Lisbon School of Economics & Management
Universidade de Lisboa

MASTERS IN

FINANCE

MASTERS FINAL WORK

PROJECT

EQUITY RESEARCH:

GREENVOLT – ENERGIAS RENOVÁVEIS, S.A.

HENRIQUE JOSÉ DO CARMO TIAGO

JUNE 2024

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SUPERVISOR:

JOSÉ AFONSO MARTINS ALMEIDA

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Abstract

This Equity Research provides an analysis of the value of a globally expanding Portuguese Renewable Energy company, Greenvolt, offering a comprehensive view of its financial performance, market conditions, strategic positioning and the risks involved. Increasing concern about climate change makes the Renewable Energy industry a relevant topic, as it contributes to achieving Carbon Neutrality. This project covers: Company Description, Industry Analysis, Valuation, Financial Analysis and Risk Analysis.

Greenvolt traces its roots back to 1999, operating in the Biomass sector. Recently, in 2021, it made its IPO, listed on the Euronext Lisbon stock exchange. Currently, it also operates in the Utility-Scale and Distributed Generation segments, with a presence in Europe, Indonesia, Japan, and the United States of America. There are high expectations about how the company will growth, as it is the main driver of the company's value.

The valuation was carried out as of May 31, 2024, with information that was up to date at the time. The main method considered is Discounted Cash Flow and it is then compared with the Adjusted Present Value method, the Equity to Flow method and Relative Valuation. The Target Price for the end of 2024 is €10.11 per share, representing an appreciation potential of 21.62%, suggesting a Buy investment recommendation. All the other methods suggest a Strong Buy recommendation, only the Relative Valuation points to a Sell, as it excludes growth expectations. The main assumptions considered in this assessment are expectations of Growth, CAPEX and Raise of Capital.

To test the robustness of the valuation, a Sensitivity and Scenario analysis is carried out, as well as Monte Carlo Simulation. Most of the results suggest a Strong Buy and Buy, confirming the outcome of the research. Other risks that could affect the business are also considered and a Risk Matrix with General Risks and Business Risks is presented.

Future analyses should assess the determinants of company value: whether the company is growing as expected and how it is being financed, considering the capital structure and the level of debt.

JEL classification: G00; G10; G30; G32; G34; G35

Keywords: Equity Research; Valuation; Renewables Industry; Greenvolt; Portugal; Biomass; Utility Scale; Distributed Generation

Resumo

Esta Equity Research fornece uma análise do valor de uma empresa portuguesa de energias renováveis em expansão global, a Greenvolt, oferecendo uma visão abrangente do seu desempenho financeiro, condições de mercado, posicionamento estratégico e riscos envolvidos. A crescente preocupação com as alterações climáticas torna o sector das Energias Renováveis um tema relevante, uma vez que contribui para alcançar a Neutralidade Carbónica. Este projeto abrange: descrição da empresa, análise do sector, avaliação, análise financeira e análise de risco.

A Greenvolt tem as suas raízes em 1999, operando no sector da Biomassa. Recentemente, em 2021 fez o seu IPO, cotando na bolsa de valores Euronext Lisbon. Atualmente, opera também nos segmentos Utility-Scale e Geração Distribuída, com presença na Europa, Indonésia, Japão e Estados Unidos da América. As expectativas de crescimento da empresa são elevadas, sendo este é o principal fator de valorização da empresa.

A avaliação foi efetuada à data de 31 de maio de 2024, com informação atualizada à data. O principal método considerado é o Discounted Cash Flow, sendo depois comparado com o método Adjusted Present Value, o método Equity to Flow e a Relative Valuation. O preço-alvo para o final de 2024 é de 10,11 euros por ação, o que representa um potencial de valorização de 21,62%, sugerindo uma recomendação de investimento de Compra. Todos os outros métodos sugerem uma recomendação de Compra Forte, apenas a Avaliação Relativa aponta para uma Venda, uma vez que exclui as expectativas de crescimento. Os principais pressupostos considerados nesta avaliação são as expectativas de Crescimento, CAPEX e Aumento de Capital.

Para testar a robustez da avaliação, é efetuada análise de sensibilidade e de cenários, bem como uma simulação de Monte Carlo. A maioria dos resultados sugere uma compra forte e uma compra, confirmando o resultado do estudo. São também considerados outros riscos que podem afetar o negócio e é apresentada uma Matriz de Riscos com Riscos Gerais e Riscos do Negócio.

Análises futuras devem avaliar os determinantes do valor da empresa: se a empresa está a crescer como esperado e como está a ser financiada, considerando a estrutura de capital e o nível de endividamento.

Classificação JEL: G00; G10; G32; G34; G35

Palavras-Chave: Equity Research; Avaliação de Empresas; Energias Renováveis; Portugal; Biomassa; Utility-Scale; Geração Distribuída

Acknowledgements

This master's thesis marks the culmination of a long journey that began with my undergraduate studies in management. It was during this period that I developed a passion for finance. The decision to leave a permanent job in the Algarve and move to Lisbon to pursue this Master's degree in Finance at ISEG was not an easy one, but it was a necessary step toward my personal and professional growth.

There are no perfect theses, only completed ones. While this Master Final Work may not fully reflect my potential and capacity, it stands as a testament to my resilience and determination. Despite numerous challenges, I have completed it, and that makes me feel proud!

On the path to achieving our goals, we are never truly alone. I would like to express my gratitude to the following individuals and institutions:

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To my friends, especially the closest ones, for always giving good advice and motivating me to have the strength to complete this project, my sincerest gratitude. Your friendship and encouragement have been crucial in this journey.

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I am deeply grateful to all the professors at ISEG who passed on their invaluable knowledge to me, especially Professor Tiago Gonçalves. His dedication and competence contributed greatly to my learning and development. I also would like to express my gratitude to my undergraduate professor at the University of Algarve, Sandra Rebelo, for encouraging me to pursue a master's degree in Finance. Her guidance was fundamental to my academic journey.

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My gratitude goes to my supervisor for this Master Final Work, Professor José Almeida. Apparently, this elephant was very hard to cut!!! But apparently it had to be cut into tiny pieces and we hope it digests well! Thank you for all the conversations and all the motivation in difficult moments, it was crucial to get me to success.

Finally, I would like to thank everyone who has passed through my life, given a little of themselves and taken a little of me with them. Everyone who motivated me to take another step in this project. Everyone who, directly or indirectly, made this accomplishment possible! Thank you!!

Grateful for you all!!

Disclosures and Disclaimer

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Recommendation System

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

This master project was developed with strict adherence to the academic integrity policies and guidelines set forth by ISEG, Universidade de Lisboa. The work presented herein is the result of my own research, analysis, and writing, unless otherwise cited. In the interest of transparency, I provide the following disclosure regarding the use of artificial intelligence (AI) tools in the creation of this project:

I disclose that AI tools were employed during the development of this thesis as follows:

- AI-based research tools were used to assist in literature review and data collection.
- Generative AI tools were consulted for brainstorming and outlining purposes. However, all final writing, synthesis, and critical analysis are my own work. Instances where AI contributions were significant are clearly cited and acknowledged.

Nonetheless, I have ensured that the use of AI tools did not compromise the originality and integrity of my work. All sources of information, whether traditional or AI-assisted, have been appropriately cited in accordance with academic standards. The ethical use of AI in research and writing has been a guiding principle throughout the preparation of this thesis.

I understand the importance of maintaining academic integrity and take full responsibility for the content and originality of this work.

Henrique José do Carmo Tiago

June 30, 2024

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Glossary

AMER – Americas

APAC – Asia and Pacific

APV – Adjusted Present Value

B – Billions

B2B – Business to Business

B2C – Business to Customer

BNEF – Bloomberg New Energy Finance

CAGR – Compound Annual Growth Rate

CAPEX – Capital Expenditures

CAPM – Capital Asset Pricing Model

CDP – Climate Change Programme

CEO – Chief Executive Officer

CO^2 – Carbon Dioxide

COD – Commercial Operation Date

DCF – Discounted Cash Flow

DG – Distributed Generation

EBIT – Earnings Before Interests and Taxes

EBITDA – Earnings Before Interests, Taxes, Depreciations and Amortizations

ECB – European Central Bank

EMEA – Europe, Middle East and Africa

EPC – Engineering, procurement, and construction

ESG – Environmental, Social and Governance

EV – Enterprise Value

FCFE – Free Cash Flow to the Equity

FCFF – Free Cash Flow to the Firm

FiT – Feed in Tariff

FTE – Flow to Equity

FY – Fiscal Year

g – Terminal Growth Rate

GDP – Gross Domestic Product

GW – Gigawatt

GWEC – Global Wind Energy Council

GWh – Gigawatt hour

H – Half

IEA – International Energy Agency

IMF – International Monetary Fund

IPO – Initial Public Offering

IRA – Inflation Reform Act

IRENA – International Renewables Energy Agency

Kd – Cost of Debt

Ke – Cost of Equity

KKR – Kohlberg Kravis Roberts

Kt – Kiloton

LCOE – Levelized Cost of Energy

M – Millions

M&A – Mergers and Acquisitions

MW – Megawatt

MWh – Megawatt hour

MWp – Megawatt peak

OPEX – Operational Expenditures

p.p. – Percentual Point

PP&E – Property, Plant and Equipment

PPA – Power Purchase Agreement

PSI – Portuguese Stock Index

Q – Quarter

ROA – Return on Assets

ROE – Return on Equity

RtB – Ready to Build

R&D – Research and Development

S.A. – Sociedade Anónima

SPA – Sales and Purchase Agreement

S&P – Standard & Poor's

SARD – Sum of Absolute Rank Difference

SME – Small Medium Enterprise

tCO^2 – Total Carbon Dioxide

TFEC – Total Final Energy Consumption

TW – Terawatt

TWh – Terawatt hour

UK – United Kingdom

USA – United States of America

WACC- Weighted Average Cost of Capital

Y – Year

YE – Year End

YoY – Year on Year

YTM – Yield to Maturity

Research Snapshot

Greenvolt Energias Renováveis, S.A. Equity Research, performed on May 31, 2024, leads to a **Buy** investment recommendation for **2024YE**. The valuation suggests **€10.11/share** price target, implying an upside potential of **21.62%** compared with the **closing price of €8.31** at the research's date. The Takeover bid made by the KKR fund of €8.30/share is considered **Undervalued**, being 21.76% below the price target. The level of risk is **Medium**, as the renewables industry belongs to the utility sector and has strong growth supported by governments and by people's environmental concerns.

Company Growth

Greenvolt is an expert on producing energy through **Biomass**. Recently entered **Utility Scale** and **Decentralized Energy** segments, taking advantage on the strong growth potential and diversifying revenues, reducing the business risk. The company's **CEO expects an annual growth of 40% until 2025**, as referred to in the 2021 Annual Report. The **average growth** of Biomass, Solar Utilities, Wind Utilities, and Solar Commercial is **6.03%**, **17.35%**, **8.43%**, and **16.50%**, respectively **(Appendix 5)**. As there is much uncertainty about how the company will grow, the assumption of revenues started from the company's expectation matching the industry growth, over the forecast period. To assess this assumption, it is performed a scenario analysis of different revenue's growth, achieving a Buy recommendation on base, a Strong Buy on optimistic scenario, and Sell on Pessimistic.

Sources of Funding

To support the growth, it is necessary to invest in Property, Plants, and Equipment as **Capital Expenditures**, and for that, choose the sources of funding considering the costs. As a strategy, the company will diversify sources of financing through **Debt**, issuing bonds and loans. Nowadays, high inflation scenarios have emerged, due to conflicts on a global scale, such as in Ukraine and Gaza Strip. To control inflation the European Central Bank may apply its monetary policies by raising interest rates, impacting the **Cost of Capital** and the Value of the company. These scenarios are also tested with the variation of 1 p.p. on the Weighted Average Cost of Capital (WACC).

Sustainability

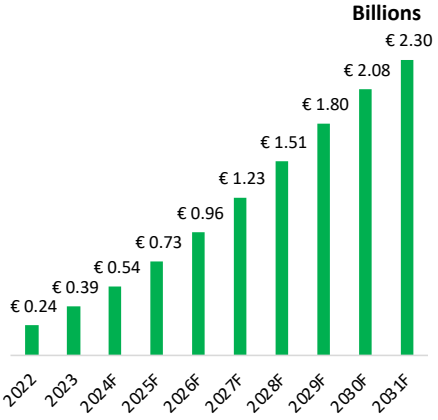
As the company operates in an industry aligned with a sustainable and environmentally conscious framework, adopting **Environmental**, **Social**, and **Governance** policies is part of the strategy. In 2023FY, Greenvolt recovered 90% of the waste and reduced carbon intensity by 21%, avoiding 281,000 tCO^2. By 2022 issued €150M Green Bonds and in 2024FY €100M to date, reflecting the strategy to attract capital from an upward trend of environmental concerns.

Table 1 - Investment Recommendation

Ticker	GVOLT
Level of Risk	Medium
Current Price	€ 8.31
Target Price	€ 10.11
Upside Potential	21.62%
Recommendation	Buy
Takeover Bid	€ 8.30
Upside Potential	21.76%
Appraisal	Undervalued

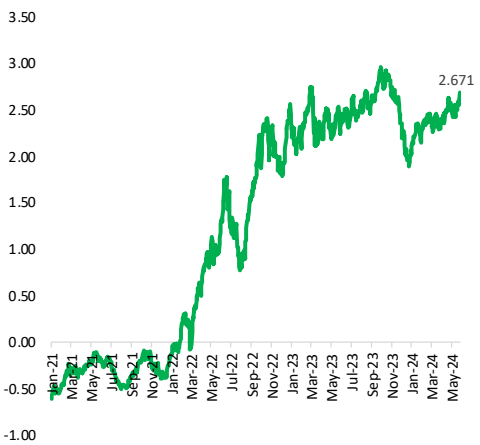
Source: Author Analysis

Figure 1 - Revenues Forecast



Source: Company Data and Author Analysis

Figure 2 - 10Y German Bond Yield



Source: The Wall Street Journal

Business Description

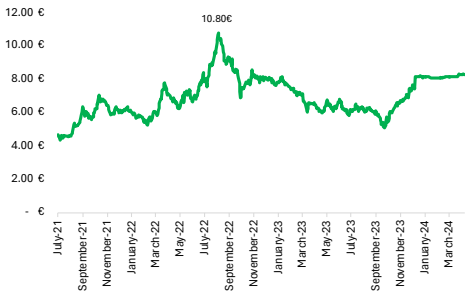
Description of the company

Greenvolt: Energias Renováveis, S.A. is a company based in Portugal and has been listed on the Euronext Lisbon Stock Exchange (ELI:GVOLT) since 2021, with a market capitalization of €1.16B at the date of valuation, operating on the renewable energy industry. The company is specialized: in residual forest **biomass** and, more recently, operates on urban waste biomass; in the development of **utility-scale** solar, wind, and energy storage projects; and in **distributed energy generation**.

The company's origins date back to 1999, named Mortágua Thermoeletric Power Plant. In 2002 incorporated Bioelétrica da Foz, a partnership between Altri and EDP. Always operating in Biomass, it had many acquisitions until Altri totally acquired it in 2018. The company's rebranding occurred in 2021, a year with many acquisitions, namely 51% of Tilbury Power Station (TGP), V-Ridium Power Group, 70% of Power Energy, and 42,19% of Perfecta Energia. In July 2021, Greenvolt capital was listed in the Euronext Lisbon market and joined the PSI-20, having 3,18% weight to the index. In 2022, the company made a joint venture with GMV, that have a solar utility project in Spain; acquired 35% of Max Solar shares, the leading player in solar utilities in Germany; made a joint venture with Infraventus, that have solar utility projects in Portugal; launched Energia Unida, a company specified for the distributed energy business; acquired 50% of Univergy, a Spanish company that installs solar photovoltaic panel to households; made a partnership with the Spanish company Green Mind Ventures, intending to promote the development of solar utility projects; and acquired a 45 MWp Solar photovoltaic park in Romania, and a 90 MW wind farm in Iceland. In 2023, Utility-Scale segment expanded from 13 to 17 geographies with 8.4 GW pipeline, and Distributed Energy is now present in 6 new geographies: Greenvolt Next in Greece, France, and Romania; Ireland by acquiring Enerpower, Italy by Solarelit; and Indonesia by Emerging Solar Indonesia.

