indicates the systematic risk. We computed a regression analysis with the share price history of ENC and IBEX 35 (Appendix 14). In the end we reached a final βL of 1.0057.

For the **Market Risk Premium (MRP)** we computed the historical average from 2015 to 2019 for each country and multiplied by the percentage of sales of ENC for each country. We got a final MRP of 6.31 % (Table 15).

The **Cost of Debt (Rd)** is the effective rate that the company pays on its debt. To compute this rate, we used the following method:

$$R_d = \frac{R_d \text{ Gross Debt} * \text{Debt Gross} - R_f * \text{Cash}}{\text{Debt Gross} - \text{Cash}}$$

Table 14 - DCF Assumptions

Assumptions	
Re	7,19%
Rf	0,84%
Beta	1,0057
Unlevered Beta	0,86
D/E	81%
Tc	25%
MRP	6,31%
Rd	1,62%
Growth Rate	1,17%

Source - The Author

Table 15 - ENCE Market Risk Premium

	%Sales	MRP
Germany	21%	5,50%
Spain	10%	6,40%
Portugal	9%	7,00%
France	10%	6,00%
Italy	6%	6,05%
Poland	9%	6,05%
Rest of Europe	17%	7,01%
Other	18%	6,57%
MRP ENCE	6,31%	

Source - The Author

In the end we got a final value of 1.62 %. Together with the low yields verified in the market nowadays, the company is projecting an increase in debt and less cash available in the future so, it was assumed such a small rate.

Finally, for the **Growth Rate (g)** of 1.17 % was assumed the average between Spain expected inflation rate by the ECB and European Commission which is 1.30 % and the 10-year historical GDP growth rate of 1,04 %.

DCF Valuation

The DCF follows a WACC approach using a **FCFF** model with a constant growth rate from 2020F – 2026F.

After reaching an Enterprise Value (EV) of € 1662 Mn, it was deducted Net Debt to get the Equity Value of € 601 Mn. That, divided by the shares outstanding 246.3 Mn gave us a **target price** of € **2.44/sh** for the end of 2021F (Table 18), representing an upside potential of 13% from the closing price on 16th October 2020. In our analysis, ENC valuation points for a **HOLD** recommendation.

Table 16 - WACC

WACC	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Re	7,19%							
Rf	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%
MRP	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%
Levered Beta (βL)	1,01	1,01	1,01	1,01	1,01	1,01	1,01	1,01
After Tax Rd	1,22%							
Rd	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%
Tc	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%
WACC	4,50%	4,47%	4,48%	4,44%	4,49%	4,54%	4,63%	4,51%
E/V	54,97%	54,50%	54,67%	54,04%	54,89%	55,73%	57,21%	55,15%
D/V	45,03%	45,50%	45,33%	45,96%	45,11%	44,27%	42,79%	44,85%

Source - The Author

Table 18 - Price Target for 2021F (FCFF)

DCF (FCFF) Valuation	
Enterprise Value	1368
- Net Debt	766
Equity Value	601
Number of Shares Out.	246,3
Price Target	2,44 €
Share Price (16/10/2020)	2,16 €
Upside potential	13%

Source - The Author

Table 17 - FCFF Estimation

FCFF	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
EBIT(1-tc)	3	23	55	50	65	76	107	107
Non Cash Charges	60	66	76	75	80	84	94	94
CAPEX	139	139	139	139	139	139	139	139
Δ NWC	-86	5	7	0	4	3	7	7
FCFF	10,7	-54,1	-14,7	-14,2	2,9	18,1	55,5	55,5

Source - The Author

To complement our DCF Model, we recurred to the **FCFE**, using the cash-flows discounted by the cost of equity. Assuming the same terminal growth rate from the previous valuation. Finally, we obtained an Equity Value of € 671 Mn, that, divided by the number of shares outstanding gave a final **target price** of € **2.72/sh** for the end of 2021F (Table 20), representing an upside potential of 26 % from the closing price on 16th October 2020.

Table 20 - Price Target for 2021F (FCFE)

DCF (FCFE) Valuation	
Equity Value	671
Number of Shares Out.	246,3
Price Target	2,72 €
Share Price (16/10/2020)	2,16 €
Upside potential	26%

Source - The Author

Table 19 - FCFE Estimation

FCFE	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Net Income	-10	11	43	37	53	63	94	94
Non Cash Charges	60	66	76	75	80	84	94	94
CAPEX	139	139	139	139	139	139	139	139
Δ NWC	-86	5	7	0	4	3	7	7
Net Borrowing	35,3	37,0	38,9	40,8	8,6	8,7	8,7	8,7
FCFE	33	-29	12	14	-1	14	51	51

Source - The Author

Table 21 - DDM Price Target for 2021F

Dividend Discount Model	
Price Target	2,59 €
Share Price (16/10/2020)	2,16 €
Upside Potential	20%

Source - The Author

Dividend Discount Model

We used another absolute valuation methodology – Multi-Stage Dividend Discount Model – to compute ENC’s share value and compare it with our DCF (FCFF) final conclusion (Table 22). Using this model, the new target price is € 2.59/sh, representing an upside potential of 20 % comparing with the share price of 16th October 2020 of € 2.16/sh – Table 21. This is a difference of 6.27 % relatively with the DCF approach. In the end, this method leads, as well, to a **HOLD** recommendation based in a high level of risk (Appendix 13).

Table 23 - Peer Group Selection

	Peer Group?
Altri	✓
Suzano	✓
CMPC	✓
UPM	✓
Stora Enso	✓
Navigator	✓

Source - The Author

Table 22 - Multi-Stage Dividend Discount Model

	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Net Income	-9,82	11,46	43,41	37,24	52,52	62,86	94,44	
N° Shares	246,30	246,30	246,30	246,30	246,30	246,30	246,30	
EPS	- 0,04 €	0,05 €	0,18 €	0,15 €	0,21 €	0,26 €	0,38 €	
DPS	0,080 €	0,023 €	0,088 €	0,076 €	0,107 €	0,128 €	0,192 €	
Payout Ratio	50%	50%	50%	50%	50%	50%	50%	
Dividends	0,08 €	0,02 €	0,09 €	0,08 €	0,11 €	0,13 €	0,19 €	3,22 €
PV			0,08 €	0,07 €	0,09 €	0,10 €	0,14 €	2,13 €

Source - The Author

Table 24 - Peers Multiples for 2021F

	EV/Sales		P/B	
	2021F	2021F	2021F	2021F
Altri	1,92	1,81		
Suzano	4,22	7,26		
CMPC	1,46	0,64		
UPM	1,42	1,27		
Stora Enso	1,32	1,14		
Navigator	1,57	1,66		
Average	1,99	2,30		
Median	1,52	1,47		

Source - The Author

Multiples Assumptions

A **Relative Valuation** was also made to compare ENC market share price with similar companies and to complement our valuation. We assumed as our peer group six companies: **Altri, Suzano, CMPC, UPM, Stora Enso** and **Navigator**. This group of companies was used to compute the average forecast **Enterprise Value-to-Sales (EV/Sales)**, and **Price-to-Book Value (P/B)** for 2021, in order to compute the price target using the valuation multiples.

We can see that the average forecast EV/Sales for 2021 is 1.99 and the average forecast P/B is 2.30 (Table 24).

Table 25 - Relative Valuation

	EV/Sales		P/B	
	2021F	2021F	2021F	2021F
Altri	1268,3	1191,5		
Suzano	2787,7	4147,1		
CMPC	964,5	421,3		
UPM	938,0	836,0		
Stora Enso	872,0	750,4		
Navigator	1037,1	1092,7		
Average	1311,3	1406,5		
Median	1000,8	964,4		
EV	1311,3	1406,5		
Net Debt	766,4	766,4		
Equity Value	544,9	640,1		
N° Shares	246,3	246,3		
Price Target	2,21 €	2,60 €		
Upside Potential	2%	20%		

Source - Thomson Reuters; The Author

Multiples Valuation

For the **EV/Sales** we achieved a **target price** of € **2.21/sh** for the end of 2021, representing a downside potential of 2 %. We used EV/Sales multiples because it is an alternative sales-based ratio that becomes useful when comparing companies with different capital structures.

For the **P/B** we reached a **target price** of € **2.60/sh** for the end of 2021, representing an upside potential of 20 %. Because Book Value is more stable than EPS, P/B may be more meaningful than P/E, when EPS is significant more high or low. So, we used P/B, because a P/E based in a negative EPS is not meaningful.

Considering the two multiples we have a **price target average** of € **2.41/sh** vs. € **2.44/sh** in the DCF Valuation (FCFF), this represents a difference of -1.47 % (Table 26). These outcomes serve to confirm the results in the DCF Valuation and reinforce our recommendation of how ENC is valued. Our recommendation is **HOLD**.

Table 26 - Multiples vs. DCF

Multiple Average	2,41 €
DCF (FCFF)	2,44 €
Difference	-1,47%

Source - The Author

Financial Analysis

In financial analysis the calculations are based in the three main financial statements – Balance Sheet, Income Statement and Cash Flow Statement. For every element we forecasted the results from 2020F – 2026F, based in assumptions better explained in the Appendix 7.

The last years showed inconstant results in ENC's performance. With constant fluctuation in BHKP (€/t) prices. In 2019 pulp average price suffered a break down in its value from € 635.11/t to € 532.82/t, due to the increase of production in the emerging markets like China. This significant fall lead the BHKP (€/t) price to 10-year historical minimum. By the end of the next 6 years, we expect that BHKP (€/t) will return to 2017 - 2018 levels with a CAGR of 5.70 %. ENC's strategy is to follow this trend with an increase in the production capacity until 1.3 Mn/t in 2026 and allow superior operating efficiency. Net profit is expected to grow at a CAGR of 47.40 % and by 2021F the company will return to levels achieved in 2019. The expected average net profit margin for 2020F - 2026F will stay at 5.0 %, 4.7 % lower than the historical average between 2017 - 2019.