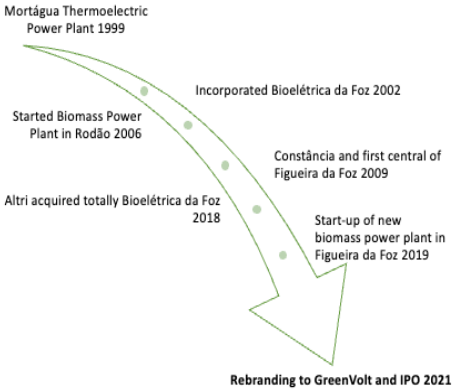
Greenvolt currently has around **714 employees** and is present in **20 different countries**, spread across Europe, Indonesia, Japan, and the United States of America, as shown in **Appendix 1**. It is a market leader in Portugal and a reference in Europe, with the vision "To have a positive impact on the world driven by renewable energy, aimed at sustainability, innovation, fairness and energy independence.".

Figure 3 - Price Performance



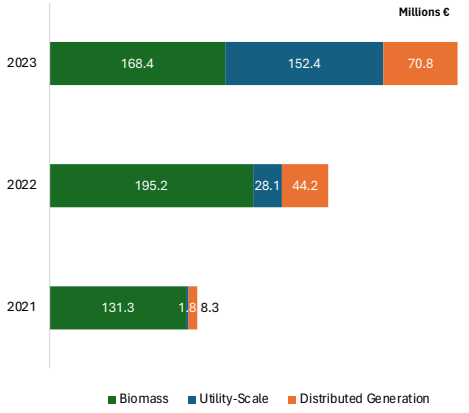
Source: Yahoo Finance

Figure 4 - Greenvolt History



Source: Company Data

Figure 5 - Revenues per Segment



Source: Company Data

Business Sectors

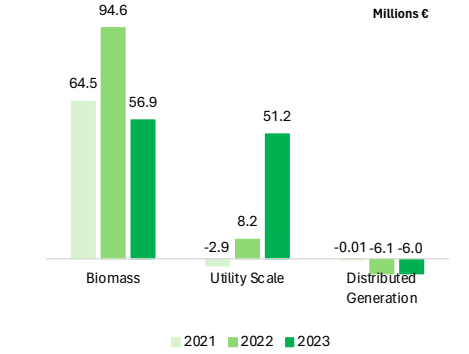
Residual biomass

Biomass is the oldest Greenvolt's business segment, operating in **Portugal with forest residuals**, more than 20 years being the market leader in the country, and in the **United Kingdom with urban waste wood** since the acquisition of TGP. This business has a positive impact to the society by cleaning up forest waste preventing wildfires, a serious problem to Portugal every summer, and by cleaning up urban waste wood avoiding disposals in landfills. This process contributes to the circular economy.

In Portugal has a presence with five centrals in four locations: one in Mortágua, one in Ródão, one in Constância, and two in Figueira da Foz. It can inject 100 Megawatts (MW) and produce 880 Gigawatts per hour (GWh) annually, with an average load factor of 81.1%. To support this activity, the government provided a Feed-in tariff (FiT) for the next 13 years; the average price in 2021 was 120€/MWh.

In the United Kingdom, operations are held by TGP, strategically located near London. It can inject 42 MW and generate 310-335 GWh annually, with an average load factor of 90.7% and availability of 94.5%.

Figure 6 - EBITDA per Segment



Source: Company Data

Due to the declining electricity prices in the UK, where prices declined 53% from 204.3 £/MWh to 95.4 £/MWh; a scheduled outage of approximately one month in TGP; and a longer than expected outage of Mortágua central, Biomass declined its **Revenues** by 14% compared with 2022FY, obtaining **€168.4M in 2023** and an **EBITDA of €56.9M** (-39% vs 2022FY).

The 2023FY events Impacted all operational factors, which were improving over the past years: **Energy Exported** decreased by 3%, from 1,026GWh to **998.3GWh**; **Availability** declined 1.6 p.p. to **89.7%**; and the **Load Factor** decreased from 82.4% to **80.2%**. All these indicators led to a decrease on Revenues and Profitability.

The company discloses that despite the negative results on the past FY, power plants in **Portugal keeps a strong and very stable operational performance**, with a **Load Factor of 81.1%** and **Availability of 92.9%**, comparing with 2022FY, 83.7% and 94.7%, respectively.

This segment depends on contracts with ending periods, with the soonest expiring in 2024 and the latest in 2044.

Solar, wind, and storage energy utility scale

Development, construction, and operation of utility-scale renewable energy projects, focused on photovoltaic, wind and storage projects, is seen as essential for the company's strategic positioning. Nowadays, there is a high potential for growth in different geographies, as projects may be deployed on areas with high solar and wind exposure. Governmental incentives are also important on developing and sustaining these projects, European Commission plans to support the acceleration of renewables to achieve the goal of having 42.5% renewable energy by 2030.

Strategically positions in the early stages of the value chain, focusing on project development, where financial investment requirements are lower and human capital is a differentiator factor to identify potential sites and in licensing processes, leveraging its internal resources and local expertise.

The company has seized an opportunity to expand its presence by acquiring ongoing projects with attractive internal rate of return, especially in light of increased pressure on smaller developers due to higher interest rates.

Greenvolt, through many branches, consolidating its geographic positioning in 17 countries. As Greenvolt Power operates mainly in Europe but has presence in the USA (with the acquisition of Oka Creek Energy Systems), Iceland, and Japan; as SEO in Spain; as Infraventus in Portugal; and as Max Solar in Germany.

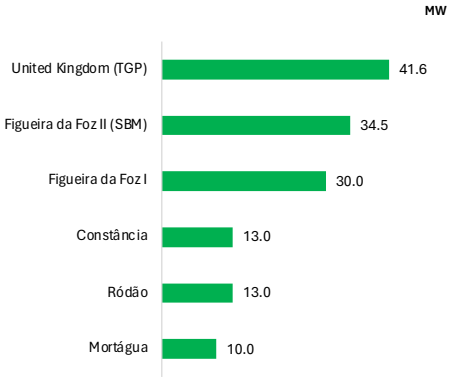
The company has a **pipeline of 8.4 GW** reported on 2023FY, positioning as one of the most prominent players in Europe. Value creation is made by developing the pipeline, by selling projects at the Ready to Build (RtB) or Ready to start Operating (COD), and by selling energy mainly by establishing Power Purchase Agreements. According with the business plan, only 20% to 30% of projects are expected to be kept on the company, making Asset Rotation the main driver of revenues of this segment.

The **revenues** of this business strongly increased from €28.1M in 2022FY to **€152.4M 2023FY**, and **EBITDA** from €8.2M 2022FY to **€51.2M 2023FY**. This reflects massive growth, mainly justified by the sale of more than 200 MW of assets, at RtB and COD, in Portugal and Poland. Utility Scale business is expected to continue the growth trend, positively impacting the company's profitability.

Distributed energy generation

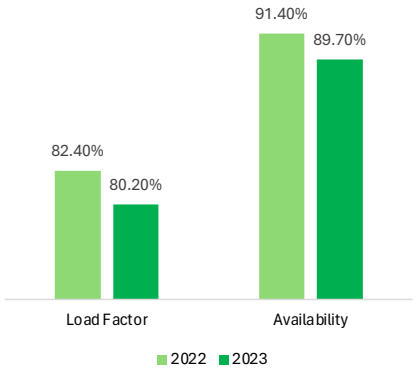
This business is one of the sectors of renewables with the **highest growth potential,** as is expected a 16.50% CAGR until 2030, especially in Portugal and Spain, due to the low self-consumption penetration when comparing Iberia with other countries in Europe and the vast increase in energy prices.

Figure 7 - Biomass Capacity 2023FY



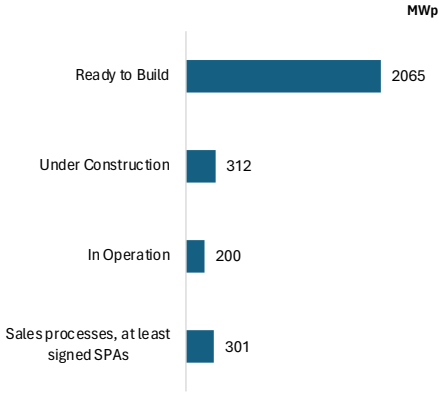
Source: Company Data

Figure 8 - Biomass Operational Factors



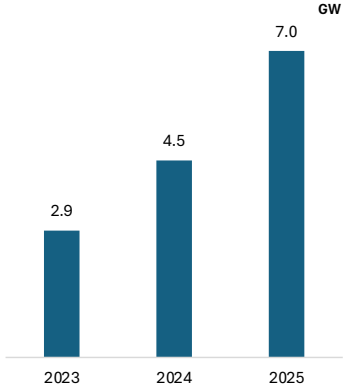
Source: Company Data

Figure 9 - Utility-Scale under Development 2023YE



Source: Company Data

Figure 10 - Utility-Scale Projects at least RtB Expectation



Source: Company Data

Greenvolt expanded, in 2023, its presence in this market from 3 countries to 10. Currently operates with: Greenvolt Next in Portugal, Spain, Greece, France, Poland, Poland, and Romania; Solarelit in Italy; Enerpower in Ireland; Maxsolar in Germany; and Greenvolt Comunidades in Iberian Peninsula.

The company strategically shifted focus to **B2B segment**, which specializes in development, maintenance, and financing of renewable energy projects, where market penetration, synergies with other business areas, and product implementation gives Greenvolt a competitive advantage.

In this segment, there are **three types of products**: the sale of projects to customers with a margin; selling energy, making PPAs; and Energy Sharing, where there are producers that share unused energy with consumers that do not produce.

Greenvolt at 2023FY has a total signed capacity of 134 MWp signed capacity, 89.4 MWp capacity installed, and **216.3 MWp backlog**, which 66.7 MWp are Power Purchase Agreements (PPA) and 149.6 MWp Engineering, procurement, and construction (EPC). All Operational indicators are improving over time, which gives a positive outlook on the profitability of this business for 2024.

Distributed Energy **Revenues** strongly increased from €44.2M in 2022FY to **€70.8M in 2023FY**, and the **EBITDA** is still negative and steady going from -€6.1M in 2022FY to **-€6.0M** in **2023FY**. This negative indicator is explained by costs acceleration on new geographies where this business is located and due to investment delays from political uncertainty in Spain.

With the 216.3 MWp backlog c.45% higher, comparing with 148.9 MWp of 2022FY, the company expects the growth to continue, achieving the breakeven by the end of 2024.

Key Drivers of Profitability

The main drivers of profitability are focused on what drives **revenues** and **costs**. Revenues first depend on the **Capacity of Production**, the **Load Factor** of energy (GWh), and the **Price**, but the revenues occur if there are buyers, and here enters the importance of PPAs and incentives for the consumption of renewable energy.

The main key factors of **revenues** are:

Demand for renewable energy – Worries about climate change and the increase in fossil fuel prices tend to make people prefer clean energy, increasing the demand.

Geographic location – As production depends on the Availability of energy, locations that are more exposed to the sun and wind significantly impact the revenues.

Incentives and tax benefits by the government – The renewable industry is still in development, and to support the achievement of carbon neutrality by 2050 and the independence from fossil, governments create incentives and tax benefits to promote and increase the profitability of companies in this industry.

Power Purchase Agreements (PPAs) – Provide stable and predictable revenues and stabilize the volatility of prices, mitigating risks.

The main key factors of **costs** are:

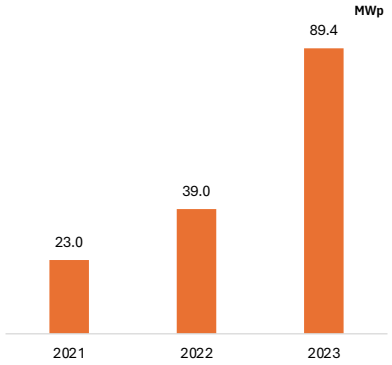
Economy of scale – As the scale of projects increases, the costs per unit decrease, increasing profitability.

Research and Development – The industry is still developing early, and there is a need to invest and be competitive.

Skilled Staff – Representing a cost is also an investment; a skilled workforce may execute projects more efficiently, making the company more profitable.

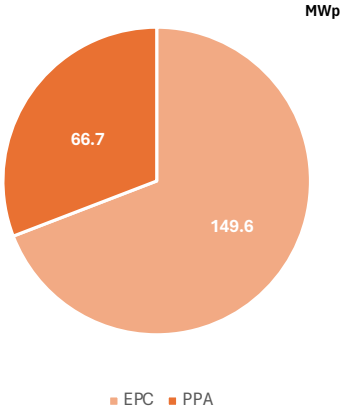
Access to Finance – The company is still in the very beginning and has a high need for funding; this impact negatively affects the profitability of the high financial expenses and the cost of capital.

Figure 11 - DG Capacity Installed



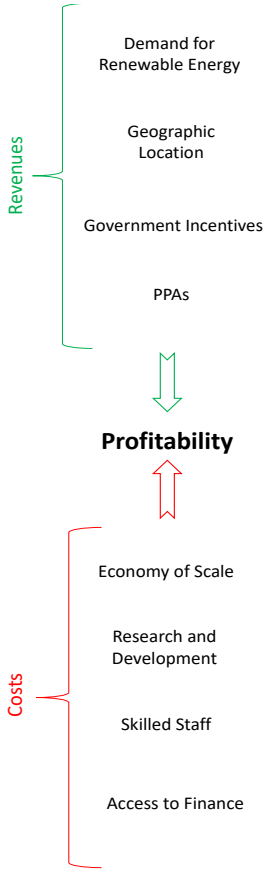
Source: Company Data

Figure 12 - DG Backlog 2023YE



Source: Company Data

Figure 13 - Key Drivers of Profitability



Source: Author Analysis

Greenvolt is **expanding and acquiring strategic projects**, contributing to being present in other geographies, increasing production, improving cost efficiency, and acquiring new technology and a skilled workforce.

Business Strategy

Greenvolt started its business in the Biomass segment but expanded to two other segments, Utility Scale and Distributed Generation, as a form of **diversification** to other energy sources. Now, the company is focused on developing its **business segments** by improving internally and looking for opportunities in the market.

Improve operational efficiency Biomass Centrals

The company is focused on improving operational efficiency, maintaining a high load factor over time, **minimizing costs**, and **improving productivity** and **quality**. For that, digitalization is a critical factor in this process. On one hand, it will increase profitability and, on the other, deliver better services to customers.

Expand Utility Scale Business

This process already started, but expansion is the **critical factor of success** for this company, as acquiring new projects and companies will allow them to **produce more energy**, reach **new geographic locations** and markets, and get **new technology** and **workforces**, contributing to growth and profitability. The scope is to maximize the value of developing a pipeline from Ready to Build (RtB) projects into Commercial Operation Date (COD), as the interest of customers in purchasing projects ready to operate is increasing.

Take advantage of Auto-consumption growth

Distributed Generation has a strong growth potential in many countries in Europe, especially in Portugal and Spain. Greenvolt expects to penetrate potential markets by **acquiring companies** already operating and **raising partnerships** with other companies.

Shareholder Structure

According to company data, there are 139,169,046 shares outstanding, representing a **market cap of c.€1.16B**; **16.38%** of this capital are **free float shares**.

In 2023, Greenvolt had significant shifts in its shareholder structure. The year began with KKR, receiving Senior Unsecured Conditionally Convertible Bonds worth 200 million Euros. This gives KKR the option to convert these bonds into regular shares. In May 2023, Altri decided to step back as shareholder, distributing its remaining shares, about 16.64% of share capital.

On December 21, 2023, Gamma Lux Holdco S.à.r.l., a fund managed by KKR, announced a voluntary **takeover bid on Greenvolt's shares at 8.30 Euros per share**. GVK Omega, SGPS, Unipessoal, Lda, adopted the bid and securing an agreement with main shareholders, that hold 60.86% of the share capital. This deal was sealed on May 31, 2024, after receiving regulatory approvals from all the countries where Greenvolt operates. At the beginning of June, the KKR Fund converted €200M of convertible bonds into regular shares at a market price of €8.3107.

Adding the 18% that Mediobanca holds, being a company owned by the **KKR Fund**, means that it **owns a total of 83.62% of Greenvolt**.

The takeover bid is now mandatory for the remainder of the capital, and as a result Greenvolt will be delisted.

Greenvolt, like other growth companies in the renewables segment, is applying sustainability principles, the distribution will be **prudent regarding dividend policy**. Earnings were **not distributed**, were retained, and put on Legal Reserves.

Figure 14 - Business Strategy

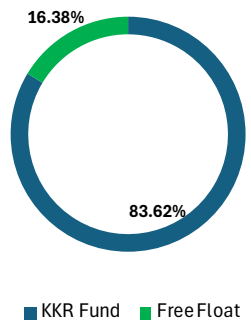
Source: Author Analysis

Table 2 – Top Shareholder Before Takeover Bid

Investor	% of Shares
Rebelo Mendonça Fernandes (Ana)	12.59%
Matos Borges de Oliveira (João Manuel)	11.21%
Vieira de Matos (Domingos José)	10.55%
V-Ridium Europe Sp. Z o.o.	9.57%
dos Santos Fernandes (Paulo Jorge)	9.53%
Matos Borges de Oliveira (Pedro Miguel)	5.41%
Amundi Asset Management, SAS	1.53%
The Vanguard Group, Inc.	1.38%
BlackRock Institutional Trust Company, N.A.	0.98%
IM Gestão de Ativos	0.93%

Source: Refinitiv

Figure 15 – Shareholder Structure After Takeover Bid



Source: Company Data

Consolidated companies such as EDP, Iberdrola and Acciona pay dividends, with payout ratios of 79.52%, 56.61% and 45.60%, respectively.

Management and ESG

Company Management and Governance

Greenvolt has João Manso Neto as the **Chief Executive Officer (CEO)** of the company, former Chairman of the Board of EDP, Gestão de Produção de Energia, S.A, also had the relevant role as CEO of EDP Renováveis S.A.

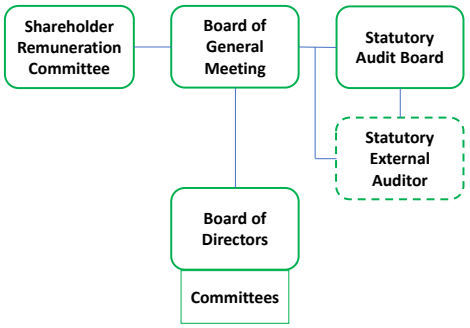
The company adopts a **one-tier governance model** (**Figure 16**). Management responsibilities are attributed to the Board of Directors and the Supervisory Structure. This model is balanced with independent members on the Board of Directors, supporting decisions on the different committees. The board of directors is determined by elections for three-year terms on the General Shareholders Meeting.

Counting with Clementina Barroso as Chairwoman of the board, a team of non-executive, independent, and non-independent directors, as described in **Table 3**.

The company takes decisions through action between the CEO, Board of Directors, Statutory Audit Board, and Statutory External Auditor, represented by Deloitte & Associados SROC, S.A.

Remunerations are the responsibility of the **Remuneration Committee**, elected at the Shareholders General Meeting, and valid for three years. The amounts are based on competence, commitment, and dedication to achieve good performance, as shown in **Appendix 2**.

Figure 16 - Governance Model



Source: Company Data

Environmental, Social and Governance

The rising need to accelerate the generation of energy from renewable sources means that Greenvolt needs to strengthen its commitment to society and the planet. To this end, it is committed to contributing to the **fight against climate change**; contributing to carbon neutrality by **producing energy from infinite sources** such as the sun and the wind; **promoting a fair and democratic energy transition** through economic solutions for families and companies; contributing to the **circular economy** and mitigating the risk of forest fires through the use of biomass.

At the beginning of 2022, Greenvolt announced its sustainability strategy for 2022-2025 centered on four principles: **Planet, People, Responsibility & Ethics, and Financial Sustainability**. The company also supports the Sustainability Development Goals adopted by the **United Nations in 2030, complying with 7 of 13 core goals**: Affordable and Clean Energy, Climate Action, Gender Equality, Decent Work and Economic Growth, Sustainable Cities and Communities, Responsible Consumption and Production, and Life on land.

In the Beginning of June 2024, Morningstar Sustainalytics attributes the company an **ESG Risk Rating** of **19.9** (low risk at the scale), 104 out of 682 on the utility industry and 4807 out of 16215 on Global Universe. According with company data, MSCI attributes an A, S&P Global 45, ISS QualityScore an E:5/S:2, ISS ESG a B, Refinitiv a B-, EthiFinance 76, and participated on Climate Change Programme (CDP) but without score awarded, as shown in **Table 4**.

Table 3 - Board of Directors

Name	Current Position
Clementina Maria Damaso De Jesus Silva Barroso	NE / I / Chairman
Joao Manuel Manso Neto	CEO
Domingos De Matos	NE / NI
Ana De Mendonca	NE / NI
Joao De Oliveira	NE / NI
Pedro De Oliveira	NE / NI
Paulo Fernandes	NE / NI
Antonio De Vasconcelos	NE / I
Maria Joana Dantas Vaz Pais	NE / I
Ana Fernandes	Investor Relations

Legend:
E - Executive
I - Independent
NE - Non Executive
NI - Non-Independent

Source: Company Data

Table 4 - ESG Ratings

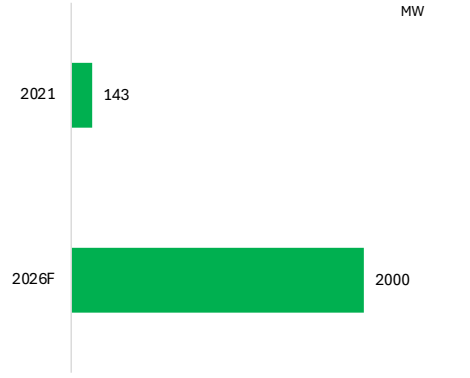
Entity	Score 2022	Score 2023	Scale
Sustainalytics	29.3	20.9	100 to 0
MSCI	A	A	CCC to AAA
S&P Global	32	45	0 to 100
ISS QualityScore		E:5/S:2	10 to 1
ISS ESG	B	B	D- to A+
EthiFinance	64	76	0 to 100
Refinitiv	B-	B	D- to A+
CDP			D- to A

Source: Company Data

Environmental

Sustainable Portfolio – The company aims to increase production of renewable energy and supply of products and services that promote its consumption by third parties. In order to increase its production, it aims to **reach an operational portfolio capacity of**

Figure 17 - Portfolio Capacity 2026



Source: Company Data

2 GW (vs. 143 MW in 2021, In 2023YE Greenvolt added 130 MW of operational capacity.

Low Carbon Value Chain – Greenvolt wants to reduce greenhouse gas emissions in its operations and value chain. To reduce the carbon footprint of its operations, the company aims to reduce its carbon intensity by 45% by 2026, compared to 2021. In 2023 it was reduced by 21% compared to the 2021 base, from 0.040 to 0.032 tCO2/MWh (**Figure 18**). It had a direct impact on carbon emissions (Scope 1 and 2), which fell from 40,388 tCO2 in 2022 to 39,893 in 2023. In addition, emissions were **avoided by 281,000 tCO2**.

Protecting Biodiversity and Preserving Ecosystems – To meet this commitment, in 2022 the company **joined act4Nature Portugal**, which aims to mobilize companies to protect and restore biodiversity. A protocol was also established with the University of Warsaw in 2023 to **reintroduce the use of agricultural land** in a photovoltaic farm. Also in 2023, it carried out an awareness-raising campaign on the strategy for this issue for the entire group. It is worth mentioning that it has managed to **recover 90% of its waste**.

Social

Diversity, Equality and Inclusion – The 2024 Gender Equality Plan for Portugal was developed, which sets out the company's vision of its position in relation to gender equality at all organizational levels, in line with the human resources strategy. By 2023YE the company was counting with **714 employees** in 18 of these geographies, **34.6% of its staff are women,** above the renewables industry average of 32%, according with IRENA, and **25% of women are in Greenvolt's leadership** positions.

Greenvolt has **trained all its employees on the subject of diversity and inclusion**, continuing the e-learning program in order to raise awareness of the policies and codes on ethics and conduct, compliance, and diversity, equality and inclusion.

The company wants to continue investing in this topic by establishing partnerships and programs to promote it, and has already signed the Portuguese Diversity Charter, in 2022.

Talent and Recognition – Greenvolt aims to attract and develop talent, and to this end has developed a strategy to implement human resources policies, such as the **Performance Management Policy and the Benefits Policy**, launched in 2022. In 2023 it launched a **Learning and Development platform** which provides training courses on the renewable energy sector.

A questionnaire has been launched for all employees with the aim of **measuring overall satisfaction and identifying areas for improvement**, in order to define an action plan to improve results.

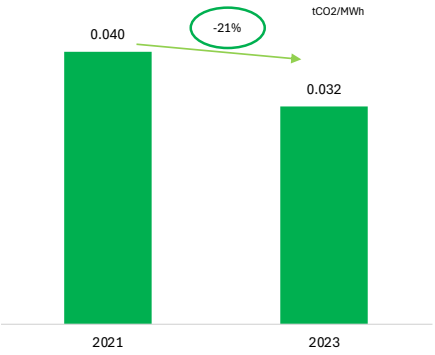
Safety, Health and Well-being – The company wants to promote the safety, health and well-being of its staff and value work-life balance. The company wants to promote the safety, health and well-being of its staff and value work-life balance. To this end, it has provided **1995 Health and Safety Training hours,** and is important to noticed that registered **zero fatalities and zero high-consequence injury accidents**.

It has constantly Improved Its benefits with the aim of providing a balance between personal and professional life, and has already **launched "GreenFriday"**, in which it offers one free Friday afternoon per month. After receiving several suggestions, the **remote working model** was extended to an annual period of **80 working days** (vs. 75 days already established).

Governance

Governance, Ethics and Transparency – Greenvolt is committed to acting responsibly and ethically, which is why in 2022 onwards **ESG metrics were indexed to executive remuneration**, following the approval of the Remuneration Policy. **Ethics and human**

Figure 18 - Carbon Intensity



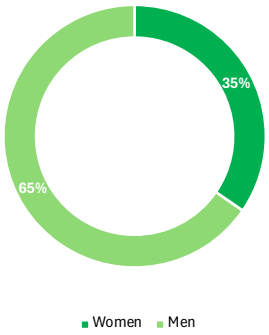
Source: Company Data

Figure 19 - Emissions Avoided 2023

281,000 tCO²

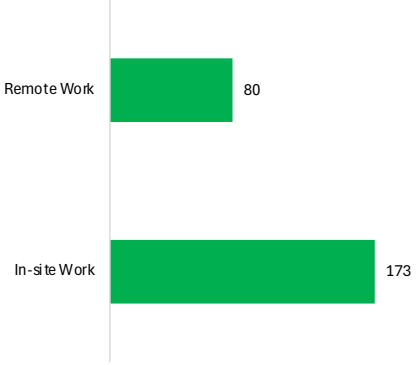
Source: Company Data

Figure 20 - Gender Distribution



Source: Company Data

Figure 21 - Remote Work Model



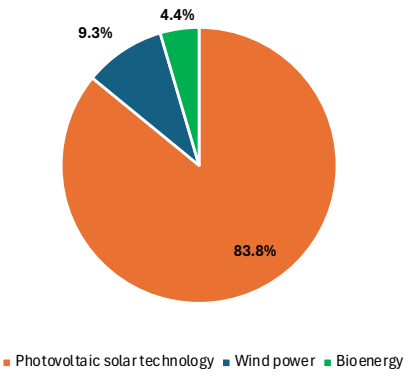
Source: Company Data

rights training was also given to all employees in 2023. The company pays attention to gender equality on its **Board of Directors** and currently has **36% of women** on its composition.

Responsible Supply Chain – Use of **social and environmental criteria when selecting suppliers**, considering respect for human rights and the environment. In 2023, Greenvolt consolidated its assessment procedure in which it verifies the integrity of its suppliers, customers and business partners.

Sustainable Finance – The company wants to attract sustainable financing, with the aim of **financing itself through green bonds** to **carry out green and socially responsible projects**, contributing to the energy transition. In 2022FY issued **€150M Green Bonds** with 5 years maturity and in 2024FY already issued more **€100M Green Bonds**. In 2023FY, **98% of the total CAPEX** was invested in **sustainability**, as shown in **figure 22**.

Figure 22 - CAPEX Investments 2023



Source: Company Data

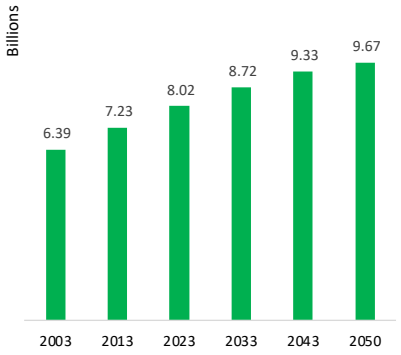
Industry Overview and Competitive Analysis

World Economic Outlook

World Population

According to the United Nations, the world population grew from 2.54 billion in 1951 to 7.68 billion in 2022, representing a **1.65% CAGR**. Since the beginning, there has been a constant growth, and it is expected to reach **9.67B people in 2050**, representing a **3.4% CAGR**. As energy consumption is correlated with the population, the demand for energy increases, putting pressure on energy resources like fossil fuels, becoming scarcer and more expensive, making renewables an attractive solution.

Figure 23 - World Population

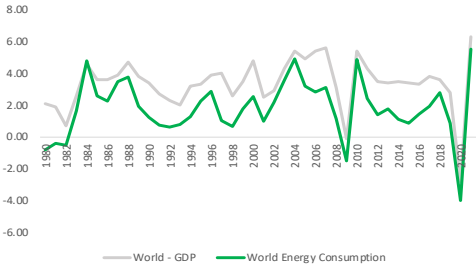


Source: United Nations

Gross Domestic Product

Analyzing the period between 1980 and 2021 YoY, the World GDP has grown an average of 3.37%, while the **European countries' GDP grew by 1.74%**. The average **energy consumption growth was 1.80%** in the same period. Historically, energy consumption follows the GDP moves, with a strong **positive correlation of 0.916**. It is essential to notice that despite the considerable decreases in GDP and Energy consumption in the 2008 and 2020 crises, the figures recovered, surpassing the growth before those events. This suggests that predicting the GDP evolution may forecast energy consumption growth. According to the IMF, the World GDP and **Europe GDP will grow between 2% and 3% until 2028**, indicating a growth in energy consumption.

Figure 24 - GDP and Energy Consumption



Source: IMF and ourworldindata.org

Inflation Rate

Inflation rates impact the prices of raw materials and equipment that pass to customers by increasing energy prices. Historically, from 2000 to 2023 in the Euro Zone, the average inflation rate is 2.20%. In 2022, with the war in Ukraine, the inflation hiked to 8.30% in this region. With the decision to raise interest rates, by the monetary policy of the European Central Bank, the impact of inflation is being minimized, already **reduced in April 2024 to 2.4%**.

According with ECB, inflation should reduce on the next years, it's expected to be **2.4% by 2024, 2.0% by 2025, and 1.9% by 2026**, due to the decrease of costs pressure and ECB's monetary Policy. By Q2 2024, the **long-term inflation rate** (5Y ahead) **is 2.0.**

Table 5 - Historical Inflation Rates

Year	Inflation Rate
2000	2.2
2005	2.2
2009	0.3
2010	1.6
2015	0.2
2019	1.2
2020	0.3
2021	2.6
2022	8.3
2023	5.4
2024 (April)	2.4

Source: European Central Bank

Interest Rates

As a mechanism to control the inflation rate, the ECB uses raising interest rates. It **hiked to 4.50%** by September 2023, and according with last Monetary Policy Decisions, on April 11, 2024, it is **expected to remain high** as long as it takes to control inflation.

High interest rates negatively impact the company as funding costs become higher and projects less profitable, reducing the return on equity. In terms of valuation, the present values are lower, reducing the enterprise value.

Renewable Energy Demand

The increase in fossil fuel prices and, consequently, the cost of energy generation made the energy demand in the European Union fall by 3.5% in 2022. However, it is expected to **recover and grow 1.4% on average from 2023 to 2025**, according to IEA.

Global energy demand is expected to grow 3.2%, on average, from 2023 to 2025 **(figure 26)**, resulting in approximately an increase of 2,500 TWh and reaching 29,281 TWh. By 2025, Asia will demand half of the world's electricity, and China will demand one-third.

The **global growth in energy demand will be led by Renewables**, which will contribute to 2474.5 TWh. Combining Renewables and Nuclear, these sources will contribute to 90% of the change in the demand until 2025, as shown in the **figure 27**.

Renewable Energy Supply

Unlike fossil fuels, the renewable energy supply does not depend on consumed sources that become scarce. It depends on the availability of sources, i.e., sun, wind, and sea exposure on the utilities or the quantity of residuals on biomass. On biomass, the replacement of residuals is higher than consumption, not becoming scarce.

According to IEA data, in 2019, oil, coal, and gas were still ahead of the global energy supply, representing 80.9% of the total supply. Renewables are increasing its growth, are expected to increase more than all other sources combined, with **more than 9% annualized growth from 2023 to 2025**, reaching more than one-third of the world's generation power share.

This growth is only possible with **government support stakeholders with tax benefits and subsidies** to companies and **reduced renewable energy production costs**.

Renewables Industry Overview

Industry Overview

In 2021, before Russia invaded Ukraine, the renewable's expected growth was 45% until 2026. Due to the dependence on Russian fossil fuels, especially in Europe, made those prices increase, making renewable energy cheaper and becoming an alternative, increasing the renewables industry growth at a faster pace.