ENC EBITDA Margin has been stable overtime with a historical average of 31.67 % from 2015 - 2019. The company has better margins than its peers, with an average of 24 %. Excluding 2019, where lower prices in BHKP (€/t) pressured EBITDA Margin down to 17 %. Given the vision and ENC's objectives it is expected that margins will grow at a 24.34 % CAGR and by 2026F this value will be close from the result in 2018.

From 2020F - 2026F, FCFE will increase from € 10.7 Mn to € 55.5 Mn given strong grow in operational cash flow generation. The total CAPEX of € 970 Mn diluted throughout the valuation period will allow the company to generate cash. The forecasted cash surplus of € 59.9 Mn in 2026F will permit ENC to keep investments in the increase of capacity and in renewable energy segment when the opportunity arises.

ENC's **liquidity ratios** are estimated to present an increase from 2020F to 2026F (Current Ratio: 0.85 in 2020F to 0.80 in 2026F and Quick Ratio: 0.65 in 2020F to 0.58 in 2026F) and Cash Ratio: 0.29 in 2020F to 0.18 in 2026F. As a result, we can observe that the company will continue to be financially capable of paying back its financial obligations.

The company pays dividends since FY2011, so we assumed a stable and secure **dividend policy** for the valuation period. Even with a negative Net Income of € - 140.9 Mn, meaning an EPS of € - 0.572 in 2014, the company paid a dividend of € 0.08. ENC dividend policy contemplates the distribution to its shareholders of an amount equivalent to approximately 50 % of the company earnings. To forecast dividend payments in the rest of the period, we considered the historical payout ratio of 50 %.

Return on Equity (ROE) decreased in 2019YE because of the lower results. From 2020F onwards it is expected that ROE raises from -1.51 % to 11.39 %. EBIT Margin improve, from 0.69 % to 15.28 % during the valuation period, meaning that ENC's operations will be profitable. Asset turnover increased YoY as leverage ratio. This trend in ROE reflects the increase in operating profits, greater efficiency, and increased use of leverage.

Figure 30 - EBITDA, EBIT and Net Income Evolution (€)



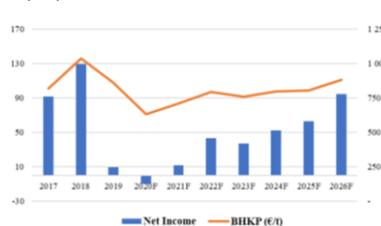
Source - Company Data; The Author

Figure 31 - EBITDA Margin, Net Profit Margin and Total Revenue Forecast (€)



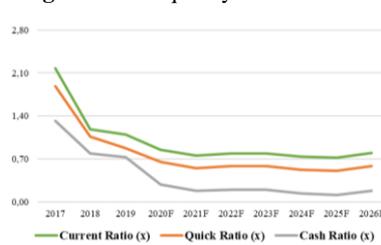
Source - Company Data; The Author

Figure 32 - Net Income vs. BHKP (€/t)



Source - Company Data; The Author

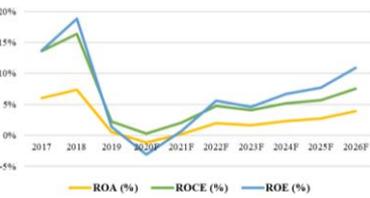
Figure 33 – Liquidity Ratios



Source - Company Data; The Author

Investment Risks

Figure 34 - ROA, ROCE, and ROE



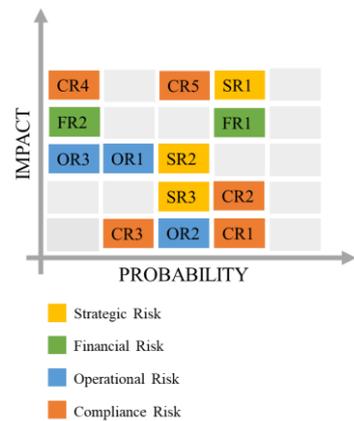
Source - Company Data; The Author

Figure 35 – EBITDA (€) vs. EUR/USD



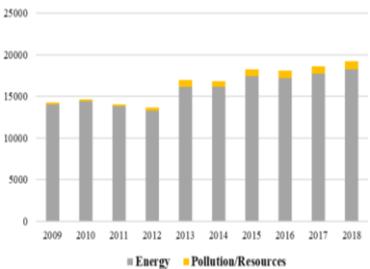
Source - Company Data; The Author

Figure 36 - Risk Matrix



Source - The Author

Figure 37 - Environmental Tax Revenues in Spain



Source - The Author

Strategic Risk | Productive Capacity and Changes in Market Share Preferences (SR1)

New plants have major impact on the supply/demand balance, which influences the market price. If capacity increases faster than the market growth, lower prices will be established. ENC as a price taker should monitor these developments to evaluate the market and be prepared for changes in the industry's productive capacity. For this reason, the company has strengthened its presence and position in the European market.

Strategic Risk | New Product Developments (SR2)

Customers' needs are always changing and there are some possible substitutes in the market like: electronic products, recycled materials, flexible packaging, etc. By monitoring these trends of new developments and innovations, and the legislative developments, the company might take market shares in substitutes. ENC is creating its own brand on an international scale with the aim of differentiating its production from that of its competition.

Strategic Risk | Operating Costs (SR3)

This is a risk due to the rising costs of raw materials consumables (chemicals, fuel, gas) other industrial supplies and parts, logistics and transport, salary costs, strikes or a drop in productivity. ENC has established operational efficiency as a priority, by optimizing production throughout the entire value chain. The risk arising from an insufficient timber supply is managed mainly through increased market presence through standing purchase, small suppliers, contingency plans, and minimum stocks to guarantee operations.

Financial Risk | Price Volatility, Exchange Rate, and Interest Rate (FR1)

The price of BHKP is set in USD (\$) and ENC's costs are in EUR (€), meaning that revenues are influenced by the EUR/USD exchange rate. Possible fluctuations in the exchange rate can have negative impacts on company sales. ENC maintains permanent contact with financial institutions to contract, if necessary, the pertinent financial and/or future hedges to mitigate the impacts derived from the volatility of the price of paper pulp. The company also monitors the foreign exchange market and the evolution of the USD and EUR and links the most important financing transactions to fixed interest rates, with respect to exchange rate and interest rate volatilities, respectively.

Financial Risk | Fiscal Risk (FR2)

It is a high priority for ENC to ensure that all activities and operations are developed in compliance with the applicable tax legislation. The Audit Committee periodically monitors the fiscal risks that the company faces to help the Board establish a fiscal risk management and control policy.

Operational Risk | Post-Production Logistics (OR1)

ENC continuously reviews the stock plans to identify deviations and correct them. It has also adopted a management strategy of internally assuming the possible variation in the supply and price of maritime transport in order to minimize costs.

Operational Risk | **Obsolete Facilities and Equipment (OR2)**

The company uses environmentally friendly technology to strengthen the competitiveness, the quality of their products and to improve processes. ENC works on civil works reviews, investments, and maintenance programs to avoid obsolescence of facilities and equipment and to guarantee efficient productivity.

Operational Risk | **Environmental Impact (OR3)**

This business is highly water, energy, and carbon intensive. Different regulations and laws have huge impact on operations. The operations have negative impact on the biodiversity and ecosystems. ENC mitigation strategies refer to continuous improvement actions and investments in facilities to reduce the risk of impact on the environment. Specifically, reducing odorous impact, reducing noise, improving air quality, improving effluent quality, and reducing the carbon footprint and water footprint.

Compliance Risk | **Technology, Legislation, Ethics, Natural Disasters (CR1, CR2, CR3, CR4)**

Technology risk, ethics and legislation are risks with small impact. Monitoring the developments in these different fields provide ENC the right information to well-understand those risks.

Compliance Risk | **Pandemic (CR5)**

Pandemics create social and economic chaos, like experienced during the year of 2020. These events interfere with business operations by disrupting the supply chain, affecting the ability to deliver products and services to customers. Due to Covid-19, ENC is now better prepared when facing such events. The company has created a business continuity plan that sets out a recovery plan and defines policies and procedures to manage factories and workers.

Risks to Price Target

In order to compute the impact on the main investment risks to the price target we have conducted a **Sensitivity Analysis** and a **Monte Carlo Simulation**. We studied the impact of changes in some variables of the DCF valuation model like, WACC rate, terminal growth rate, market risk premium, and beta. As well as other main drivers for ENC business like BHKP (€/t) price and the EUR/USD exchange rate.

In Table 28, we can see the significant sensitivity of ENC to changes in terminal growth rate and WACC rate as shares value can drop by 51.08 % (€ 1.19/sh) in the worst situation and rise by 94.74 % (€ 4.75/sh) in the best scenario. Changes in WACC produces higher volatility in prices, this means that some changes can be consequence of the low risk-free rates at the moment.