From **2022 to 2027**, the **global renewable capacity** is expected to **grow by 2400 GW,** corresponding to 75%, in comparison, it corresponds to the total power capacity of China.

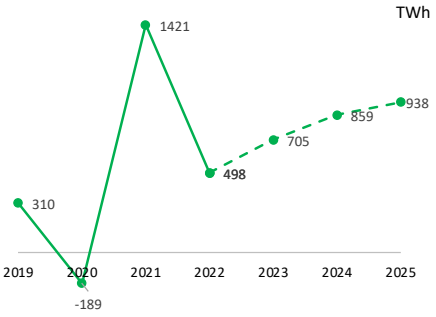
According to IEA, by 2025, renewables are expected to surpass coal, becoming the largest source of global electricity generation, and **reach 35% of the share of the energy generation mix**. Energy production from **Wind and Solar** sources is expected to double, providing **20% of total energy power in 2027**. By that time, energy provided by solar utilities is expected to become the most significant source in the world, surpassing coal. Regarding wind utilities, the capacity is expected to double, and offshore projects will contribute to one-fifth of the growth.

In biomass, the traditional method uses organic material from plants, and during the combustion of energy production, releases carbon into the atmosphere. Modern bioenergy presents nearly zero emissions and is expected to replace this process, contributing to the Net Zero emissions by 2050. By **2030**, **bioenergy is expected to increase by 20%**, compared with 2021, modern bioenergy will drive this process as the traditional biomass method is expected to fall to zero.

Figure 25 - Interest Rates Evolution

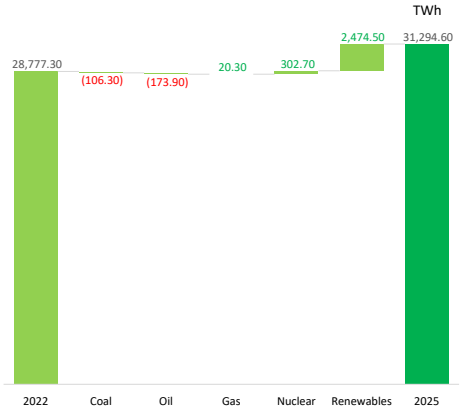
Source: European Central Bank

Figure 26 - Changes in Energy Demand



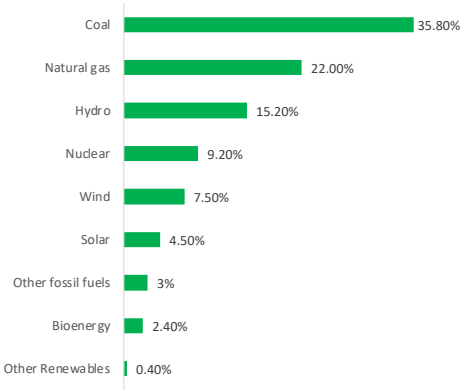
Source: IEA

Figure 27 - Changes in Energy Generation



Source: IEA

Figure 28 - World Energy Production 2023



Source: Statista

Renewables Industry Structure

The renewable energy industry includes stages from production to delivery to consumption. Players have intervention in Equipment Manufacturing, Energy Generation, Project Development, Energy Storage, Transmission and Distribution, and Research and Development.

Market structure is defined as **Oligopoly**, as products are homogenous and require high investment in utilities. It is difficult to enter and exit the market, but it is still fragmented in some companies, yet to be consolidated.

The industry is in the **growth stage**, as sales have been increasing, costs are reducing, and companies are already making profits.

Climate Change

Since 1800, human activities have been driven by climate change, by burning fossil fuels to produce energy. According to the World Bank, **CO^2 emissions increased at a 1.77% CAGR from 1990 to 2019** (**figure 31**). These emissions negatively impact climate change: temperatures rising, drought, wildfires, rainfall patterns shifting, and glaciers melting, impacting the global mean sea level.

To minimize these impacts on climate change, the goal was to limit global warming to 1.5 degrees Celsius above pre-industrial levels with the Paris Agreement in December 2015 by 196 at the United Nations Climate Change Conference (COP21). According to IRENA, achieving the 1.5 ºC scenario **requires a total investment of USD 150 trillion from 2023 to 2050** on the reduction of CO^2 emissions. To keep this goal in sight, according to McKinsey, the transformation of the global energy system must be quicker than expected, accelerating the switch from fossil fuels through improving efficiency, electrification, and new fuels.

It is necessary to **increase the renewables share** on the energy mix consumption from 19% in 2019 to 38% in 2030. To force the achievement of that goal, some countries are joining the Net Zero by 2050, which is a pledge to achieve **zero carbon emissions by 2050**, switching from fossil fuels to renewable energy sources.

New policies and regulations are being implemented to mitigate the energy crisis and achieve the 2050 goal, as in Europe, the REPowerEU, the Inflation Reform Act (IRA) in the USA, the 14th Five-Year Plan in China, and market reforms.

Renewables Future Trends

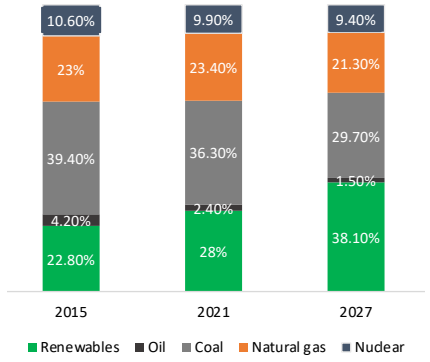
The switch from power generated from fossil fuels to clean power is the most significant contributor, followed by the electrification of transport, industrial processes, buildings, and heating.

As ESG standards compliance becomes increasingly essential for regulatory reasons and investment attractiveness, and renewable energy is becoming more cost-efficient, **large companies are shifting** their energy mix toward more **sustainable options**. This bet on renewable energy demonstrates that environmentally friendly energy sources are the **best long-term solution** and that their widespread adoption is only a matter of time.

According to Reuters, **trends for renewable energy** for the following years point to the increased role of **Artificial Intelligence**, **Energy Storage**, and **Technology Improvements**.

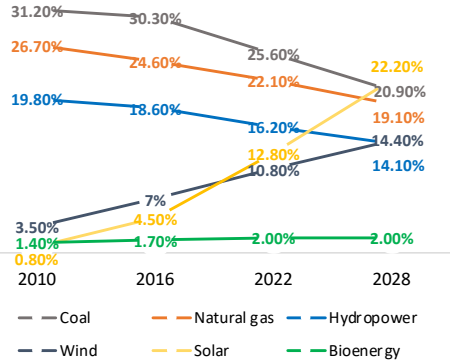
The **Solar Energy** market is growing exponentially, taking ten years from 100 GW capacity to 1 TW in 2022, and is expected **to reach 2.3 TW in 2025** (**figure 34**). It is the fastest-growing renewable energy. China is expected to keep its leadership in the

Figure 29 - Energy Generation Mix Evolution



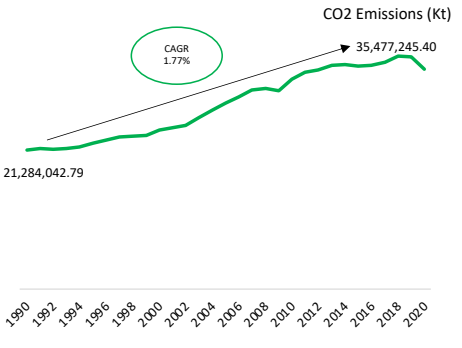
Source: IEA

Figure 30 - Power Capacity by Source



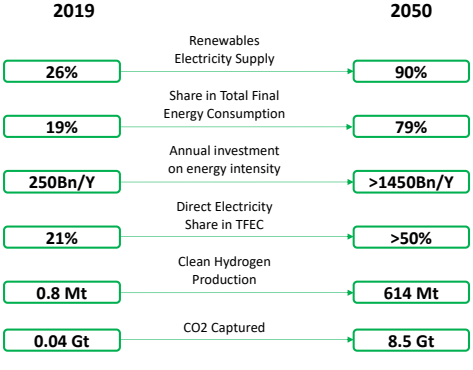
Source: IEA

Figure 31 - Historical Carbon Emissions



Source: World Bank

Figure 32 - Goals to 1.5ºC 2050



Source: IRENA

market, followed by the United States. In Europe, solar energy increased 47% from 41.1 GW installed capacity in 2022 to 56 GW in 2023; Germany, Spain, Italy, Poland and the Netherlands were the main contributors.

The **Wind Energy** market is expected to grow significantly, especially offshore. There are investments in vast offshore wind farms, increasing capacity, and improving technology such as larger and more efficient turbines that drive bigger energy production. Locations with solid exposure to wind, especially coastal areas, can improve on this sector. According to GWEC, by the end of 2023, **global offshore** wind capacity, in operation, **totalized 75 GW**, representing a 24% increase comparing with 2022. To reach the Net Zero Emissions by 2050, this sector is expected to have an average annual generation growth of 17%.

Bioenergy is the most significant contributor to global renewable energy, comprising 55% of renewable energy sources and 6% of the world's energy supply. To achieve the Net Zero Emissions by 2050, it is necessary to replace fossil fuels by 2030, increasing 8% annually until 2030.

Corporate PPAs

Power Purchase Agreements (PPAs) are a **crucial driver** for renewable energy adoption, directly allowing companies to purchase renewable energy from generators through a long-term contract. It ensures a stable and **cost-efficient source** of clean energy, **reducing carbon footprint**. It benefits the growth of the renewable energy industry, incentivizes the development of projects, and supports green energy grids. A company that provides energy allows it to have predictable and stable revenues. According with BloombergNEF, Global Solar and Wind **PPAs reached a record high in 2023 of 46 GW**, driven by a strong growth in Europe from 8.8 GW in 2022 to 15.4 GW in 2023 (**figure 35**). The USA is the largest PPA market, with 20.6 GW in 2023, despite a 16% drop compared to 2022.

M&A Trends

Despite the strong growth trend in renewables and global commitments to the energy transition, in 2023 there was a decrease in M&A Activity. According to GlobalData**, M&A deals value fell from $771B in 2022 to $559B in 2023** (**figure 36**), a drop seen in all renewable segments, with the exception of geothermal energy. In Europe, the number of deals fell from 2,125 in 2022 to 1,659 in 2023. This could be a sign that companies may be less interested in consolidating renewable energy assets. Renewables continues to grow in terms of capacity, and technology advancements, indicating that it will continue the growth trend. As competition in the renewables energy industry intensifies and the industry becomes more profitable, acquisitions become more strategic in capturing value from M&A operations, so this activity is expected to recover and grow in the following years.

Demand Drivers

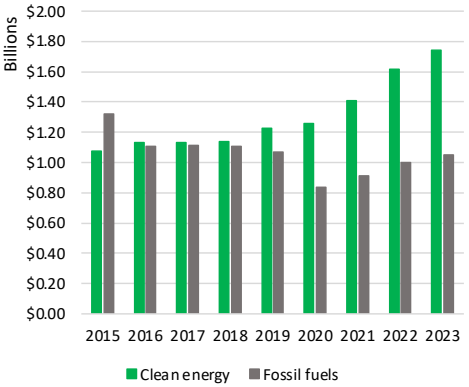
Environmental Awareness

With climate change, biodiversity loss, air and water pollution, plastic pollution, and deforestation, **people are concerned about the well-being of the planet** and its ecosystems, which consequently has an impact on human lives, it is perceived as an urgent issue to mitigate. For that, renewable energy plays a vital role in achieving **carbon neutrality**.

Renewable Energy Price Decline

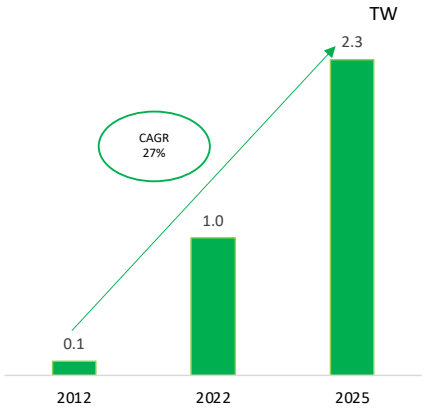
As **production costs decline**, renewable energy **prices are expected to follow the trend**, supported by technology development and economies of scale of businesses.

Figure 33 - Clean Energy vs Fossil Fuels Investment



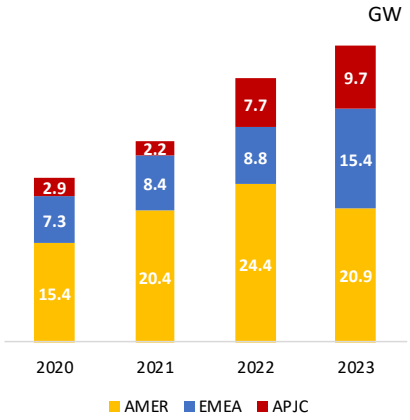
Source: IEA

Figure 34 - Solar Energy Capacity Evolution



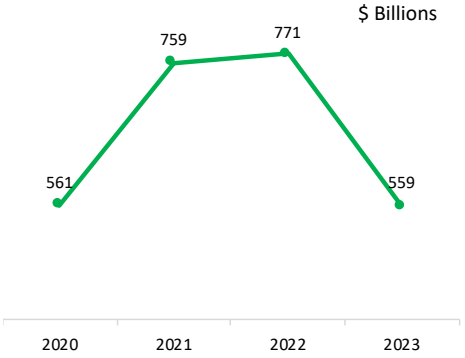
Source: solarpowereurope.org

Figure 35 - Corporate PPA by Region



Source: BNEF

Figure 36 - M&A Deal Value



Source: GlobalData

According to IRENA, **LCOE of renewables had sharply declined** in the past, continuing the trend; from 2010 to 2022, Solar Photovoltaic, Onshore Wind, and Bioenergy costs declined 89%, 69%, and 26%, respectively (**figure 37**), while **Coal prices kept almost the same price**. Unlike fossil fuels, which need fuel to produce energy, renewable energy only depends on the cost of power plants, operational costs, and technology. It enables renewables to be more price-competitive than fossil fuels.

Figure 37 - LCOE Evolution

Source: IRENA

Supply Drivers

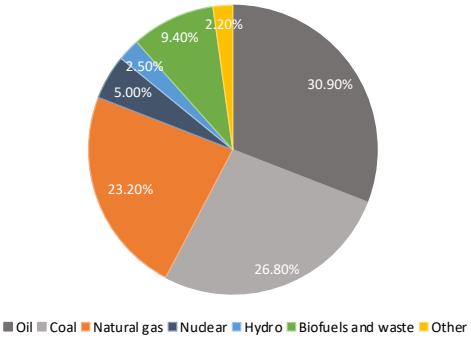
Availability and Capacity

The renewables industry does not depend on other products to produce energy, as in other industries, there are abundant resources such as sunlight, hydro, wind, and geothermal energy. The factors to consider for production are the availability of these natural resources and the capacity to produce energy. That capacity is in relation to industry investments.

Technology Development

Another factor to consider is efficiency, it depends on the development of technology, such as more advanced wind turbines, efficient solar panels, and better storage solutions. For that, companies in the industry must invest in Research and Development to be more cost-efficient and competitive in the market.

Figure 38 - Total Energy Supply 2019



Source: IEA

Competitive Positioning

Peer Identification

Comparing the company with Peers is valuable to benchmark the performance with the industry. To identify Peers, the **Sum of Absolute Rank Difference (SARD)** method was performed (**Appendix 4**), selecting the Top 6 companies with more similarities with Greenvolt, considering Liquidity, Solvency, and Profitability from public listed companies operating in the renewables industry. Greenvolt's Peers group are **EDP, Vestas Wind Systems, Acciona, Grenergy Renovables, and Corporación Acciona Energías Renovables**, with respective ranks (**table 6**).

Table 6 - Peers Identification

Peer Company	SARD Rank
EDP	1
Vestas Wind Systems	2
Acciona	3
Grenergy Renovables	4
Iberdrola	5
Corporación Acciona Energías Renovables	6

Source: Author Analysis

Porter's 5 Forces

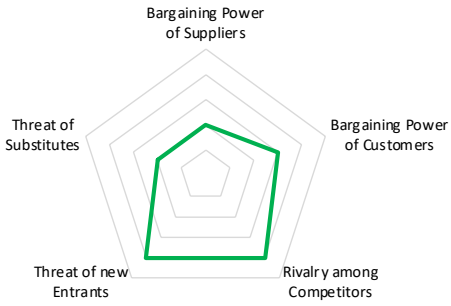
Bargaining Power of Suppliers – Low (2) – The industry is growing, and the number of suppliers of equipment to produce energy is increasing and competing with each other with innovation and technology to get market share, reducing the power of an individual supplier.

Bargaining Power of Customers – Medium (3) – With the increase of renewable energy providers, big customers like corporates and governments have some power as customers, they can impact the PPAs when setting prices. Companies need to comply with ESG requirements, using renewable energy as a strategy, and secure contracts.

Rivalry among competitors – Medium/High (4) – Renewables are becoming more competitive as other players enter the market trying to get more market share. Companies also compete on technological advances to be more profitable and leverage growth.

Threat of new entrants – Medium/High (4) – As barriers to entry are low since there are incentives to make this sector grow, the threat of new players in the industry is relatively high. Governments support and facilitate new companies' entrance with incentives and subsidies. On the other hand, companies established on the market benefit from economies of scale, know-how, and internal technology that can limit potential new threats.

Figure 39 - Porter's 5 Forces



Source: Author Analysis

Threat of Substitutes – Medium/Low (2) – Fossil fuels are still the most widely used resource but are limited and severely impact the environment. Although renewables are growing worldwide, there is still the possibility (even if not very likely) that fossil fuels gain some ground if prices become lower than renewables.

SWOT Analysis

Table 7 – SWOT Analysis

Strengths	Weaknesses
○ Biomass segment with high profitability ○ Strong presence in Europe, and expanding to other continents ○ Diverse and skilled workforce, highly skilled workforce spread worldwide and good gender balance ○ Strong liquidity to invest in new projects ○ Good ESG Score and sustainability metrics	○ Small balance sheet size, brings uncertainty regarding investment source and debt capacity ○ Significant debt level ○ Majority of revenues levered on biomass, brings risk to the business ○ Profitability dependent on regulatory environment
Opportunities	**Threats**
○ Fossil fuel price increase ○ Reduction of renewable energy costs ○ People's environmental awareness ○ Investing trend on green bonds and companies ○ Government support renewable energy companies, with subsidies to accelerate energy transaction	○ Constant R&D investment requirements, to improve efficiency ○ Regulatory and policy changes, tax exemptions and subsidies may be reduced ○ Emerging of new energy solutions as nuclear and green hydrogen ○ Market competition, players increase vying for market share

Source: Author Analysis

PESTEL Analysis

PESTEL Analysis is performed and presented on **Appendix 3**.

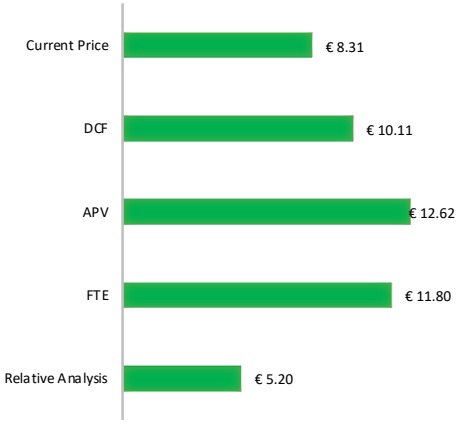
Investment Summary

The base case investment recommendation is to **Buy**, with a 2024YE price target of €10.11 per share, representing an upside potential of 21.62% against the closing price on May 31, 2024, of 8.31€ per share, and +21.76% against **KKR takeover bid** of €8.30 per share, suggesting that the bid is **Undervalued**. Despite the company belongs to utility industry, is considered **Medium Risk**, as it is under renewables sector, which is in the growth stage, and the company recently entered into the stock market, that brings risks and uncertainties.

Greenvolt operates predominantly in Portugal and Europe, but is also present internationally, in the renewable industry sector, through Biomass, Solar and Wind Utility-Scale, and Distributed Energy segments. Contributes to a more sustainable world, having the mission to benefit society, shareholders and employees through creating sustainable value from sun, wind and forests.

On the past fiscal years, the company has seen a strong growth on its revenues, 57.05% by 2021 and 71.22% by 2022, foreseeing an acceleration on growth, but 2023FY was challenging with the decrease of 14.68% on Biomass due to the declining energy prices on the UK, scheduled outage on TGP, and longer than expected outage on Mortágua Central. Despite these issues, **2023FY revenues increased by 59.11%,** by the strong

Figure 40 - Valuations Target Price



Source: Author Analysis

contribution of 509.98% revenues growth of Utility-scale and 195.13% of Distributed Generation, that indicates the strong growth potential of these business segments for the following years. The increase of Depreciations and Amortizations, a consequence of investments on utility-scale segment, and the contribution of Financial Expenses led to a reduction on results.

Historically, revenues have a **growth above the industry**. As it is still at an early stage it is expected keep growing, **meeting the industry growth in the long term**. To achieve this, Greenvolt needs to **raise capital** to make its investments as Capital Expenditures. As part of its strategy, it intends to diversify its sources of funding, including types of debt. In addition to issuing Green Bonds and Bank Loans, at the beginning of 2023 the company issued €200M Convertible Bonds to KKR that were converted into ordinary shares at the beginning of June 2024.

The shareholder structure had a huge change on May 31, 2024, when the **Takeover Bid** was executed by GVK Omega, SGPS, Unipessoal, Lda, managed by the KKR fund, for €8.30 a share. **KKR currently holds 83.62%** of the capital and is expected to acquire all the shares traded on the stock exchange, delisting the company.

Valuation Methods

For valuation purposes were considered 4 valuation methods, **Discounted Cash Flow Model** (DCF), Flow to Equity (FTE), Adjusted Present Value (APV), and Relative Valuation through the multiple approach. The principal method chosen was DCF, that integrate future expectations of FCFF discounted by the WACC, leading to a 2024YE target price of €10.11 per share. As the valuation is prospective and is not retrospective, and **Greenvolt's value is based on its growth potential**, DCF, APV, and FTE methods are more relevant than Relative Valuation. The last mentioned is used as a reference to check the company's current situation compared with its peers.

Investment Risks

The robustness of the valuation is tested with sensitive analysis, scenario analysis, and Monte Carlo Simulation. Most results are between Strong Buy and Sell investment recommendation. If the cost of capital increases and the growth rate slows leads to Sell, and if cost of capital decrease and growth rate accelerate it suggests a Strong Buy recommendation. A Black Swan scenario is considered as if all pessimistic scenario happens, it leads to a Sell.

A Risk Matrix is also considered, assessing **Operating, Political and Regulatory, Market, and Social and Environmental Risks** that may affect Greenvolt's industry and business.

Table 8 - Greenvolt Financial Figures

(Amounts Expressed in Million Euros)

Financial Figures	2022	2023	2024F	2031F
Revenues	242.28	385.49	514.49	1,889.37
EBIT	62.53	44.18	95.83	378.36
Net Income	25.49	(3.48)	14.50	156.24
CAPEX	227.96	441.21	414.77	359.83
D&A	42.04	53.62	69.68	214.46
FCFF	(183.41)	(387.17)	(270.03)	141.62
EPS (Euros)	0.18	(0.02)	0.10	1.12

Source: Company Data and Author Analysis

Figure 41 - Recommendation/Appraisal

Recommendation	Bid Appraisal	Upside/Downside
STRONG BUY	Highly Undervalued	> 30%
BUY	Undervalued	> 15% and <= 30%
HOLD/NEUTRAL	Fairly Valued	> 5% and <= 15%
REDUCE	Overvalued	> - 5% and <= 5%
SELL	Highly Overvalued	<= -5%

Target Price	€	10.11
Takover Bid Price	€	8.30
Upside/Downside		21.76%
Current Price	€	8.31
Upside/Downside		21.62%

Source: Author Analysis

Table 9 - Risks Summary

Operational Risks
Limited availability of feedstocks to Biomass
Intermittency of Solar energy
Intermittency of Wind energy
Development of another energy sources
Technological evolution may not perform as expected
Political and Regulatory Risks
Changes in Political Support and tax exemptions
Market Risks
Decrease in fossil fuel prices
Oils and Gas purchase Renewable Businesses
Financing Costs Increase
Social and Environmental Risks
Negative environmental impacts

Source: Author Analysis

Valuation

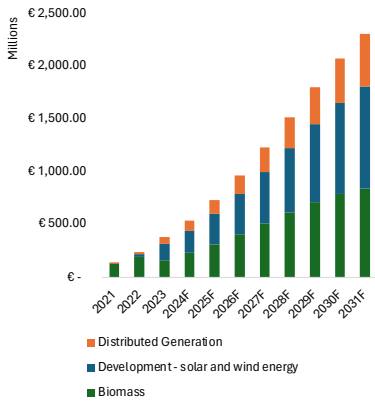
The Greenvolt's valuation to reach the price target was performed through the Discounted Cash Flow Model (DCF), providing a solid foundation based on the expected company growth meeting the industry growth. In addition, to offer a comprehensive perspective was explored other different models were used, such as Adjusted Present Value (APV), Flow to Equity (FTE), and Relative Valuation.

Main Assumptions

Free Cash Flow to the Firm

The majority of forecasted figures is depending on the growth of sales. **Sales growth** for 2024 is depending on the meeting from the 40% annual growth rate expectation, disclosed on the Annual Report 2021, with the industry annual growth. As sales forecast

Figure 42 - Revenues Forecast by Segment



Source: Company Data and Author Analysis

assumption, each segment starts with a **growth of 40% in 2024** and decrease each year meeting the industry average annual growth for each segment. **Biomass** market growth expectation is **6.03%**, **Wind and Solar Utility-Scale is 12.89%** and **Distributed Generation is 16.50% (Appendix 5)**.

The **forecast period** is from 2024 to 2031, based on the time that a comparable Portuguese company, EDP Renováveis, took to stabilize its revenues, which is 10 years **(Appendix 6)**. Given that Greenvolt had its IPO in 2021, by assumption was considered the valuation until 2031.

CAPEX and Depreciation & Amortization

The evolution of the Capital Expenditures (CAPEX) results from the necessity of the company's growth, aligning with industry. The drivers considered to this figure was Property, Plant and Equipment (PP&E), Intangible Assets and its respective Depreciations and Amortizations. To forecast **PP&E** was **converged** the 2023 relation PP&E/Revenues of 188% with the **Peers relation of 175.49% by 2031**. **Intangible Assets** were forecasted on a similar assumption, the 2023 relation Intangible Assets/Revenues of 84.21% **converging** with **Peers relation of 18.46%** at the end of the forecast period.

Depreciation and Amortization are based on the historical average of 2021, 2022 and 2023 on PP&E, Rights of Use and Intangible Assets, being 5.14%.

Weighted Average Cost of Capital

To estimate WACC, it is necessary to estimate Cost of Equity (Ke), Cost of Debt (Kd), and debt and equity weights, considering taxation on debt. Cost of Equity. Cost of Equity was calculated through CAPM, with the 10Y German Bond Yield as risk-free rate of 2.67%, the Beta with Pure-Play Method of 0.61 **(Appendix 23)**, and the Portuguese equity risk premium of 6.35% from Damodaran Research, resulting on a **Ke of 6.57% (Appendix 22)**. **Cost of Debt of 4.63%** resulted from the weighted average of the Yield to Maturity of Greenvolt's public traded bonds, GREEN262510NOV28, GREEN 5,2% 18NOV27, GREEN 4,65%14FEB29 **(Appendix 25)**. As the company is not consolidated and does not disclose the long-term targeted capital structure, the Equity and Debt Weights was estimated based on Peers Average Weights of **45% Equity** weight and **55% Debt** weight (**Appendix 28)**. Based on mentioned assumptions, Greenvolt's estimated **WACC is 4.96% (table 10)**.

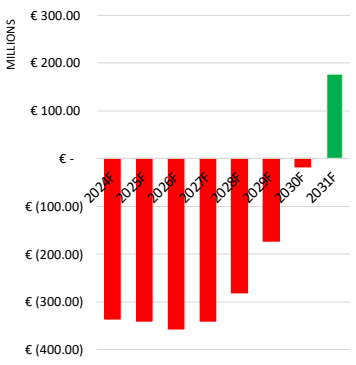
Terminal Growth Rate

This figure is essential to compute the terminal value of the company, in this case, it was performed in the year 2031. The **Real GDP Growth Approach** in Europe **(Figure 45)** was performed to determine the Growth Rate, considering the period from 2024 to 2027, resulting in a **1.74% Growth Rate**.

Discounted Cash Flow Model

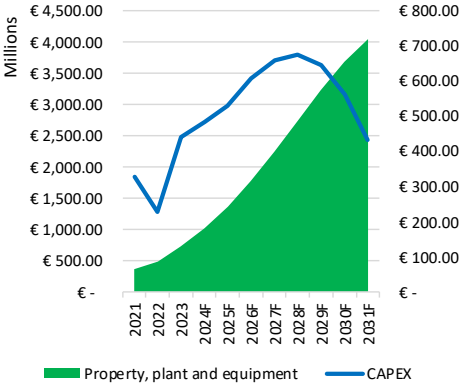
The DCF Model assesses future cash flows and growth dynamics within the renewable energy industry. It enables the estimation of the company's fair value and offers flexibility to test various scenarios to consider the decision-making. This is the main valuation method because incorporates Greenvolt's expected growth. By estimating the FCFF from 2024 to 2031 it was possible to estimate the **Enterprise Value of €2.77B**. By adding the estimated 2024 cash of €392M, subtracting the estimated 2024 Debt and Non-Controlling Interests of €1.64B and €116M, respectively, was reached **the Equity Value of €1.41B**. By dividing for the number of shares outstanding, 139,169,046, the **intrinsic value per share for 2024YE is €10.11**, suggesting a Buy as investment recommendation **(Appendix 29)**.

Figure 43 - FCFF Forecast



Source: Author Analysis

Figure 44 - PP&E and CAPEX Evolution



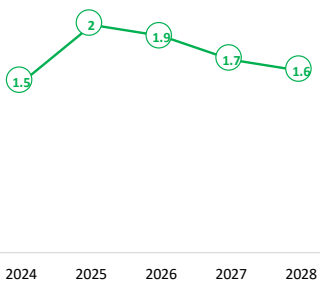
Source: Company Data and Author Analysis

Table 10 - WACC Parameters

WACC	
Risk Free Rate	2.67%
Beta	0.61
Equity Risk Premium	6.35%
Cost of Equity	**6.57%**
GREEN262510NOV28 YTM	3.83%
GREEN 5,2% 18NOV27 YTM	5.03%
GREEN 4,65%14FEB29 YTM	4.79%
Cost of Debt	**4.63%**
E/(E+D)	45%
D/(E+D)	55%
Marginal Tax Rate Portugal	21%
WACC	**4.96%**

Source: Author Analysis

Figure 45 - Terminal Growth Rate Forecast



Source: IMF

Other Methods

Adjusted Present Value

APV is performed to assess the company value considering the value of the FCFF and Interest tax shield discounted with unlevered WACC of 5.50%. This method takes into account the benefits of raising debt, such as interest rate shield, which is significant for Greenvolt due to raising debt to finance its growth. As result, the Adjusted Present Value is €3.12B, Equity Value is €1.64B after considering net debt and non-controlling interests. Results on a Price Target of **€12.62 per share**, leading to a Strong Buy **(Appendix 30)**.

Flow to Equity

The Flow to Equity is a valuation approach that focuses on the intrinsic value of the company's Equity, adjusting the FCFF to the Free Cash Flow to the Equity, considering interest expenses (after taxes) and new Net Debt, discounting with the Cost of Equity of 6.57%. This method measures how much cash generates to shareholders after all expenses, reinvestments, and debt are paid. Given the high financing by debt in order to grow and high interest expenses, the estimated Equity Value is €1.64B, leading to **€11.80 per share** as Price Target, which is a Strong Buy Recommendation **(Appendix 31)**.

Relative Valuation

This valuation model provides a different perspective on the company value by comparing the company with Peers that resulted from the **SARD approach**. Were selected the top 6 companies based on business and financial similarities with Greenvolt. To reach the Price Range and the Price Target was performed as Multiples the Price/Earnings, Price/Sales, Price/Book Value of Equity, EV/Sales, EV/EBIT, and EV/EBITDA (**figure 46**). For valuation purposes Price/Earnings multiple was not considered, as Greenvolt had a negative Net Profit at 2023FY.

The price target reached is **€5.20 per share**, in the range of 10.55€ to 2.12€, which gives the opposite investment recommendation than the previous methods presented, as a Sell **(Appendix 32)**.

Comparison with consensus

According to Refinitiv data, the consensus of analysts gives the **current price target of 8.69€** (**table 12**), with 1 giving a Strong Buy, 3 a Buy, 2 a Hold, and 1 a Strong Sell investment recommendation**.** Considering this, the method performed closest to the consensus is the DCF Model, it might be justified by the fact of FCFF has incorporated the growth expectations of Greenvolt's business lines, as it is in the very early stage, and Multiples Analysis makes the comparison of the current situation of the company compared with peers, giving an opposite investment recommendation. It is possible to notice diverse investment recommendations, some of them opposite, this is result of the current growth stage of Greenvolt and the uncertainty how does the company will grow and perform.