Table 28 - Sensitivity Analysis for Terminal Growth Rate and WACC for 2021F

		Change in Terminal Growth Rate								
		0,97%	1,02%	1,07%	1,12%	1,17%	1,22%	1,27%	1,32%	1,37%
Change in WACC	3,71%	3,62 €	3,75 €	3,87 €	4,01 €	4,14 €	4,29 €	4,43 €	4,59 €	4,75 €
	3,91%	3,18 €	3,28 €	3,39 €	3,51 €	3,62 €	3,75 €	3,87 €	4,01 €	4,14 €
	4,11%	2,78 €	2,88 €	2,97 €	3,07 €	3,18 €	3,28 €	3,39 €	3,51 €	3,62 €
	4,31%	2,44 €	2,52 €	2,61 €	2,69 €	2,78 €	2,88 €	2,97 €	3,07 €	3,18 €
	4,51%	2,13 €	2,21 €	2,28 €	2,36 €	2,44 €	2,52 €	2,61 €	2,69 €	2,78 €
	4,71%	1,86 €	1,93 €	1,99 €	2,06 €	2,13 €	2,21 €	2,28 €	2,36 €	2,44 €
	4,91%	1,62 €	1,67 €	1,74 €	1,80 €	1,86 €	1,93 €	1,99 €	2,06 €	2,13 €
	5,11%	1,39 €	1,45 €	1,50 €	1,56 €	1,62 €	1,67 €	1,74 €	1,80 €	1,86 €
	5,31%	1,19 €	1,24 €	1,29 €	1,34 €	1,39 €	1,45 €	1,50 €	1,56 €	1,62 €

Source - The Author

Table 27 – Risk Classification

	High Risk
Sell	≤ 0 %
Reduce	> 0 % and 10% ≤
Hold	> 10% and 20% ≤
Buy	> 20% and 45% ≤
Strong Buy	≥ 45%

Source - Disclosure

In Table 29, we performed a sensitivity analysis to ENC's MRP and Beta. As we can see MRP impacts more the shares value than changes in Beta. In the worst scenario price target can drop by 49.75 % (€ 1.23/sh), on the contrary, the price target can rise by 75.74 % (€ 4,29/sh). MRP for Spain is not expected to change significantly, since that in the past 5 years this variable remained almost constant.

Table 29 - Sensitivity Analysis for MRP and Beta for 2021F

		Change in Market Risk Premium								
		5,11%	5,41%	5,71%	6,01%	6,31%	6,61%	6,91%	7,21%	7,51%
Change in Beta	0,974	4,29 €	3,81 €	3,38 €	3,00 €	2,66 €	2,35 €	2,07 €	1,81 €	1,57 €
	0,982	4,22 €	3,74 €	3,32 €	2,94 €	2,60 €	2,30 €	2,02 €	1,76 €	1,53 €
	0,990	4,15 €	3,68 €	3,26 €	2,89 €	2,55 €	2,24 €	1,97 €	1,71 €	1,48 €
	0,998	4,08 €	3,62 €	3,20 €	2,83 €	2,49 €	2,19 €	1,92 €	1,67 €	1,44 €
	1,006	4,02 €	3,55 €	3,14 €	2,77 €	2,44 €	2,14 €	1,87 €	1,62 €	1,39 €
	1,014	3,95 €	3,49 €	3,08 €	2,72 €	2,39 €	2,09 €	1,82 €	1,58 €	1,35 €
	1,022	3,88 €	3,43 €	3,03 €	2,66 €	2,34 €	2,04 €	1,78 €	1,53 €	1,31 €
	1,030	3,82 €	3,37 €	2,97 €	2,61 €	2,29 €	2,00 €	1,73 €	1,49 €	1,27 €
	1,038	3,76 €	3,31 €	2,91 €	2,56 €	2,24 €	1,95 €	1,69 €	1,45 €	1,23 €

Source - The Author

In Table 30, we can observe how ENC's share price behaves when changing some key drivers of profitability. BHKP price influences more the price target than the average exchange rate. If pulp prices rise the change in shares value can increase by 36.58% (€ 3,49/sh), but if prices decrease, the worst-case scenario is a drop in price target by 7.23 % (€ 2,37/sh). Changes in BHKP (\$/t) price can cause significant changes in the company value. Given the historical volatility of the paper pulp prices and the structural changes in demand and supply due to the actual crisis, this exposition to the market can led to stressful periods in the future.

Table 30 - Sensitivity Analysis for BHKP Price and Average Exchange Rate for 2021F

		Change in BHKP Price (\$/t)								
		400	500	600	700	766	800	900	1 000	1 100
Change in Average Exchange Rate EUR/USD	0,48	2,51 €	2,64 €	2,78 €	2,92 €	3,01 €	3,06 €	3,20 €	3,33 €	3,44 €
	0,68	2,38 €	2,46 €	2,54 €	2,63 €	2,70 €	2,73 €	2,83 €	2,93 €	3,03 €
	0,88	2,31 €	2,37 €	2,43 €	2,49 €	2,53 €	2,56 €	2,63 €	2,70 €	2,78 €
	1,08	2,27 €	2,32 €	2,36 €	2,41 €	2,44 €	2,46 €	2,51 €	2,57 €	2,63 €
	1,28	2,25 €	2,28 €	2,32 €	2,36 €	2,38 €	2,40 €	2,44 €	2,48 €	2,53 €
	1,48	2,23 €	2,26 €	2,29 €	2,32 €	2,34 €	2,35 €	2,39 €	2,42 €	2,46 €
	1,68	2,22 €	2,24 €	2,27 €	2,29 €	2,31 €	2,32 €	2,35 €	2,38 €	2,41 €

Source - The Author

Table 31 - Scenario Analysis for 2021F

Sensitivity Analysis for ENCE Valuation			
Variables	Low Estimate	Base Case	High Estimate
BHKP Price	400	766	1100
Target Price	2,27 €	2,44 €	2,63 €
EUR/USD	0,48	1,08	1,68
Target Price	3,01 €	2,44 €	2,31 €
WACC	3,71%	4,51%	5,31%
Target Price	4,14 €	2,44 €	1,39 €
Terminal Growth Rate	0,97%	1,17%	1,37%
Target Price	2,13 €	2,44 €	2,78 €
Market Risk Premium	5,11%	6,31%	7,51%
Target Price	4,02 €	2,44 €	1,39 €
Beta	0,9737	1,0057	1,0377
Target Price	2,66 €	2,44 €	2,24 €

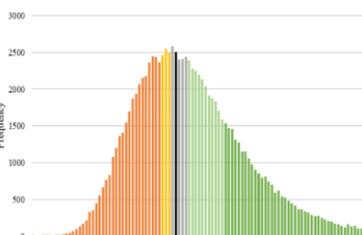
Source - The Author

Monte Carlo Simulation

In addition to the sensitivity analysis we performed a Monte Carlo Simulation covering 100.000 simulations. We assumed a normal distribution and respective standard deviation of variables that we believe it would impact ENC price target the most, terminal growth rate of 1.17 % (standard deviation of 0.50 %), tax rate of 25% (standard deviation of 2 %) and WACC rate of 4.45 % (standard deviation of 1.50 %) – Appendix 19.

The results show a mean price of € 2.69/sh in comparison of € 2.44/sh in the DCF method and a standard deviation of € 0.95. This mean price in the Monte Carlo simulation represents an upside potential of 24 %, which is slightly above the result computed in DCF valuation. The level of certainty is 57.92 %.

Figure 38 – Monte Carlo Simulation



Source - The Author

Appendix 1 – Income Statement

Income Statement										
Figures in € M	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Total Revenue	740,3	832,0	735,4	600,2	660,6	755,2	750,3	802,8	841,9	938,1
Other Income	12,1	11,5	19,2	12,5	13,8	15,8	15,7	16,8	17,6	19,6
Cost of Sales	(291,2)	(289,2)	(334,6)	(252,1)	(277,4)	(317,2)	(315,1)	(337,2)	(353,6)	(394,0)
Personnel Expenses	(74,4)	(77,7)	(92,3)	(93,4)	(94,6)	(95,9)	(97,5)	(99,2)	(101,0)	(102,8)
Other Operating Expenses	(170,8)	(185,7)	(200,7)	(203,1)	(205,7)	(208,6)	(212,2)	(215,8)	(219,7)	(223,7)
EBITDA	216,0	290,9	127,0	64,2	96,6	149,3	141,2	167,4	185,3	237,1
<i>EBITDA Margin</i>	<i>29%</i>	<i>35%</i>	<i>17%</i>	<i>11%</i>	<i>15%</i>	<i>20%</i>	<i>19%</i>	<i>21%</i>	<i>22%</i>	<i>25%</i>
Depreciation and Amortisation	(66,4)	(81,3)	(94,5)	(60,0)	(66,1)	(75,5)	(75,0)	(80,3)	(84,2)	(93,8)
EBIT	149,6	209,6	32,5	4,2	30,6	73,8	66,1	87,2	101,1	143,3
<i>EBIT Margin</i>	<i>20%</i>	<i>25%</i>	<i>4%</i>	<i>1%</i>	<i>5%</i>	<i>10%</i>	<i>9%</i>	<i>11%</i>	<i>12%</i>	<i>15%</i>
Net Finance Cost	(29,8)	(36,3)	(21,4)	(11,7)	(12,2)	(12,8)	(13,4)	(14,1)	(14,2)	(14,4)
Profit Before Tax	119,9	173,2	11,1	(7,5)	18,3	60,9	52,7	73,1	86,9	129,0
Income Tax	(26,2)	(41,6)	0,4	-	4,6	15,2	13,2	18,3	21,7	32,2
Net Income	93,7	131,7	11,5	(7,5)	13,7	45,7	39,5	54,8	65,1	96,7
Non-Controlling Interests	(1,9)	(2,5)	(2,3)	(2,3)	(2,3)	(2,3)	(2,3)	(2,3)	(2,3)	(2,3)
Net Income	91,8	129,1	9,2	(9,8)	11,5	43,4	37,2	52,5	62,9	94,4

Appendix 2 – Statement of Financial Position

Statement of Financial Position	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Figures in € M										
Intangible Assets	16,0	60,1	61,9	61,9	61,9	61,9	61,9	61,9	61,9	61,9
Property, Plant and Equipment	692,7	987,1	1 238,3	1 316,8	1 389,3	1 452,4	1 515,9	1 574,2	1 628,6	1 673,4
Biological Assets	81,7	82,6	79,1	79,1	79,1	79,1	79,1	79,1	79,1	79,1
Non-Current Financial Assets	6,6	13,7	8,7	8,9	9,0	9,1	9,2	9,4	9,6	9,8
Deferred Tax Assets	59,8	56,5	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Total Non-Current Assets	856,7	1 200,0	1 442,2	1 520,7	1 593,3	1 656,5	1 720,2	1 778,6	1 833,2	1 878,1
Inventories	39,1	43,5	56,6	37,8	41,6	47,5	47,2	50,5	53,0	59,0
Trade and Other Accounts Receivable	113,7	122,4	42,2	84,3	92,8	106,1	105,4	112,8	118,3	131,8
Income Tax	1,0	1,4	8,6	2,5	2,7	3,1	3,1	3,3	3,5	3,8
Other Current Assets	2,1	2,1	1,8	1,9	1,9	1,9	1,9	2,0	2,0	2,0
Other Financial Assets	6,4	6,2	4,5	5,7	6,3	7,2	7,1	7,6	8,0	8,9
Cash and Cash Equivalents	270,5	348,6	222,2	67,6	45,3	54,2	54,5	40,1	34,5	59,9
Total Current Assets	446,4	524,3	336,0	199,7	190,5	219,9	219,2	216,3	219,2	265,5
TOTAL ASSETS	1 303,1	1 724,2	1 778,1	1 720,4	1 783,8	1 876,4	1 939,4	1 994,9	2 052,4	2 143,7
Issued Capital	221,6	221,6	221,6	221,6	221,6	221,6	221,6	221,6	221,6	221,6
Reserves	318,9	328,2	425,8	417,3	402,3	394,3	420,9	434,5	458,8	479,1
Profit/Loss for the Period	91,8	129,1	9,2	(9,8)	11,5	43,4	37,2	52,5	62,9	94,4
Non-Controlling Interests	9,9	18,3	18,3	20,5	22,8	25,1	27,4	29,7	32,0	34,3
TOTAL EQUITY	642,2	697,3	674,9	649,7	658,3	684,4	707,2	738,4	775,2	829,5
Non-Current Borrowings	414,8	498,1	705,0	740,3	777,3	816,2	857,0	865,6	874,2	883,0
Deferred Tax Liabilities	23,8	40,0	37,6	37,6	37,6	37,6	37,6	37,6	37,6	37,6
Other Non-Current Liabilities (incl. Provisions)	17,0	45,2	55,5	56,7	57,4	58,4	58,6	59,1	59,7	60,8
Total Non-Current Liabilities	455,7	583,3	798,1	834,6	872,2	912,1	953,1	962,3	971,5	981,3
Current Borrowings	15,2	157,6	34,3	34,3	34,3	34,3	34,3	34,3	34,3	34,3
Trade and Other Account Payable	180,3	242,8	234,7	165,3	181,9	208,0	206,7	221,1	231,9	258,4
Income Tax	0,4	1,8	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Other Current Liabilities (incl. Provisions)	9,3	41,4	35,7	36,1	36,6	37,1	37,7	38,3	39,0	39,7
Total Current Liabilities	205,2	443,6	305,1	236,1	253,2	279,8	279,1	294,2	305,7	332,9
TOTAL EQUITY AND LIABILITIES	1 303,1	1 724,2	1 778,1	1 720,4	1 783,8	1 876,4	1 939,4	1 994,9	2 052,4	2 143,7

Appendix 3 – Cash Flow Statement

Cash Flow Statement							
Figures in € M	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Operating Activities	(21,9)	96,6	141,0	128,3	153,3	166,9	212,1
+EBITDA	64,2	96,6	149,3	141,2	167,4	185,3	237,1
-Income Tax	-	(4,6)	(15,2)	(13,2)	(18,3)	(21,7)	(32,2)
-DNWC	86,1	(4,5)	(6,9)	(0,3)	(4,2)	(3,3)	(7,2)
Investment Activities	(138,5)	(138,5)	(138,6)	(138,6)	(138,6)	(138,6)	(138,6)
-CAPEX	(138,5)	(138,5)	(138,6)	(138,6)	(138,6)	(138,6)	(138,6)
+Other Inv.	-	-	-	-	-	-	-
Financing Activities	5,8	19,6	6,5	10,6	(29,1)	(33,8)	(48,1)
-Interest Paid	(11,7)	(12,2)	(12,8)	(13,4)	(14,1)	(14,2)	(14,4)
-Dividends	(17,7)	(5,2)	(19,5)	(16,8)	(23,6)	(28,3)	(42,5)
-DDebt	35,3	37,0	38,9	40,8	8,6	8,7	8,7
Change in Cash	(154,6)	(22,3)	8,9	0,3	(14,4)	(5,6)	25,4
Begining	222,2	67,6	45,3	54,2	54,5	40,1	34,5
End	67,6	45,3	54,2	54,5	40,1	34,5	59,9

Appendix 4 – Key Financial Ratios

Key Financial Ratios	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Liquidity Ratios										
Current Ratio (x)	2,18	1,18	1,10	0,85	0,75	0,79	0,79	0,74	0,72	0,80
Quick Ratio (x)	1,88	1,07	0,87	0,65	0,55	0,58	0,58	0,53	0,51	0,58
Cash Ratio (x)	1,32	0,79	0,73	0,29	0,18	0,19	0,20	0,14	0,11	0,18
Efficiency Ratios										
Total Assets Turnover (x)	0,49	0,48	0,41	0,35	0,37	0,40	0,39	0,40	0,41	0,44
Accounts Receivables Turnover (x)	6,27	10,11	17,41	7,12	7,12	7,12	7,12	7,12	7,12	7,12
Collection Period (days)	58,21	36,12	20,97	51,28	51,28	51,28	51,28	51,28	51,28	51,28
Inventory Turnover (x)	7,04	5,78	5,92	6,68	6,68	6,68	6,68	6,68	6,68	6,68
Days in Inventory (days)	51,81	63,17	61,70	54,66	54,66	54,66	54,66	54,66	54,66	54,66
Payables Turnover (x)	1,38	1,21	1,43	1,52	1,52	1,52	1,52	1,52	1,52	1,52
Payables Period (days)	265,16	301,34	256,05	239,35	239,35	239,35	239,35	239,35	239,35	239,35
Operating Cycle (days)	110,02	99,29	82,66	105,95	105,95	105,95	105,95	105,95	105,95	105,95
Cash Cycle (days)	-155,14	-202,06	-173,38	-133,40	-133,40	-133,40	-133,40	-133,40	-133,40	-133,40
Assets Turnover	1,07	0,84	0,59	0,46	0,48	0,52	0,49	0,51	0,52	0,56
Profitability Ratios										
EBITDA Margin (%)	29,18%	34,96%	17,27%	10,69%	14,63%	19,77%	18,81%	20,86%	22,01%	25,28%
EBIT Margin (%)	20,21%	25,19%	4,42%	0,69%	4,63%	9,77%	8,81%	10,86%	12,01%	15,28%
Net Profit Margin (%)	12,40%	15,52%	1,25%	-1,64%	1,73%	5,75%	4,96%	6,54%	7,47%	10,07%
ROA (%)	6,06%	7,37%	0,52%	-0,57%	0,64%	2,31%	1,92%	2,63%	3,06%	4,41%
ROCE (%)	13,63%	16,36%	2,21%	0,28%	2,00%	4,62%	3,98%	5,13%	5,79%	7,91%
ROE (%)	13,70%	18,82%	1,36%	-1,51%	1,74%	6,34%	5,27%	7,11%	8,11%	11,39%
EPS (x)	0,41	0,58	0,04	-0,04	0,05	0,20	0,17	0,24	0,28	0,43
SG&A/Sale (%)	10,05%	9,34%	12,55%	15,56%	14,32%	12,70%	13,00%	12,35%	11,99%	10,96%
Solvency Ratios										
Long- and short-term Debt Ratio (%)	33,00%	38,03%	41,58%	45,03%	45,50%	45,33%	45,96%	45,11%	44,27%	42,79%
Long-term Debt Ratio (%)	31,84%	28,89%	39,65%	43,03%	43,58%	43,50%	44,19%	43,39%	42,59%	41,19%
Debt to Equity Ratio (x)	0,670	0,940	1,095	1,192	1,233	1,243	1,260	1,219	1,172	1,106
Equity Multiplier (x)	2,029	2,473	2,635	2,648	2,710	2,742	2,742	2,702	2,647	2,584
Debt to EBITDA (x)	1,991	2,254	5,822	12,071	8,400	5,698	6,314	5,374	4,904	3,868
Interest Coverage Ratio (x)	5,03	5,77	1,52	0,36	2,50	5,75	4,92	6,19	7,11	9,98
Value Creation and Cash Flow Ratios										
Debt Coverage (x)	0,21	0,20	0,01	-0,01	0,01	0,05	0,04	0,06	0,07	0,10
Cash to Income (%)	37%	42%	30%	11%	7%	7%	7%	5%	4%	6%
Earnings Quality: CFO/(NP+D&A+ΔNWC)	1,11	0,78	1,19	0,61	1,18	1,12	1,14	1,12	1,11	1,09