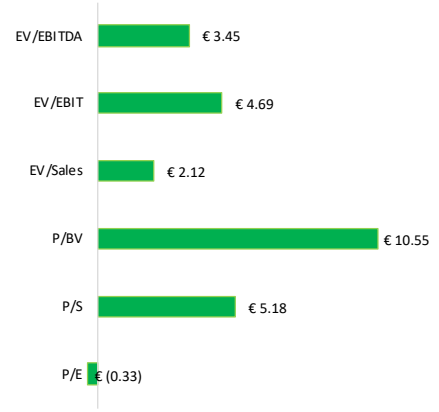
Table 11 - DCF Output

In Millions

Discounted Cash Flow Model		
FCFF PV (2024YE)	€	(1,197.30)
Terminal Value	€	5,565.96
Terminal Value PV (2024YE)	€	3,967.11
Enterprise Value	€	2,769.81
Debt	€	1,639.80
Cash	€	392.45
Non Controlling Interests	€	115.99
Equity Value	€	1,406.48
Number of Shares Outstanding		139.17
Equity Value per Share (2024)	**€**	**10.11**

Source: Author Analysis

Figure 46 - Relative Valuation Output



Source: Author Analysis

Table 12 - Price Target Consensus

Contributor	Target Price (€)
ALANTRA EQUITIES	8.32
ODDO BHF	10.00
BNP PARIBAS EXANE	8.30
BANCO SANTANDER	8.70
CAIXABANK BPI	8.30
Undisclosed	8.00
JB CAPITAL	Undisclosed
ESN/CAIXA BANCO DE INVESTIMENTO (PORTUGAL)	Undisclosed
Mean	**8.69**

Source: Refinitiv

Financial Analysis

Expanding Operations

Greenvolt has been **investing in assets in order to increase its production capacity**, having increased PP&E with a CAGR of 40% between 2021 and 2023. With its revenue growth converging with the industry's average growth, **CAPEX investment of €5.27B** is expected, reflecting a 16% CAGR in Total non-current assets. The performance of the assets can be assessed through the activity and profitability indicator, Assets Turnover, which shows how much revenue the assets are able to generate. The company has a large margin for improvement when compared to its peers, which have an **Asset Turnover Ratio** of 37.48% while in **2023 Greenvolt has 16.85%**. This indicator is expected to improve, **reaching 33.53% in 2031**, as revenues increase at a faster pace than total assets.

Table 13 - Financial Ratios Overview

	2023	2024F	2031F	Peers
Profitability				
Profit Margin	-0.90%	2.41%	7.89%	11.27%
Turnover	16.85%	19.29%	33.53%	37.48%
Leverage	4.00	4.78	5.52	3.99
ROE (Dupont)	-0.61%	2.22%	14.59%	8.73%
Activity				
Asset Turnover	16.85%	19.29%	33.53%	37.48%
Solvency				
Debt to Equity	2.20	2.80	3.48	1.33
Liquidity				
Cash Ratio	86.53%	63.10%	22.56%	28.51%

Source: Author Analysis

Rising Debt Levels

Since 2021, Greenvolt has been **increasing its debt levels**, in the form of loans and by issuing bonds, increasing the Debt-to-Capital from 43.69% in 2021 to 55.04% in 2023. This arises from the company's need to expand its operations in order to grow. This trend is expected to continue until the company reach a stage of maturity where, in the long term, **Debt-to-Equity** levels are closer to its peers. It is estimated that the debt-to-equity ratio will increase from **2.20 to 3.48 in 2031, peaking at 4.20 in 2028**, well **above the 1.33 of its peers**. It foresees possible solvency problems but is expected to stabilize after the period forecasted.

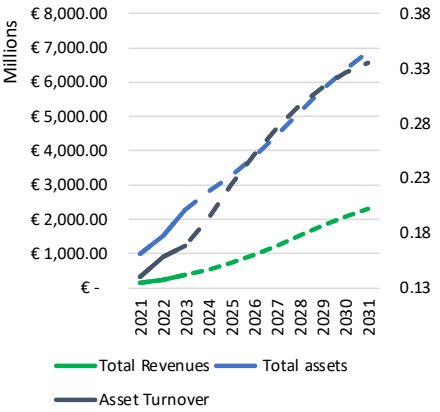
Debt is the company's preferred source of funds and, as a result, liabilities can be expected to increase at a faster rate than equity. **Leverage** has historically increased, from **2.88 in 2021 to 4.00 in 2023**, as a result of which it is expected **to increase to 6.42 in 2028**, being higher than peers. As CAPEX stabilizes and begins to decrease due to the stabilization of the company's growth, debt requirements behave in the same way, causing **Leverage to decrease to 5.52 in 2031**. This indicator is still higher than the peers but indicates a trend towards becoming less leveraged in debt in the long term.

Interest expenses are expected to rise due to the increase in debt, impacting the profitability of the business. In **2023**, **financial costs** amounted to **28% of revenues**. This weight is expected to decrease, **stabilizing at 10% of revenues from 2031 onwards**.

Strategic Cash Reserves

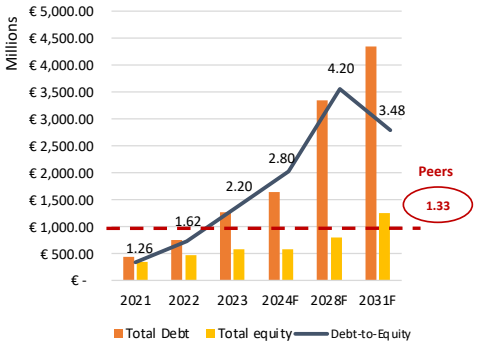
Greenvolt's management stated that having **high amounts of cash is a strategy of the company to be able to take investment opportunities**. Since the IPO, Greenvolt has very high cash reserves, with a Cash Ratio of 348.88% by 2021 compared with **28.51% of Peers**. During the forecast period, available cash is expected to decrease, given the need to invest in order for the company to grow. Cash flow generated by investing activities is not covered by cash flow generated by operating activities and cash flow generated by financing activities. Current liabilities are expected to increase significantly. As the business expands, current Liabilities are expected to increase in a steady pace on all the period forecasted. These events will impact Liquidity, making the **Cash Ratio decrease from 86.53% in 2023 to 9.05% in 2029**. As the growth is expected to stabilize and consequently investment requirements reduce, cash amount will increase supported by cash flows from operational activities, **reaching 22.56%** Cash Ratio by **2031**.

Figure 47 - Asset Turnover Forecast



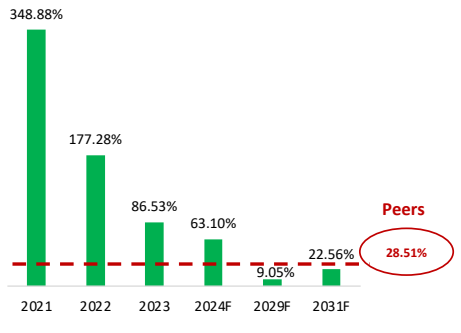
Source: Author Analysis

Figure 48 - Debt to Equity Forecast



Source: Author Analysis

Figure 49 - Cash Ratio Forecast



Source: Author Analysis

Profitability Concerns

Since 2021, **Greenvolt has had a low Return on Equity**, with 3.50% in 2021 and 5.47% in 2022. In 2023, the company reached a negative consolidated net profit of -€3.48M, with an ROE of -0.61%, well below the **Peers' average of 8.73%**. This low result is essentially explained by the low Profit Margin of -0.90% due to the increase in staff costs due to the expansion of the Distributed Generation segment into new geographies, the increase in costs associated with depreciation and amortization in the Utility-scale segment, and the increase in financial expenses. As the business expands and revenues increase, the weight of these expenses is expected to decrease, reaching a profit margin of 7.89% in 2031, still below the Peers' 11.27%, indicating that the company has the margin to be more profitable. The increase in Asset Turnover from 16.85% in 2023 to 33.53% in 2031 also plays a major role in profitability, as does the increase in Leverage, which is forecast to reach 5.52 in 2031, above the Peers' 3.99. Leverage is the only profitability component higher than peers, and responsible for the expected **ROE in 2031 to be higher than Peers, at 14.59%** and 8.73%, respectively.

Table 14 - Profitability vs Peers

Company Name	Profit Margin	Turnover	Leverage	ROE
Vestas	0.51%	68.32%	7.40	2.56%
Grenergy Renovables	28.50%	14.15%	3.68	14.85%
EDP	8.22%	28.58%	3.40	7.99%
Iberdrola	10.93%	32.88%	2.49	8.95%
Acciona	3.46%	56.77%	4.62	9.06%
Acciona Energ. Renov.	15.99%	24.18%	2.31	8.94%
Greenvolt (2023)	**-0.90%**	**16.85%**	**4.00**	**-0.61%**
Greenvolt (2031F)	**7.89%**	**33.53%**	**5.52**	**14.59%**

Source: Author Analysis

Investment Risks

Risk Matrix

The **Risk Matrix** is performed measuring the Likelihood of an event to happen and the Severity of that event, on a scale from 1 to 5, reaching the Impact from 1 to 25, as on (**Appendix 40**).

Operational Risks

Limited availability of feedstocks (O1) – Low – Specifically on biomass, the forest, and urban residuals are limited and can cause a shortage. **Mitigation Measures:** Expand the business to regions with more feedstock; Raise partnerships with other entities to use forest and urban wood waste.

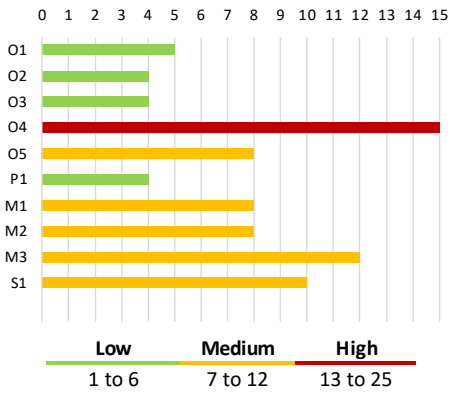
Intermittency of Solar Energy (O2) – **Low** – Solar energy is highly dependent on the availability of sunshine. This has low risk as Greenvolt is present in the southern Europe, which has high levels of sun exposure. **Mitigation Measures:** Expand the business to regions with more sun exposure.

Intermittency of Wind Energy (O3) – **Low** – Wind energy only exists if there is wind and if it is blowing at the right speed. Location is critical and is the key factor in the success of this utility. **Mitigation Measures:** Expand the business to regions with appropriate wind exposure; explore offshore wind farms.

Development of other energy sources (O4) – **High** – Substitutes always bring risks, green hydrogen and nuclear energy are being developed, and prices might be lower than the energy sources of the company. **Mitigation Measures:** Diversify its energy portfolio by entering these emerging sectors or by acquiring businesses already exploring other renewable energy sources.

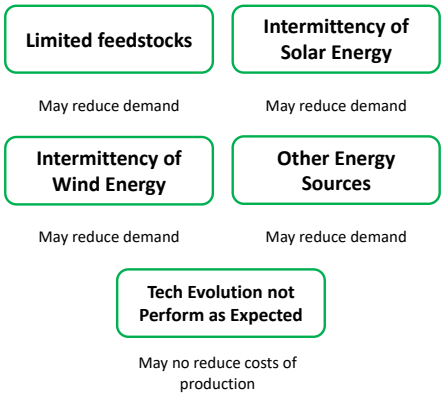
Technological Evolution do not Perform as expected (O5) – Medium – It directly impacts the costs of production and environmental impacts that some sectors still have, like carbon emissions by Biomass, which may reduce revenues and value of renewables companies. **Mitigation Measures:** Invest in R&D may help the company to stay ahead of the technological curve; collaborate with technology providers to ensure that has access to the latest and most efficient technology; acquire and develop staff to be adapted to new technologies.

Figure 50 - Risk Matrix



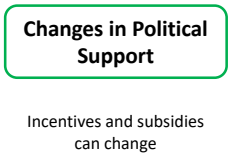
Source: Author Analysis

Figure 51 – Operational Risks



Source: Author Analysis

Figure 52 – Political and Regulatory Risks



Source: Author Analysis

Political and Regulatory Risks

Changes in Political Support and tax exemptions (P1) – **Low** – The industry has been sustainable for the past few years due to the political support with subsidies and tax exemptions, which is very unlikely due to the commitment to carbon neutrality, but these changes may be severe. **Mitigation Measures:** Investment in R&D by promoting technological development, minimizing production costs and increasing profitability.

Market Risks

Competition from fossil fuels – Decrease in fossil fuel prices (M1) – Medium – A decrease in fossil fuel prices can make renewable energy sources less competitive, making the severity of this event high. The prices of fossil fuels can be volatile, while the long-term trend of factors such as policy changes and technological advances is for these prices to rise and the prices of renewables to fall. **Mitigation Measures:** Investment in technology and efficiency, can help to offset the cost advantage that fossil fuel has when their prices are low; Raise long-term PPAs by locking the energy price for a long period, protecting from short-term price fluctuations.

Competition from fossil fuels – Purchase of Renewable Businesses to reduce industry growth (M2) – **Medium** – Purchase of renewable energy businesses by major fossil fuel companies can potentially slow the renewables industry growth. However, the overall trend is towards a switch from fossil fuels usage to renewables energy. **Mitigation Measures:** Engage policy advocacy to discourage the purchase of renewable energy businesses by fossil fuel companies.

Financing Costs Increase (M3) – **Medium** – Companies in this industry have high CAPEX investment needs, and financing is necessary. As financing becomes more expensive, companies become less profitable, impacting the value of the company. Uncertainty due to current global conflicts, such as in Ukraine and the Gaza Strip, can cause inflation to rise and interest rates to rise as a way of controlling this. **Mitigation Measures:** Fixed-rate debt financing; use of interest rate swaps, exchanging the variable rates of your financing for fixed rates, bringing certainty to future interest payments.

Social and Environmental Risks

Impacts on the environment (S1) – **Medium** – Infrastructures such as solar panels and wind turbines may have environmental consequences, such as the destruction of natural habitats and, on the other, the future of equipment when it cannot be used anymore. Biomass also affects the ecosystem, as removing forest residues may destroy natural habitats. If issues change people's perceptions and opinions, it will harm the entire industry. **Mitigation Measures:** End of life management by recycling equipment; site election by avoiding sensitive areas with high biodiversity or endangered species.

Sensitive Analysis

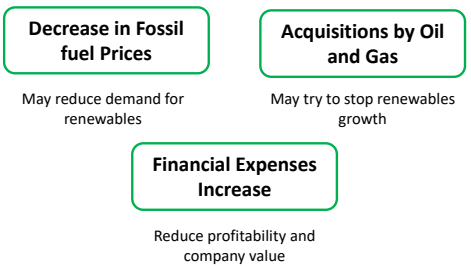
WACC and Terminal Growth Rate

The price target was reached with the DCF Model, but to test the company's robustness by changing some inputs, with Sensitive Analysis that directly impacts the target share price. The WACC varies between -1p.p. and +1p.p. over the base case 4.96%, as the Terminal Growth Rate of 1.74%. By changing these variables, the **investment recommendation is between Strong Buy and Sell** (**figure 55**), indicating that the investment decision is highly dependent on the WACC and the Terminal Growth Rate. This occurs because the Enterprise Value having a strong dependence on the Terminal Value of the firm.

First Year Revenues Growth

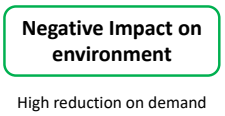
Revenue growth has a strong impact on FCFF, which determines the Price Target and the investment recommendation. In order to test the robustness of the valuation, the

Figure 53 - Market Risks



Source: Author Analysis

Figure 54 - Social and Environmental Risks



Source: Author Analysis

Figure 55 - Sensitive Analysis - WACC and g

Terminal Growth Rate \ WACC	3.96%	4.46%	4.96%	5.46%	5.96%
0.74%	€ 11.60	€ 6.77	€ 3.13	€ 0.31	€ (1.93)
1.24%	€ 17.33	€ 10.84	€ 6.15	€ 2.62	€ (0.12)
1.74%	€ 25.65	€ 16.41	€ 10.11	€ 5.55	€ 2.13
2.24%	€ 38.81	€ 24.49	€ 15.52	€ 9.40	€ 4.98
2.74%	€ 62.80	€ 37.28	€ 23.37	€ 14.66	€ 8.72

Source: Author Analysis

Figure 56 - Sensitive Analysis - 2024 Revenue Growth

Shift Revenue Growth 2024				
-10%	-5%	0%	5%	10%
€ 7.97	€ 8.97	€ 10.11	€ 11.41	€ 12.88

Source: Author Analysis

Figure 57 - Scenario Analysis - Revenues

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
Revenues	Industry Growth	Expectation Meeting Industry	Company Expectation
	-53.91%	21.62%	38.87%
Price (€)	3.83	10.11	11.54
	Sell	Buy	Strong Buy

Source: Author Analysis

Figure 58 - Scenario Analysis - 2023 Revenue Growth meeting Industry

2023 Revenues Growth	
Revenues	Meeting Industry
	60%
Price (€)	13.33
	Strong Buy

Source: Author Analysis

initial value of the 40% 2024 growth was changed between -10p.p. and +10p.p. The investment decision is **Strong Buy for +5p.p. and for +10p.p**., while **Hold for -5p.p.** and **Reduce for -10p.p** (**figure 56**).