Appendix 5 – Common-Size Income Statement

Common-Size Income Statement	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Figures in € M										
Total Revenue	100,0%									
Other Income	1,6%	1,4%	2,6%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%
Cost of Sales	-39,3%	-34,8%	-45,5%	-42,0%	-42,0%	-42,0%	-42,0%	-42,0%	-42,0%	-42,0%
Personnel Expenses	-10,0%	-9,3%	-12,5%	-15,6%	-14,3%	-12,7%	-13,0%	-12,4%	-12,0%	-11,0%
Other Operating Expenses	-23,1%	-22,3%	-27,3%	-33,8%	-31,1%	-27,6%	-28,3%	-26,9%	-26,1%	-23,8%
EBITDA	29,2%	35,0%	17,3%	10,7%	14,6%	19,8%	18,8%	20,9%	22,0%	25,3%
Depreciation and Amortisation	-9,0%	-9,8%	-12,8%	-10,0%	-10,0%	-10,0%	-10,0%	-10,0%	-10,0%	-10,0%
EBIT	20,2%	25,2%	4,4%	0,7%	4,6%	9,8%	8,8%	10,9%	12,0%	15,3%
Net Finance Cost	-4,0%	-4,4%	-2,9%	-1,9%	-1,9%	-1,7%	-1,8%	-1,8%	-1,7%	-1,5%
Profit Before Tax	16,2%	20,8%	1,5%	-1,3%	2,8%	8,1%	7,0%	9,1%	10,3%	13,7%
Income Tax	-3,5%	-5,0%	0,1%	0,0%	0,7%	2,0%	1,8%	2,3%	2,6%	3,4%
Net Income	12,7%	15,8%	1,6%	-1,3%	2,1%	6,1%	5,3%	6,8%	7,7%	10,3%
Non-Controlling Interests	-0,3%	-0,3%	-0,3%	-0,4%	-0,3%	-0,3%	-0,3%	-0,3%	-0,3%	-0,2%
Net Income	12,4%	15,5%	1,3%	-1,6%	1,7%	5,7%	5,0%	6,5%	7,5%	10,1%

Appendix 6 – Common-Size Statement of Financial Position

Common-Size Statement of Financial Position Figures in € M	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Intangible Assets	1,2%	3,5%	3,5%	3,6%	3,5%	3,3%	3,2%	3,1%	3,0%	2,9%
Property, Plant and Equipment	53,2%	57,2%	69,6%	76,5%	77,9%	77,4%	78,2%	78,9%	79,3%	78,1%
Biological Assets	6,3%	4,8%	4,4%	4,6%	4,4%	4,2%	4,1%	4,0%	3,9%	3,7%
Non-Current Financial Assets	0,5%	0,8%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Deferred Tax Assets	4,6%	3,3%	3,0%	3,1%	3,0%	2,9%	2,8%	2,7%	2,6%	2,5%
Total Non-Current Assets	65,7%	69,6%	81,1%	88,4%	89,3%	88,3%	88,7%	89,2%	89,3%	87,6%
Inventories	3,0%	2,5%	3,2%	2,2%	2,3%	2,5%	2,4%	2,5%	2,6%	2,8%
Trade and Other Accounts Receivable	8,7%	7,1%	2,4%	4,9%	5,2%	5,7%	5,4%	5,7%	5,8%	6,1%
Income Tax	0,1%	0,1%	0,5%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Other Current Assets	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Other Financial Assets	0,5%	0,4%	0,3%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Cash and Cash Equivalents	20,8%	20,2%	12,5%	3,9%	2,5%	2,9%	2,8%	2,0%	1,7%	2,8%
Total Current Assets	34,3%	30,4%	18,9%	11,6%	10,7%	11,7%	11,3%	10,8%	10,7%	12,4%
TOTAL ASSETS	100%									
Issued Capital	17,0%	12,9%	12,5%	12,9%	12,4%	11,8%	11,4%	11,1%	10,8%	10,3%
Reserves	24,5%	19,0%	23,9%	24,3%	22,6%	21,0%	21,7%	21,8%	22,4%	22,4%
Profit/Loss for the Period	7,0%	7,5%	0,5%	-0,6%	0,6%	2,3%	1,9%	2,6%	3,1%	4,4%
Non-Controlling Interests	0,8%	1,1%	1,0%	1,2%	1,3%	1,3%	1,4%	1,5%	1,6%	1,6%
TOTAL EQUITY	49,3%	40,4%	38,0%	37,8%	36,9%	36,5%	36,5%	37,0%	37,8%	38,7%
Non-Current Borrowings	31,8%	28,9%	39,7%	43,0%	43,6%	43,5%	44,2%	43,4%	42,6%	41,2%
Deferred Tax Liabilities	1,8%	2,3%	2,1%	2,2%	2,1%	2,0%	1,9%	1,9%	1,8%	1,8%
Other Non-Current Liabilities (incl. Provisions)	1,3%	2,6%	3,1%	3,3%	3,2%	3,1%	3,0%	3,0%	2,9%	2,8%
Total Non-Current Liabilities	35,0%	33,8%	44,9%	48,5%	48,9%	48,6%	49,1%	48,2%	47,3%	45,8%
Current Borrowings	1,2%	9,1%	1,9%	2,0%	1,9%	1,8%	1,8%	1,7%	1,7%	1,6%
Trade and Other Account Payable	13,8%	14,1%	13,2%	9,6%	10,2%	11,1%	10,7%	11,1%	11,3%	12,1%
Income Tax	0,0%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Other Current Liabilities (incl. Provisions)	0,7%	2,4%	2,0%	2,1%	2,0%	2,0%	1,9%	1,9%	1,9%	1,9%
Total Current Liabilities	15,7%	25,7%	17,2%	13,7%	14,2%	14,9%	14,4%	14,7%	14,9%	15,5%
TOTAL EQUITY AND LIABILITIES	100%									

Appendix 7 – Forecasting Assumptions

Income Statement	Notes	2020F	2021F	2022F	2023F	2024F	2025F	2026F	Assumption
Inflation	%	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Spain expected inflation rate by European Commission and ECB.
Average Exchange Rate EUR/USD	USD	1,070	1,080	1,070	1,060	1,070	1,070	1,070	Based in Trading Economics forecast.
Average Exchange Rate USD/EUR	EUR	0,935	0,926	0,935	0,943	0,935	0,935	0,935	
Revenue	YoY	-18,39%	10,07%	14,32%	-0,64%	6,99%	4,87%	11,42%	Appendix "Sales Breakdown"
Pulp	YoY	-24,77%	12,10%	17,90%	-2,69%	7,67%	4,75%	13,73%	
Forestry	YoY	-44,48%	12,10%	17,90%	-2,69%	7,67%	4,75%	13,73%	
Energy from Pulp	YoY	-28,24%	12,10%	17,90%	-2,69%	7,67%	4,75%	13,73%	
Energy from Biomass	YoY	5,20%	5,20%	5,20%	5,20%	5,20%	5,20%	5,20%	
Other Income	%Rev	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	Average from the previous 5 years.
Cost of sales	%Rev	42,00%	42,00%	42,00%	42,00%	42,00%	42,00%	42,00%	Based on the 5-year historical average.
Personnel expenses	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Adjusted for the expected inflation.
Other operating expenses	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Adjusted for the expected inflation.
Depreciation and Amortisation	%Rev	10,00%	10,00%	10,00%	10,00%	10,00%	10,00%	10,00%	Based on the 5 year average of total depreciation and amortization.
Net finance cost	%Debt	1,58%	1,58%	1,58%	1,58%	1,58%	1,58%	1,58%	Interest rate used in bond issuance.
Income tax	%Rev	0%	25%	25%	25%	25%	25%	25%	According to legal obligations in Spain.
Non-controlling interests		0%	0%	0%	0%	0%	0%	0%	Assuming the same nominal value from 2019.

Balance Sheet	Notes	2020F	2021F	2022F	2023F	2024F	2025F	2026F	Assumption
Non-Current Assets									
Intangible assets	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Property, plant and equipment	YoY	6,34%	5,51%	4,54%	4,38%	3,85%	3,46%	2,75%	Assuming investment plans from the company. Appendix "CAPEX"
Biological assets	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to 2019 value, there are no expectations to increase land.
Non-current financial assets	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Adjusted for expected inflation.
Deferred tax assets	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Since 2015 deferred tax assets have been decreasing in 2019 and onwards we assume it going to be equal.
Current Assets									
Inventories	%Rev	6,29%	6,29%	6,29%	6,29%	6,29%	6,29%	6,29%	The average since 2015 as a percentage of sales.
Trade and other accounts receivable	%Rev	14,05%	14,05%	14,05%	14,05%	14,05%	14,05%	14,05%	Based in the historical 5-year average.
Income tax	%Rev	0,41%	0,41%	0,41%	0,41%	0,41%	0,41%	0,41%	Based in the historical 5-year average.
Other current assets	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Based in inflation.
Other financial assets	%Rev	0,95%	0,95%	0,95%	0,95%	0,95%	0,95%	0,95%	Based in the historical 5-year average.
Equity									
Issued Capital	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Reserves	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Non-controlling interests	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
N° Shares Outstanding		246,3	246,3	246,3	246,3	246,3	246,3	246,3	N° of shares at 2019YE
Dividend p/ Share		0,080	0,023	0,088	0,076	0,107	0,128	0,192	See 'DDM'
Non-Current Liabilities									
Non-current borrowings	YoY	5%	5%	5%	5%	1%	1%	1%	Debt is assumed to grow because the company has financing issues.
Deferred tax liabilities	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Other non-current liabilities	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Assuming the same nominal value from 2019.
Current Liabilities									
Current borrowings	YoY	0%	0%	0%	0%	0%	0%	0%	Debt is assumed to be constant from 2019F onwards.
Current derivatives	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Trade and other account payable	%Rev	27,54%	27,54%	27,54%	27,54%	27,54%	27,54%	27,54%	Based in the historical 5-year average as percentage of Rev.
Income tax	YoY	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	Assuming the same nominal value from 2019.
Other current liabilities (incl. provisions)	YoY	1,20%	1,30%	1,40%	1,70%	1,70%	1,80%	1,85%	Based in inflation.

Appendix 8 – Sales Breakdown

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Pulp Capacity (Mt)	1,10	1,10	1,18	1,18	1,18	1,20	1,22	1,25	1,27	1,30
Total Production (Mt)	0,96	0,97	0,91	0,91	0,91	0,96	0,98	1,00	1,04	1,08
<i>Production/Capacity</i>	87,09%	88,00%	77,29%	77,29%	77,29%	80,00%	80,00%	80,00%	82,00%	83,00%
Pulp Sales (Mt)	0,98	0,95	0,91	0,91	0,91	0,96	0,97	1,00	1,04	1,08
<i>Sales/Production</i>	101,81%	97,88%	99,83%	99,84%	99,84%	99,84%	99,84%	99,84%	99,84%	99,84%
Pulp Average Market Price (€/t)	818,00	1 037,00	862,00	632,71	709,26	794,39	760,38	799,07	803,74	882,24
Pulp Average Sale Price (€/t)	528,23	635,11	522,82	393,28	440,86	493,78	472,63	496,68	499,58	548,38
<i>Average Rebate</i>	35,42%	38,76%	39,35%	37,84%	37,84%	37,84%	37,84%	37,84%	37,84%	37,84%
Pulp Sales Revenue (€M)	515,18	601,75	476,03	358,11	401,44	473,27	460,56	495,89	519,44	590,77
Forestry (€M)	19,60	12,40	23,00	12,77	14,31	16,88	16,42	17,68	18,52	21,06
<i>%/Pulp Sales</i>	3,80%	2,06%	4,83%	3,57%	3,57%	3,57%	3,57%	3,57%	3,57%	3,57%
Energy Sales linked to Pulp (€M)	76,80	82,80	73,30	52,60	58,97	69,52	67,65	72,84	76,30	86,77
<i>%/Pulp Sales</i>	14,91%	13,76%	15,40%	14,69%	14,69%	14,69%	14,69%	14,69%	14,69%	14,69%
Energy from Biomass (€M)	133,04	138,92	167,95	176,69	185,87	195,54	205,71	216,40	227,66	239,50
<i>Growth Rate</i>	-	4,42%	20,90%	5,20%	5,20%	5,20%	5,20%	5,20%	5,20%	5,20%
Total Sales	744,63	835,86	740,28	600,17	660,59	755,21	750,34	802,82	841,92	938,10

Pulp Average Market Price (€/t)

RISI, Hawkins Wright, Brian McClay

Estimates for European Annual Average

BHKP and BSKP Prices

	2020F	2021F	2022F	2023F	2024F	2025F	2026F
BHKP (\$/t)	677	766	850	806	855	860	944
BSKP (\$/t)	1 275	1 150	1 000	1 063	1 150	1 150	1 150
Average Exchange Rate EUR/USD	1,070	1,080	1,070	1,060	1,070	1,070	1,070
Average Exchange Rate USD/EUR	0,93	0,93	0,93	0,94	0,93	0,93	0,93
BHKP (€/t)	633	709	794	760	799	804	882
BSKP (€/t)	1 192	1 065	935	1 003	1 075	1 075	1 075

Appendix 9 – Net Working Capital

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Current Assets	155,9	169,4	109,3	126,4	138,9	158,6	157,6	168,6	176,7	196,7
Inventories	39,1	43,5	56,6	37,8	41,6	47,5	47,2	50,5	53,0	59,0
Trade and Other Accounts Receivables	113,7	122,4	42,2	84,3	92,8	106,1	105,4	112,8	118,3	131,8
Income Tax	1,0	1,4	8,6	2,5	2,7	3,1	3,1	3,3	3,5	3,8
Other Current Assets	2,1	2,1	1,8	1,9	1,9	1,9	1,9	2,0	2,0	2,0
Current Liabilities	190,0	286,0	270,8	201,8	218,9	245,5	244,8	259,9	271,3	298,6
Trade and Other Accounts Payables	180,3	242,8	234,7	165,3	181,9	208,0	206,7	221,1	231,9	258,4
Income Tax	0,4	1,8	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Other Current Liabilities (incl. Provisions)	9,3	41,4	35,7	36,1	36,6	37,1	37,7	38,3	39,0	39,7
NWC	-34,1	-116,6	-161,5	-75,4	-80,0	-86,9	-87,2	-91,3	-94,6	-101,9
DNWC		82,5	44,9	-86,1	4,5	6,9	0,3	4,2	3,3	7,2

Appendix 10 – CAPEX

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Intangible assets	15,972	60,1	61,9	61,9	61,9	61,9	61,9	61,9	61,9	61,9
Property, plant and equipment	692,673	987,1	1238,3	1316,8	1389,3	1452,4	1515,9	1574,2	1628,6	1673,4
Biological assets	81,692	82,6	79,1	79,1	79,1	79,1	79,1	79,1	79,1	79,1
D&A	-66,377	-81,3	-94,5	-60,0	-66,1	-75,5	-75,0	-80,3	-84,2	-93,8
CAPEX	-	420,7	344,0	138,5	138,5	138,6	138,6	138,6	138,6	138,6

Through 2019-2026 Ence will be doing the following investments:

Adaptation to Fluff at Navia (€ 45Mn)

New swing line at Navia (€ 450Mn)

Renewable energy busines (€ 475Mn)

Total investment of € 970Mn.

Having in mind the recent crisis we assumed that these investments will be done until 2026F.

All of these investments have been assumed to be distributed equally troughout 2020 until 2026.

Appendix 11 – Discounted Cash Flow Method (FCFF)

Assumptions	
Re	7,19%
Rf	0,84%
Beta	1,0057
Unlevered Beta	0,86
D/E	81%
Tc	25%
MRP	6,31%
Rd	1,62%
Growth Rate	1,17%

WACC	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Re	7,19%	7,19%	7,19%	7,19%	7,19%	7,19%	7,19%	7,19%
Rf	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%	0,84%
MRP	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%	6,31%
Levered Beta (β_L)	1,01	1,01	1,01	1,01	1,01	1,01	1,01	1,01
After Tax Rd	1,22%	1,22%	1,22%	1,22%	1,22%	1,22%	1,22%	1,22%
Rd	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%	1,62%
Tc	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%
WACC	4,50%	4,47%	4,48%	4,44%	4,49%	4,54%	4,63%	4,51%
E/V	54,97%	54,50%	54,67%	54,04%	54,89%	55,73%	57,21%	55,15%
D/V	45,03%	45,50%	45,33%	45,96%	45,11%	44,27%	42,79%	44,85%

FCFF	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
EBIT(1-tc)	3	23	55	50	65	76	107	107
Non Cash Charges	60	66	76	75	80	84	94	94
CAPEX	139	139	139	139	139	139	139	139
Δ NWC	-86	5	7	0	4	3	7	7
FCFF	10,7	-54,1	-14,7	-14,2	2,9	18,1	55,5	55,5
Discounted FCFF			-	-	-	-	-	-
Cummulative FCFF			-	-	-	-	-	-
Discounted TV			1429	1508	1590	1660	1718	1662
PV			1368	1444	1522	1587	1642	

DCF (FCFF) Valuation	
Enterprise Value	1368
- Net Debt	766
Equity Value	601
Number of Shares Out.	246,3
Price Target	2,44 €
Share Price (16/10/2020)	2,16 €
Upside potential	13%

Appendix 12 – Discounted Cash Flow Method (FCFE)

FCFE	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Net Income	-10	11	43	37	53	63	94	94
Non Cash Charges	60	66	76	75	80	84	94	94
CAPEX	139	139	139	139	139	139	139	139
Δ NWC	-86	5	7	0	4	3	7	7
Net Borrowing	35,3	37,0	38,9	40,8	8,6	8,7	8,7	8,7
FCFE	33	-29	12	14	-1	14	51	51
Discounted FCFE			-	-	-	-	-	-
Cummulative FCFE			-	-	-	-	-	-
Discounted TV			719	757	797	855	902	
PV			671	707	743	798	841	851
Re			7,19%	7,19%	7,19%	7,19%	7,19%	7,19%

DCF (FCFE) Valuation

Equity Value	671
Number of Shares Out.	246,3
Price Target	2,72 €
Share Price (16/10/2020)	2,16 €
Upside potential	26%

Appendix 13 – Multi-Stage Dividend Discount Model

Assumptions

g	1,17%
Re	7,19%

	2020F	2021F	2022F	2023F	2024F	2025F	2026F	TV
Net Income	-9,82	11,46	43,41	37,24	52,52	62,86	94,44	
N° Shares	246,30	246,30	246,30	246,30	246,30	246,30	246,30	
EPS	- 0,04 €	0,05 €	0,18 €	0,15 €	0,21 €	0,26 €	0,38 €	
DPS	0,080 €	0,023 €	0,088 €	0,076 €	0,107 €	0,128 €	0,192 €	
Payout Ratio	50%	50%	50%	50%	50%	50%	50%	
Dividends	0,08 €	0,02 €	0,09 €	0,08 €	0,11 €	0,13 €	0,19 €	3,22 €
PV			0,08 €	0,07 €	0,09 €	0,10 €	0,14 €	2,13 €