Figure 59 - Scenario Analysis - WACC

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
WACC	5.96%	4.96%	3.96%
	-74.37%	21.62%	208.66%
Price (€)	2.13	10.11	25.65
	Sell	Buy	Strong Buy

Source: Author Analysis

Scenario Analysis

Revenues Growth

As this is a more sensitive matter as the company is in the early beginning and there is no certainty how the revenues will grow, considered three scenarios to assess the investment decision: the **company will grow with the industry**, pessimistic, the company **expectation as was stated on 2021 Annual Report that is expected to grow 40% until 2025**, as optimistic, and the **revenues meeting the industry growth YoY** starting on the Company Expectation by 2024, base scenario. As result, the **Pessimistic** Scenario suggests a **Sell** Recommendation with a **downside** potential of **53.91%**, and the **Optimistic** Scenario leads to **Strong Buy** Recommendations with a **38.87% upside potential (figure 57**).

Figure 60 - Scenario Analysis - g

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
g	0.74%	1.74%	2.74%
	-62.33%	21.62%	181.23%
Price (€)	3.13	10.11	23.37
	Sell	Buy	Strong Buy

Source: Author Analysis

An extra scenario is considered to assess what the investment recommendation would be if revenue growth started from **2023 growth of 59.11% converging with industry** growth in 2031. The result indicates **Strong Buy** with a target price of **€13.33** (**figure 58**).

Figure 61 - Black Swan Scenario

Black Swan Scenario	
Revenues	Industry Growth
g	0.74%
WACC	5.96%
	-107.58%
Price (€)	-0.63
	Sell

Source: Author Analysis

WACC

The weighted average cost of capital is one of the main drivers to reach the target price, as it is the discount rate for cashflows to assess the investment recommendation. Was considered **+1p.p. to the pessimistic** scenario and **-1p.p. to the Optimistic** Scenario and the WACC of 4.96% as a base. As a result, the **pessimistic** scenario suggests a **Sell**, and a **Strong Buy** to Optimist Scenario (**figure 59**).

Terminal Growth Rate

This assessment considered **adding 1p.p**. to the base scenario of 1.74% of the Terminal Growth Rate as an **optimistic** scenario and **reducing 1%** to the **pessimistic** scenario. Both Base and **Optimistic** scenarios lead to a **Strong Buy** recommendation and **Pessimistic** to a **Sell** (**figure 60**).

Black Swan Scenario

To complement the scenario analysis, a scenario **combining all pessimistic scenarios** simultaneously, leading to a **downside potential of 107.58%**, with a negative price target of -**0.63€**, suggesting a **Sell** recommendation (**figure 61**). On this case the Enterprise Value is not sufficient to face the Net Debt and Non-controlling interests.

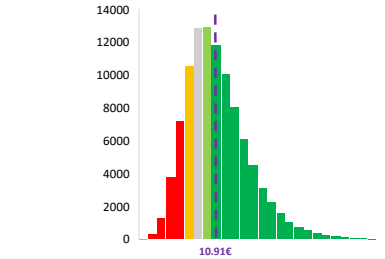
Table 15 - Monte Carlo Simulation Output

Indicator		Value
Trials		100,000.00
Base case	€	10.11
Minimum	€	(1.58)
Maximum	€	63.59
Mean	€	10.91
Median	€	10.13
Standard Deviation		5.14
Skewness		1.18
Kurtosis		3.10
10th percentil	€	5.22
90th percentil	€	17.50

Source: Author Analysis

Monte Carlo Simulation

Figure 62 - Monte Carlo Simulation Graph



Sell	Reduce	Hold	Buy	Strong Buy
29.94%	7.55%	7.42%	10.71%	44.38%

Source: Author Analysis

Testing the robustness of the valuation is performed through a Monte Carlo Simulation, with 100,000,000 trials, stressing the variables' **Risk-Free Rate**, which has a direct impact on the Cost of Equity and Cost of Debt, and the **Terminal Growth Rate** that has a direct impact on the terminal value of valuation. Parameters of variables, mean and standard deviation, following a normal distribution, were based on the **historical data** for Risk-Free Rate on historical **yields of 10Y German Bonds**, for Terminal Growth Rate on **Real GDP Growth of Europe**.

As a result of the simulation, the **mean Price Target is 10.91€,** 7.91% above the base price, as a Strong Buy recommendation. Probabilities give a **44.38% Strong Buy**, followed by **10.71% Buy**, **7.42% Hold**, **7.55% Reduce** and **29.94% Sell** (**figure 62**).

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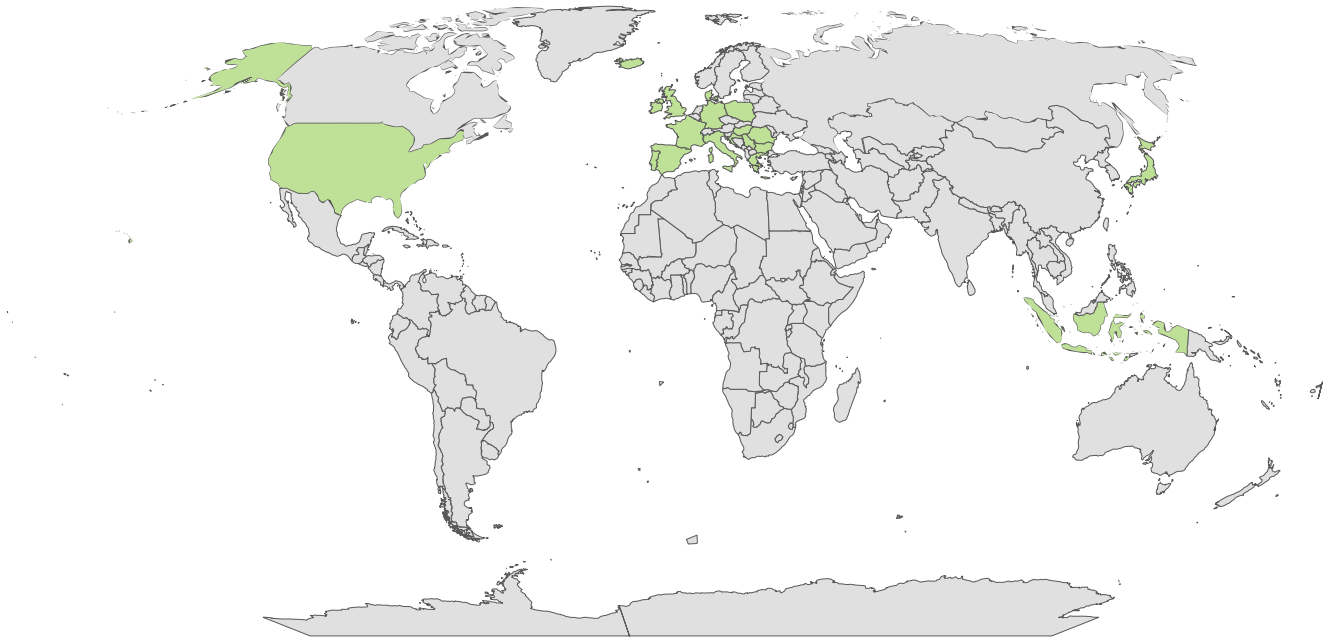
Appendices

Appendix 1: Greenvolt Global Presence



Appendix 2 – Board of Directors Remuneration

Source: Company Data

Non-Executive Directors	Fixed Remuneration Gross Value		Short Term Variable Remuneration Gross Value	Medium Term Variable Remuneration
Clementina Barroso	€	80,000.04	N/A	N/A
Paulo Fernandes	€	99,999.96	N/A	N/A
João Borges Oliveira	€	99,999.96	N/A	N/A
Ana Mendonça	€	45,000.00	N/A	N/A
Pedro Borges de Oliveira	€	45,000.00	N/A	N/A
Domingos de Matos	€	45,000.00	N/A	N/A
Céline Abecassis-Moedas*	€	13,125.00	N/A	N/A
Jorge Vasconcelos	€	48,000.00	N/A	N/A
José Soares de Pina**		N/A	N/A	N/A
Joana Pais	€	48,000.00	N/A	N/A
Sofia Portela***	€	32,400.00	N/A	N/A
Sérgio Monteiro***		N/A	N/A	N/A
Executive Directors	**Fixed Remuneration Gross Value**		**Short Term Variable Remuneration Gross Value**	**Medium Term Variable Remuneration**
João Manso Neto	€	499,992.00	€ 350,000.00	Deferred to 2024 and 2025****

*Corresponds to the period between 1 January 2023 and 06 April 2023 (date of resignation).

**Corresponds to the period between 1 January 2023 and 23 June 2023 (date of resignation).

***Corresponds to the period from 28 April 2023 to 31 December 2023.

**** Corresponds to the valuation of a two-million-Euro investment, these shares mirror the performance of Greenvolt shares at the IPO's closing on July 15, 2022. They can be exercised for half of their value each in 2024 and 2025

Source: Company Data

Appendix 3: PESTEL Analysis

Political	Governments and supranational organizations are promoting energy transition and energy independence. European Union focus on energy independence has intensified due to Russia-Ukraine conflict and geopolitical instability. Renewable energy industry investments encouraged through subsidies, tax benefits, and credits. Oil and Gas industry is losing its previous political and economic relevance to greener companies. China, one of the most polluting countries, is adopting clean energy standards and increasing the use of renewables.
Economic	High inflation period and impending global recession. Russia-Ukraine war is expected to accelerate the energy transition. Economic stimulus packages provide opportunities to sustainable economic alignment and climate targets achievement, increasing investment in the sector
Social	Social awareness for climate leads to a worldwide increase of sustainable energy consumption. World population will keep increasing and energy consumption is expected to follow.
Technological	Technological developments on energy storage, beyond lithium-based batteries. Improvements on performance and cost efficiency of solar, wind and hydro utilities. Development of carbon capture technologies to store, use or remove. Green hydrogen development – which has high energy density – is seen as a potential solution for long-distance transportation. Artificial intelligence and big data may be used for decision-making in energy grids, and forecasted energy consumption, maintenance needs, and capacity levels. Blockchain may be used to encrypt grid operations, to monitoring data, and facilitate digital transactions.
Environmental	Renewables are in the center of energy transition and climate protection, shifting from fossil fuels to sustainable sources. Net zero carbon emissions are part of the government's agenda, aligning with Paris Agreement. The adoption of green sources of energy is the key to a sustainable future, reducing carbon emissions. ESG metrics are becoming more and more fundamental on countries and companies.
Legal	Intellectual property regulation protecting sustainable energy-related technology is an industry asset and indicates regulatory support for such solutions. Increase in legislation and regulation promoting responsible energy consumption. 144 countries have set their own targets to expand renewable energies. Policies are being implemented in 138 countries and regions to increase the share of renewables on energy supply. Legal concerns can have both positive and negative effects and tend to have neutral effects on the progress of the renewable energy industry. EU adoption of the 2030 climate and energy framework in September 2020 aims to increase the 2030 reduction target of greenhouse gas emissions.

Source: Author Analysis

Appendix 4: Peer Selection – SARD

Company Data

Company Name	Total Assets	PP&E	Intangible Assets	Total Liabilities	Total Equity	Total Debt	Working Capital	Revenues	EBIT	Net Income
Greenvolt	**2,287,384**	**812,836**	**503,106**	**1,715,038**	**572,346**	**1,350,938**	**246,563**	**345,834**	**58,923**	**-3,476**
Vestas Wind Systems A/S	22,514,000	1,911,000	3,203,000	19,472,000	3,042,000	3,387,000	901,000	15,382,000	337,000	78,000
Grenergy Renovables SA	1,266,336	763,810	5,769	922,606	343,730	752,209	50,406	179,139	87,134	51,055
EDP Renováveis	30,046,652	21,187,801	2,615,473	17,394,226	12,652,426	8,333,442	-1,816,552	2,247,307	1,098,491	459,435
EDP	56,696,674	27,304,192	8,203,576	40,039,871	16,656,803	22,635,699	-1,250,397	16,202,308	3,063,464	1,331,390
Iberdrola	150,033,000	90,309,000	20,255,000	89,741,000	60,292,000	61,646,000	-5,009,000	49,335,000	9,096,000	5,394,000
Acciona S.A.	31,650,000	12,478,000	2,978,000	24,799,000	6,851,000	10,880,000	1,018,000	17,967,000	1,330,000	621,000
Acciona Energías Renovables	14,672,000	10,895,000	232,000	8,333,000	6,339,000	4,617,000	233,000	3,547,000	905,000	567,000
Naturgy Energy Group S.A.	37,893,000	19,855,000	5,969,000	25,964,000	11,929,000	15,955,000	1,539,000	22,617,000	3,738,000	2,274,000
Solaria Energia y Medio Ambiente S.A.	1,648,922	1,276,203	110,507	1,124,804	524,118	1,060,051	-67,374	191,322	169,840	107,514
Siemens Energy AG	47,907,000	5,724,000	13,151,000	39,119,000	8,788,000	4,781,000	-5,032,000	31,119,000	-3,098,000	-4,588,000
Verbio Vereinigte Bioenergie	1,297,187	622,332	940	385,360	911,827	189,969	384,280	1,968,281	201,109	132,156
Enefit Green AS	1,301,923	1,082,205	68,988	584,733	717,190	482,431	45,912	226,269	70,307	55,793
CropEnergies AG	1,046,870	371,086	7,039	263,120	783,750	15,650	446,109	1,488,273	256,867	196,556
Waga Energy SA	194,584	121,046	2,057	96,712	97,872	57,340	34,439	33,262	-13,333	-15,442

Financial Ratios

	Solvency					**Liquidity**		
Company Name	Debt to Equity	Ranking	Debt to Assets	Ranking	Working Capital	Ranking	EBIT Margin	Ranking
Greenvolt	**2.36**	**1**	**59.06%**	**3**	**246,562.66**	**6**	**17.04%**	**9**
Vestas Wind Systems A/S	1.11	7	15.04%	12	901,000.00	3	2.19%	13
Grenergy Renovables SA	2.19	2	59.40%	2	50,406.00	8	48.64%	3
EDP Renováveis	0.66	11	27.74%	11	(1,816,552.00)	13	48.88%	2
EDP	1.36	5	39.92%	6	(1,250,397.00)	12	18.91%	6
Iberdrola	1.02	8	41.09%	5	(5,009,000.00)	14	18.44%	7
Acciona S.A.	1.59	4	34.38%	8	1,018,000.00	2	7.40%	12
Acciona Energías Renovables	0.73	9	31.47%	9	233,000.00	7	25.51%	5
Naturgy Energy Group S.A.	1.34	6	42.11%	4	1,539,000.00	1	16.53%	10
Solaria Energia y Medio Ambiente S.A.	2.02	3	64.29%	1	(67,374.00)	11	88.77%	1
Siemens Energy AG	0.54	13	9.98%	14	(5,032,000.00)	15	-9.96%	14
Verbio Vereinigte Bioenergie	0.21	14	14.64%	13	384,280.00	5	10.22%	11
Enefit Green AS	0.67	10	37.06%	7	45,912.00	9	31.07%	4
CropEnergies AG	0.02	15	1.49%	15	446,109.00	4	17.26%	8
Waga Energy SA	0.59	12	29.47%	10	34,439.00	10	-40.08%	15

	Financial Ratios Profitability				**SARD Method**		
Company Name	ROE	Ranking	ROA	Ranking	SARD Value	SARD Rank	**Selection**
Greenvolt	**-0.61%**	**13**	**-0.15%**	**13**	0	**1**	
Vestas Wind Systems A/S	2.56%	12	0.35%	12	24	**2**	**X**
Grenergy Renovables SA	14.85%	4	4.03%	6	26	**5**	**X**
EDP Renováveis	3.63%	11	1.53%	11	36	**11**	
EDP	7.99%	9	2.35%	9	24	**2**	**X**
Iberdrola	8.95%	7	3.60%	8	30	**6**	**X**
Acciona S.A.	9.06%	6	1.96%	10	25	**4**	**X**
Acciona Energías Renovables	8.94%	8	3.86%	7	30	**6**	**X**
Naturgy Energy Group S.A.	19.06%	3	6.00%	4	31	**9**	
Solaria Energia y Medio Ambiente S.A.	20.51%	2	6.52%	3	38	**12**	
Siemens Energy AG	-52.21%	15	-9.58%	15	41	**13**	
Verbio Vereinigte Bioenergie	14.49%	5	10.19%	2	45	**14**	
Enefit Green AS	7.78%	10	4.29%	5	32	**10**	
CropEnergies AG	25.08%	1	18.78%	1	53	**15**	
Waga Energy SA	-15.78%	14	-7.94%	14	30	**6**	