Dividend Discount Model

Price Target	2,59 €
Share Price (16/10/2020)	2,16 €
Upside Potential	20%

Appendix 14 – Beta Estimation

Identifier	Company Name	Beta (Reuters)	Beta	Total Debt	Market Cap	WACC	Effective Tax Rate	Bu
ENC.MC	ENCE	1,10	1,9329	739,400	542,320	8,50%		0,86
ALSS.LS	Altri SGPS SA	1,712	1,9945	790,602	745,383	8,10%	22%	1,01
SUZB3.SA	Suzano	0,95	0,6048	85,803	63,754	7,86%		0,27
CMPC.SN	CMPC	0,58	1,0064	4,442	5,099	8,50%		0,56
NVGR.LS	Navigator	1,38	1,5469	1,070	1,508	9%	22%	0,94
MNDI.L	Mondi	1,03	1,1381	2,719	8,789	5,21%		0,88
UPM.HE	UPM	1,068	0,8819	1,301	13,859	5,40%		0,81
STERV.HE	Stora Enso	1,507	1,1488	3,888	10,768	7%		0,86

Regression Statistics

Multiple R	0,520566197
R Square	0,270989166
Adjusted R Square	0,270478654
Standard Error	0,022150487
Observations	1430

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0,260443023	0,260443023	530,8186253	3,9744E-100
Residual	1428	0,700639765	0,000490644		
Total	1429	0,961082788			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	0,000696723	0,000585803	1,189346342	0,234501126	-0,000452404	0,001845851	-0,000452404	0,001845851
X Variable 1	1,008621216	0,04377791	23,03950141	3,9744E-100	0,922745303	1,09449713	0,922745303	1,09449713

Blume Adjustment

1,005747478

Appendix 15 – Market Risk Premium Estimation

	Historical Average MRP
USA	5,6
Spain	6,4
Germany	5,5
France	6,0
UK	5,7
Italy	6,1
Canada	5,9
Portugal	7,0
Switzerland	6,4
Belgium	6,1
Sweden	6,4
Denmark	5,9
Finland	5,9
Japan	5,9
Norway	5,8
Brazil	8,3
Ireland	6,2
China	7,4
Mexico	8,5
Russia	8,7
India	8,3
South Africa	7,6
Australia	6,6
Chile	6,3
Uruguay	8,0
Poland	6,1
Peru	7,4
Czech Rep.	6,0
Indonesia	8,9
Israel	6,0
Korea (South)	6,5
Netherlands	5,9
New Zealand	6,0
Thailand	8,2
Turkey	8,7
Austria	6,1
Greece	15,4
Colombia	8,1
Hungary	8,3
Venezuela	19,4
Argentina	17,0

	%Sales	MRP
Germany	21%	5,50%
Spain	10%	6,40%
Portugal	9%	7,00%
France	10%	6,00%
Italy	6%	6,05%
Poland	9%	6,05%
Rest of Europe	17%	7,01%
Other	18%	6,57%
MRP ENCE	6,31%	

Appendix 16 – Relative Valuation

	EV/Sales				EV/EBITDA				P/E				P/Sales				P/Book			
	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F
Altri	1,8	2,1	1,9	1,9	5,9	9,3	7,4	6,4	11,6	20,8	11,3	10,1	1,6	1,1	1,1	1,0	2,5	1,8	1,8	1,8
Suzano	5,3	4,9	4,2	4,1	12,8	10,7	8,4	8,0	-	-	-	-	2,1	2,3	2,0	1,9	3,0	14,9	7,3	4,0
CMPC	1,5	1,6	1,5	1,4	7,1	8,6	7,1	7,0	72,2	436,9	21,3	17,8	1,1	1,0	0,9	0,9	0,8	0,7	0,6	0,6
UPM	1,3	1,5	1,4	1,4	6,9	9,6	8,2	7,6	15,5	18,6	15,1	14,2	1,6	1,5	1,4	1,4	1,6	1,3	1,3	1,3
Stora Enso	1,2	1,4	1,3	1,3	7,7	9,6	7,7	7,2	11,6	23,5	14,4	12,0	1,0	1,1	1,0	1,0	1,4	1,2	1,1	1,1
Navigator	1,5	1,7	1,6	1,5	6,6	9,3	7,3	6,8	15,2	19,1	11,3	9,6	1,5	1,1	1,0	1,0	2,5	1,7	1,7	1,6
Average	1,3	1,5	1,4	1,4	7,1	9,5	7,7	7,2	14,1	20,4	13,6	11,9	1,4	1,2	1,2	1,1	1,8	1,4	1,4	1,3
Median	1,3	1,5	1,4	1,4	6,9	9,6	7,7	7,2	15,2	19,1	14,4	12,0	1,5	1,1	1,0	1,0	1,6	1,3	1,3	1,3

	Sales				EBITDA				Net Income				Sales				Equity			
	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F
ENCE	735,4	600,2	660,6	755,2	127,0	64,2	96,6	149,3	11,5	-17,6	6,4	38,5	735,4	600,2	660,6	755,2	674,9	639,4	627,9	648,5

ENCE EV based on:	EV/Sales				EV/EBITDA				P/E				P/Sales				P/Book			
	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F	2019	2020F	2021F	2022F
Altri	1331,0	1248,3	1268,3	1397,1	744,2	598,1	717,0	958,3	132,9	-156,4	155,5	460,2	1139,8	684,2	693,6	762,8	1687,3	1149,9	1191,5	1197,8
Suzano	3890,2	2910,8	2787,7	3066,1	1628,2	684,1	812,6	1192,7	-	-	-	-	1514,9	1350,4	1288,1	1419,8	2011,3	9706,1	4147,1	2710,3
CMPC	1088,4	948,3	964,5	1049,7	904,3	554,4	688,0	1040,4	830,4	-3289,0	292,1	812,5	794,2	576,2	587,9	641,9	506,2	422,3	421,3	438,0
UPM	919,2	888,2	938,0	1042,2	877,6	616,0	793,3	1133,0	178,7	-139,9	207,7	647,5	1184,0	894,2	944,6	1049,7	1106,9	844,6	836,0	889,8
Stora Enso	875,1	822,2	872,0	974,2	981,7	614,1	745,9	1070,3	133,7	-177,1	198,2	546,1	750,1	630,2	667,2	747,7	931,4	773,1	750,4	739,2
Navigator	1066,3	1026,3	1037,1	1147,9	834,4	596,1	705,4	1021,0	174,8	-143,9	154,9	440,5	1117,8	672,2	673,8	747,7	1673,8	1097,9	1092,7	1095,1
Average	1528,4	1307,4	1311,3	1446,2	995,1	610,5	743,7	1069,3	290,1	-781,3	201,7	581,4	1083,5	801,2	809,2	894,9	1319,5	2332,3	1406,5	1178,4
Median	1077,3	987,3	1000,8	1098,8	890,9	606,1	731,4	1055,4	174,8	-156,4	198,2	546,1	1128,8	678,2	683,7	755,2	1390,4	971,3	964,4	992,4
EV	1528,4	1307,4	1311,3	1446,2	995,1	610,5	743,7	1069,3	290,1	-781,3	201,7	581,4	1083,5	801,2	809,2	894,9	1319,5	2332,3	1406,5	1178,4
Net Debt	517,2	707,0	766,4	796,3	517,2	707,0	766,4	796,3	517,2	707,0	766,4	796,3	517,2	707,0	766,4	796,3	517,2	707,0	766,4	796,3
Equity Value	1011,2	600,4	544,9	649,9	477,9	-96,5	-22,7	273,0	-227,1	-1488,3	-564,7	-215,0	566,3	94,2	42,9	98,6	802,3	1625,3	640,1	382,0
N° Shares	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3	246,3
PT	4,11	2,44	2,21	2,64	1,94	-0,39	-0,09	1,11	-0,92	-6,04	-2,29	-0,87	2,30	0,38	0,17	0,40	3,26	6,60	2,60	1,55

	EV/Sales	EV/EBITDA	P/E	P/S	P/B
	2021F	2021F	2021F	2021F	2021F
Altri	1268,3	720,0	74,7	694,3	1191,5
Suzano	2787,7	816,0	-	1289,5	4147,1
CMPC	964,5	690,8	140,4	588,5	421,3
UPM	938,0	796,6	99,8	945,6	836,0
Stora Enso	872,0	749,1	95,3	667,9	750,4
Navigator	1037,1	708,3	74,4	674,5	1092,7
Average	1311,3	746,8	96,9	810,0	1406,5
Median	1000,8	734,5	95,3	684,4	964,4
EV	1311,3	746,8	96,9	810,0	1406,5
Net Debt	766,4	766,4	766,4	766,4	766,4
Equity Value	544,9	-19,6	-669,4	43,7	640,1
N° Shares	246,3	246,3	246,3	246,3	246,3
Price Target	2,21 € -	0,13 € -	2,77 €	0,13 €	2,60 €
Upside Potential	2,43%	*	*	*	20,32%

*Negative prices justified by the negative and low results from ENC in 2020F and 2021F.

Appendix 17 – Sensitivity Analysis

	High Risk
Sell	≤ 0 %
Reduce	> 0 % and 10% ≤
Hold	> 10% and 20% ≤
Buy	> 20% and 45% ≤
Strong Buy	≥ 45%

		Change in BHKP Price (\$/t)								
Change in Average Exchange Rate EUR/USD		400	500	600	700	766	800	900	1 000	1 100
	0,48		2,51 €	2,64 €	2,78 €	2,92 €	3,01 €	3,06 €	3,20 €	3,33 €
0,68		2,38 €	2,46 €	2,54 €	2,63 €	2,70 €	2,73 €	2,83 €	2,93 €	3,03 €
0,88		2,31 €	2,37 €	2,43 €	2,49 €	2,53 €	2,56 €	2,63 €	2,70 €	2,78 €
1,08		2,27 €	2,32 €	2,36 €	2,41 €	2,44 €	2,46 €	2,51 €	2,57 €	2,63 €
1,28		2,25 €	2,28 €	2,32 €	2,36 €	2,38 €	2,40 €	2,44 €	2,48 €	2,53 €
1,48		2,23 €	2,26 €	2,29 €	2,32 €	2,34 €	2,35 €	2,39 €	2,42 €	2,46 €
1,68		2,22 €	2,24 €	2,27 €	2,29 €	2,31 €	2,32 €	2,35 €	2,38 €	2,41 €

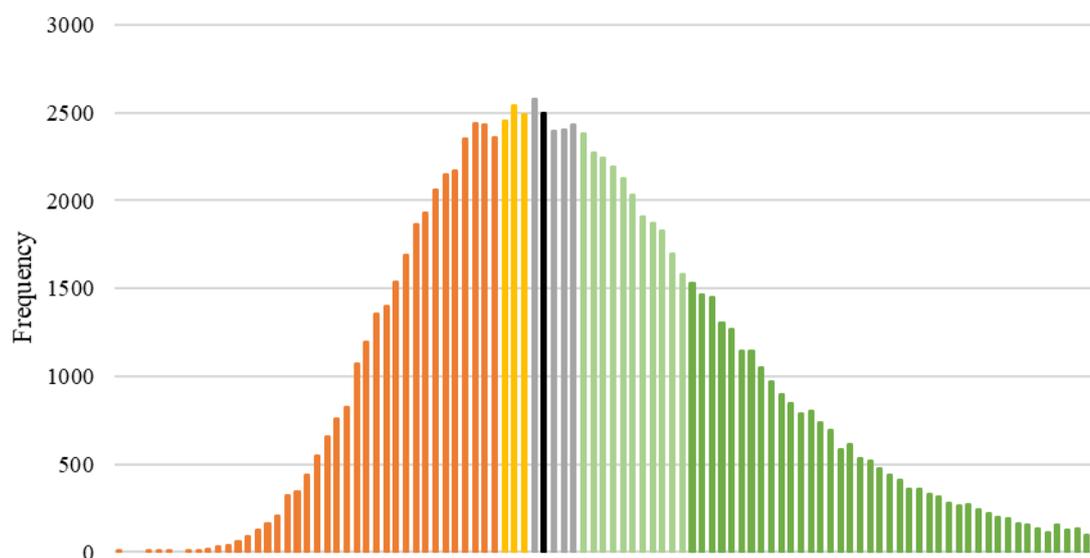
		Change in Terminal Growth Rate								
Change in WACC		0,97%	1,02%	1,07%	1,12%	1,17%	1,22%	1,27%	1,32%	1,37%
	3,71%		3,62 €	3,75 €	3,87 €	4,01 €	4,14 €	4,29 €	4,43 €	4,59 €
3,91%		3,18 €	3,28 €	3,39 €	3,51 €	3,62 €	3,75 €	3,87 €	4,01 €	4,14 €
4,11%		2,78 €	2,88 €	2,97 €	3,07 €	3,18 €	3,28 €	3,39 €	3,51 €	3,62 €
4,31%		2,44 €	2,52 €	2,61 €	2,69 €	2,78 €	2,88 €	2,97 €	3,07 €	3,18 €
4,51%		2,13 €	2,21 €	2,28 €	2,36 €	2,44 €	2,52 €	2,61 €	2,69 €	2,78 €
4,71%		1,86 €	1,93 €	1,99 €	2,06 €	2,13 €	2,21 €	2,28 €	2,36 €	2,44 €
4,91%		1,62 €	1,67 €	1,74 €	1,80 €	1,86 €	1,93 €	1,99 €	2,06 €	2,13 €
5,11%		1,39 €	1,45 €	1,50 €	1,56 €	1,62 €	1,67 €	1,74 €	1,80 €	1,86 €
5,31%		1,19 €	1,24 €	1,29 €	1,34 €	1,39 €	1,45 €	1,50 €	1,56 €	1,62 €

		Change in Market Risk Premium								
Change in Beta		5,11%	5,41%	5,71%	6,01%	6,31%	6,61%	6,91%	7,21%	7,51%
	0,974		4,29 €	3,81 €	3,38 €	3,00 €	2,66 €	2,35 €	2,07 €	1,81 €
0,982		4,22 €	3,74 €	3,32 €	2,94 €	2,60 €	2,30 €	2,02 €	1,76 €	1,53 €
0,990		4,15 €	3,68 €	3,26 €	2,89 €	2,55 €	2,24 €	1,97 €	1,71 €	1,48 €
0,998		4,08 €	3,62 €	3,20 €	2,83 €	2,49 €	2,19 €	1,92 €	1,67 €	1,44 €
1,006		4,02 €	3,55 €	3,14 €	2,77 €	2,44 €	2,14 €	1,87 €	1,62 €	1,39 €
1,014		3,95 €	3,49 €	3,08 €	2,72 €	2,39 €	2,09 €	1,82 €	1,58 €	1,35 €
1,022		3,88 €	3,43 €	3,03 €	2,66 €	2,34 €	2,04 €	1,78 €	1,53 €	1,31 €
1,030		3,82 €	3,37 €	2,97 €	2,61 €	2,29 €	2,00 €	1,73 €	1,49 €	1,27 €
1,038		3,76 €	3,31 €	2,91 €	2,56 €	2,24 €	1,95 €	1,69 €	1,45 €	1,23 €

Appendix 18 – Scenario Analysis

Sensitivity Analysis for ENCE Valuation			
Variables	Low Estimate	Base Case	High Estimate
BHKP Price	400	766	1100
Target Price	2,27 €	2,44 €	2,63 €
EUR/USD	0,48	1,08	1,68
Target Price	3,01 €	2,44 €	2,31 €
WACC	3,71%	4,51%	5,31%
Target Price	4,14 €	2,44 €	1,39 €
Terminal Growth Rate	0,97%	1,17%	1,37%
Target Price	2,13 €	2,44 €	2,78 €
Market Risk Premium	5,11%	6,31%	7,51%
Target Price	4,02 €	2,44 €	1,39 €
Beta	0,9737	1,0057	1,0377
Target Price	2,66 €	2,44 €	2,24 €

Appendix 19 – Monte Carlo Simulation



Variable	Mean	Std. Dev.	Distribution
Terminal Growth	1,17%	0,50%	Normal
Tax Rate	25%	2%	Normal
WACC	4,45%	1,50%	Normal

Statistics	
N° of Trials	100 000
Mean	2,69 €
Standard Deviation	0,95 €
10th Percentile	1,64 €
90th Percentile	3,90 €
Upside Potential	24%

Abbreviations

Billion (Bn)
Bleached Chemi-Thermo Mechanical Pulp (BCTMP)
Bleached Hardwood Kraft Pulp (BHKP)
Bleached Softwood Kraft Pulp (BSKP)
Board of Directors (BoD)
Book Value (BV)
Capital Asset Pricing Model (CAPM)
Capital Expenditures (CAPEX)
Chief Executive Officer (CEO)
Code of the National Securities Market Commission (CNMV)
Compounded Annual Growth Rate (CAGR)
Cost of Goods Sold (COGS)
Debt to Equity (D/E)
Discounted Cash Flow (DCF)
Dividend Discount Model (DDM)
Dividends per Share (DPS)
Earnings Before Interest and Taxes (EBIT)
Earnings Before Interest Taxes Depreciation and Amortization (EBITDA)
Earnings per Share (EPS)
Electrical Network of Spain (REE)
Elemental Chlorine Free (ECF)
ENCE (ENC)
Enterprise Value (EV)
Enterprise Value to EBITDA (EV/EBITDA)
Enterprise Value to Sales (EV/Sales)
European Central Bank (ECB)
Free Cash Flow to Firm (FCFF)
Gross Domestic Product (GDP)
Half (H)
Hectares (Ha)
Kilograms (Kg)
Megawatts (MW)
Net Working Capital (NWC)
Operator of the Iberian Energy Market (OMIE)
Price to Book Value (P/BV)
Price to Earnings (P/E)
Quarter (Q)
Return on Equity (ROE)
Target Price (TP)
Total Chlorine Free (TCF)
Year to Date (YTD)
Year-on-Year (YoY)

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Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	$0\% \leq$	$>0\% \ \& \ \leq 10\%$	$>10\% \ \& \ \leq 20\%$	$>20\% \ \& \ \leq 45\%$	$>45\%$
Medium Risk	$-5\% \leq$	$>-5\% \ \& \ \leq 5\%$	$>5\% \ \& \ \leq 15\%$	$>15\% \ \& \ \leq 30\%$	$>30\%$
Low Risk	$-10\% \leq$	$>-10\% \ \& \ \leq 0\%$	$>0\% \ \& \ \leq 10\%$	$>10\% \ \& \ \leq 20\%$	$>20\%$