Source: Author Analysis and Yahoo Finance

Appendix 5: Growth Assumptions

Biomass Growth

A) https://www.precedenceresearch.com/biomass-power-market
B) https://www.grandviewresearch.com/industry-analysis/biomass-power-market
C) https://www.marketdataforecast.com/market-reports/biomass-power-generation-market
D) https://www.globenewswire.com/en/news-release/2023/05/15/2668453/0/en/Biomass-Power-Market-Size-Projected-to-Reach-USD-2-10-512-4-Million-at-a-CAGR-of-5-8-by-2030-Report-by-Market-Research-Future-MRFR.html
E) https://www.marketwatch.com/press-release/global-biomass-power-generation-market-2023-2030-worldwide-industry-growing-at-a-cagr-of-63-and-expected-to-reach-usd-67870-million-2023-05-18

A) Global Biomass Growth CAGR (2022-2030)	5.73%
B) Global Biomass Growth CAGR (2022-2030)	6.00%
C) Global Biomass Growth CAGR (2022-2030)	6.30%
D) Global Biomass Growth CAGR (2022-2030)	5.80%
E) Global Biomass Growth CAGR (2023-2030)	6.30%
Average	**6.03%**

Solar Utilities Growth

A) https://www.precedenceresearch.com/solar-farm-market
B) https://www.grandviewresearch.com/industry-analysis/solar-energy-system-market-report
C) https://www.vantagemarketresearch.com/industry-report/solar-energy-system-market-1731
D) https://www.globenewswire.com/news-release/2023/03/16/2628384/0/en/Solar-Panel-Market-Projected-to-Grow-at-CAGR-of-18-by-2030-Driven-by-Increasing-Demand-for-Renewable-Energy-Sources-and-Government-Initiatives.html

A) Global Solar Growth CAGR (2022-2030)	15.70%
B) Global Solar Growth CAGR (2022-2030)	15.70%
C) Global Solar Growth CAGR (2022-2030)	20.00%
D) Global Solar Growth CAGR (2022-2030)	18.00%
Average	**17.35%**

Wind Utilities Growth

A) https://www.sphericalinsights.com/reports/wind-energy-market
B) https://www.grandviewresearch.com/industry-analysis/wind-power-industry
C) https://www.alliedmarketresearch.com/wind-energy-market-A10536
D) https://straitsresearch.com/report/wind-energy-market

A) Global Wind Growth CAGR (2022-2030)	8.40%
B) Global Wind Growth CAGR (2022-2030)	6.50%
C) Global Wind Growth CAGR (2022-2030)	9.30%
D) Global Wind Growth CAGR (2022-2030)	9.50%
Average	**8.43%**

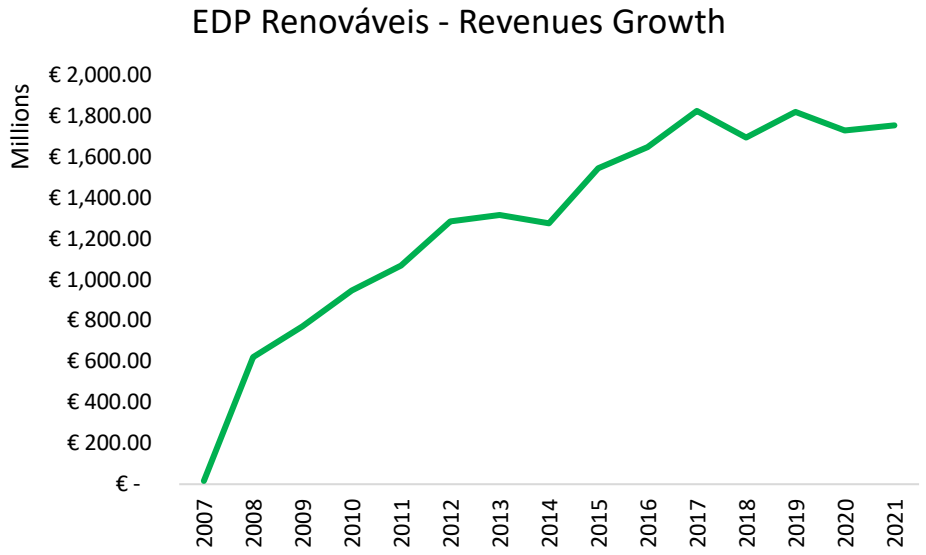
Solar Commercia Growth

https://www.precedenceresearch.com/solar-farm-market

Global Solar Commercial Growth CAGR (2022-2030)	**16.50%**

Source: Author Analysis

Appendix 6: Comparable Company Revenues Growth



Source: Yahoo Finance

Appendix 7: Statement of Financial Position – Historical

Balance Sheet Statement	(Amounts Expressed in Thousands of Euros)					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
ASSETS						
NON-CURRENT ASSETS						
Property, plant and equipment	145,000	166,800	160,466	370,016	490,023	726,406
Right-of-use assets	-	5,800	5,434	66,298	73,127	86,430
Goodwill	-	-	-	113,923	122,041	178,493
Intangible assets	1,500	1,400	6,796	100,531	169,483	324,613
Investments in joint ventures	-	-	-	3,036	46,006	38,831
Other investments	-	-	-	139	171	91
Other non-current assets	-	-	-	4	96	81
Other debts from third parties	-	-	-	3,338	32,614	79,286
Derivative financial instruments	-	-	-	1,333	20,038	32,614
Deferred tax assets	2,300	2,500	1,494	20,590	21,349	30,075
Total non-current assets	148,800	176,500	174,190	679,208	974,948	1,496,921
CURRENT ASSETS						
Inventories	1,500	3,000	1	875	25,743	35,810
Trade receivables	-	-	20	13,123	22,997	30,901
Assets associated with contracts with customers	8,000	7,400	7,477	28,698	32,773	109,179
Other receivables	2,500	1,000	12	20,566	64,909	57,410
Income tax receivable	-	-	0	680	3,806	9,183
State and other public entities	2,200	-	115	3,691	13,977	42,623
Other current assets	100	200	506	2,283	4,876	10,297
Derivative financial instruments	-	-	-	-	5,236	5,275
Cash and cash equivalents	6,700	16,100	14,101	258,757	380,993	463,517
Total current assets	21,000	27,700	22,232	328,675	555,310	764,193
Group of assets classified as held for sale	-	-	-	-	-	26,269
Total assets	169,800	204,200	196,421	1,007,883	1,530,257	2,287,384
EQUITY AND LIABILITIES						
EQUITY						
Share capital	50	50	50	267,100	367,094	367,094
Issuance premiums deducted from costs with the issue of shares	-	-	-	773	(3,490)	(3,490)
Other equity instruments	-	-	-	-	-	35,967
Legal reserve	10	10	10	10	132	308
Supplementary capital	13,200	13,200	9,584	-	-	-
Other reserves and retained earnings	15,000	19,800	39,718	33,949	38,095	60,387
Amounts recognized in other comprehensive income	-	-	-	-	-	137
Consolidated net profit for the year attributable to Equity holders of the parent	5,200	6,800	17,934	7,750	16,609	1,182
Total equity attributable to shareholders of the Parent Company	33,460	39,860	67,296	309,581	418,441	461,585
Non-controlling interests	-	-	15	40,431	47,335	110,761
Total equity	33,460	39,860	67,311	350,012	465,776	572,346
LIABILITIES						
NON-CURRENT LIABILITIES						
Bank loans	-	-	-	160,577	147,480	223,239
Bond loans	-	49,700	48,464	169,646	411,743	570,895
Other loans	-	-	-	39,522	39,645	84,722
Shareholders loans	-	-	-	40,827	38,660	39,468
Lease liabilities	-	6,100	5,837	67,071	74,072	89,247
Other payables	-	-	820	16,289	22,764	32,639
Other non-current liabilities	1,100	800	612	389	1,656	5,208
Deferred tax liabilities	3,000	2,800	3,258	36,058	43,892	50,218
Provisions	9,200	11,400	11,538	15,867	12,740	17,912
Derivative financial instruments	-	-	-	37,458	56,916	57,591
Total non-current liabilities	13,300	70,800	70,529	583,704	849,569	1,171,138
CURRENT LIABILITIES						
Bank loans	-	-	-	6,369	70,741	44,496
Bond loans	-	300	1,545	2,934	4,044	66,007
Other loans	-	50,000	40,007	20,490	40,184	203,047
Shareholders loans	111,300	24,600	-	-	-	27,127
Lease liabilities	-	300	284	877	2,157	2,689
Trade payables	6,940	11,840	8,538	17,884	34,519	34,979
Liabilities associated with contracts with customers	-	-	-	-	4,554	10,126
Other payables	3,500	2,000	3,939	15,826	45,082	114,161
Income tax payable	900	200	3,412	1,214	17	3,341
State and other public entities	-	4,000	566	1,870	2,269	5,727
Other current liabilities	400	300	290	6,400	9,017	18,962
Derivative financial instruments	-	-	-	303	2,329	4,995
Total current liabilities	123,040	93,540	58,582	74,167	214,913	535,657
Liabilities directly associated with the group of assets classified as held for sale	-	-	-	-	-	8,243
Total liabilities	136,340	164,340	129,110	657,871	1,064,482	1,715,038
Equity + Liabilities	169,800	204,200	196,421	1,007,883	1,530,257	2,287,384

Source: Company Data

Appendix 8: Statement of Financial Position – Forecast

Balance Sheet Statement	(Amounts Expressed in Thousands of Euros)							
	2024F	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**
ASSETS								
NON-CURRENT ASSETS								
Property, plant and equipment	1,016,969	1,367,458	1,781,727	2,247,462	2,742,063	3,233,086	3,680,871	4,043,343
Right-of-use assets	178,915	242,962	319,737	407,394	502,129	598,158	688,107	763,836
Goodwill	178,493	178,493	178,493	178,493	178,493	178,493	178,493	178,493
Intangible assets	454,458	548,303	630,974	688,532	706,374	671,987	578,077	425,279
Investments in joint ventures	74,922	100,743	131,262	165,574	202,012	238,186	271,175	297,879
Other investments	91	91	91	91	91	91	91	91
Other non-current assets	81	81	81	81	81	81	81	81
Other debts from third parties	79,286	79,286	79,286	79,286	79,286	79,286	79,286	79,286
Derivative financial instruments	32,614	32,614	32,614	32,614	32,614	32,614	32,614	32,614
Deferred tax assets	30,075	30,075	30,075	30,075	30,075	30,075	30,075	30,075
Total non-current assets	2,045,905	2,580,106	3,184,341	3,829,603	4,473,218	5,062,057	5,538,871	5,850,978
CURRENT ASSETS								
Inventories	51,586	70,052	92,188	117,462	144,777	172,464	198,399	220,234
Trade receivables	48,179	65,426	86,101	109,706	135,216	161,076	185,298	205,691
Assets associated with contracts with customers	109,179	109,179	109,179	109,179	109,179	109,179	109,179	109,179
Other receivables	57,410	57,410	57,410	57,410	57,410	57,410	57,410	57,410
Income tax receivable	9,183	9,183	9,183	9,183	9,183	9,183	9,183	9,183
State and other public entities	42,623	42,623	42,623	42,623	42,623	42,623	42,623	42,623
Other current assets	10,297	10,297	10,297	10,297	10,297	10,297	10,297	10,297
Derivative financial instruments	5,275	5,275	5,275	5,275	5,275	5,275	5,275	5,275
Cash and cash equivalents	392,446	299,455	211,778	141,892	104,740	115,952	189,341	334,118
Total current assets	726,177	668,900	624,033	603,026	618,699	683,458	807,004	994,009
Group of assets classified as held for sale	26,269	26,269	26,269	26,269	26,269	26,269	26,269	26,269
Total assets	2,798,351	3,275,275	3,834,643	4,458,898	5,118,186	5,771,785	6,372,144	6,871,255
EQUITY AND LIABILITIES								
EQUITY								
Share capital	367,094	367,094	367,094	367,094	367,094	367,094	367,094	367,094
Issuance premiums deducted from costs with the issue of shares	(3,490)	(3,490)	(3,490)	(3,490)	(3,490)	(3,490)	(3,490)	(3,490)
Other equity instruments	35,967	35,967	35,967	35,967	35,967	35,967	35,967	35,967
Legal reserve	308	308	308	308	308	308	308	308
Supplementary capital	-	-	-	-	-	-	-	-
Other reserves and retained earnings	61,569	69,343	83,339	107,224	143,862	196,061	266,161	355,564
Amounts recognized in other comprehensive income	137	137	137	137	137	137	137	137
Consolidated net profit for the year attributable to Equity holders of the parent	7,774	13,995	23,885	36,638	52,199	70,100	89,403	108,726
Total equity attributable to shareholders of the Parent Company	469,358	483,354	507,239	543,877	596,076	666,177	755,579	864,305
Non-controlling interests	115,985	125,390	141,441	166,063	201,141	248,249	308,329	381,394
Total equity	585,344	608,744	648,680	709,940	797,218	914,426	1,063,908	1,245,699
LIABILITIES								
NON-CURRENT LIABILITIES								
Bank loans	301,609	373,055	454,170	541,189	628,496	709,027	775,089	819,509
Bond loans	807,517	998,803	1,215,978	1,448,959	1,682,712	1,898,322	2,075,195	2,194,123
Other loans	97,377	120,443	146,632	174,727	202,914	228,914	250,243	264,584
Shareholders loans	39,468	39,468	39,468	39,468	39,468	39,468	39,468	39,468
Lease liabilities	173,250	228,937	295,111	369,803	449,266	527,998	599,143	655,284
Other payables	32,639	32,639	32,639	32,639	32,639	32,639	32,639	32,639
Other non-current liabilities	5,208	5,208	5,208	5,208	5,208	5,208	5,208	5,208
Deferred tax liabilities	50,218	50,218	50,218	50,218	50,218	50,218	50,218	50,218
Provisions	17,912	17,912	17,912	17,912	17,912	17,912	17,912	17,912
Derivative financial instruments	57,591	57,591	57,591	57,591	57,591	57,591	57,591	57,591
Total non-current liabilities	1,582,789	1,924,274	2,314,926	2,737,712	3,166,423	3,567,297	3,902,705	4,136,536
CURRENT LIABILITIES								
Bank loans	142,945	176,806	215,250	256,492	297,870	336,037	367,346	388,399
Bond loans	47,769	59,084	71,931	85,713	99,541	112,296	122,759	129,794
Other loans	175,983	217,671	265,000	315,774	366,716	413,704	452,250	478,168
Shareholders loans	27,127	27,127	27,127	27,127	27,127	27,127	27,127	27,127
Lease liabilities	5,045	6,666	8,593	10,768	13,082	15,374	17,446	19,081
Trade payables	65,795	89,348	117,582	149,817	184,655	219,970	253,048	280,897
Liabilities associated with contracts with customers	10,126	10,126	10,126	10,126	10,126	10,126	10,126	10,126
Other payables	114,161	114,161	114,161	114,161	114,161	114,161	114,161	114,161
Income tax payable	3,341	3,341	3,341	3,341	3,341	3,341	3,341	3,341
State and other public entities	5,727	5,727	5,727	5,727	5,727	5,727	5,727	5,727
Other current liabilities	18,962	18,962	18,962	18,962	18,962	18,962	18,962	18,962
Derivative financial instruments	4,995	4,995	4,995	4,995	4,995	4,995	4,995	4,995
Total current liabilities	621,976	734,014	862,794	1,003,002	1,146,303	1,281,819	1,397,287	1,480,777
Liabilities directly associated with the group of assets classified as held for sale	8,243	8,243	8,243	8,243	8,243	8,243	8,243	8,243
Total liabilities	2,213,007	2,666,531	3,185,963	3,748,958	4,320,969	4,857,359	5,308,236	5,625,556
Equity + Liabilities	2,798,351	3,275,275	3,834,643	4,458,898	5,118,186	5,771,785	6,372,144	6,871,255

Source: Author Analysis

Appendix 9: Income Statement – Historical

Income Statement	(Amounts Expressed in Thousands of Euros)					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Total Revenues	53,800	65,200	90,100	141,507	242,281	385,493
Costs of sales	(19,900)	(24,900)	(39,029)	(43,238)	(74,451)	(155,429)
External supplies and services	(13,500)	(17,500)	(17,920)	(34,273)	(53,989)	(93,568)
Payroll expenses	-	-	-	(6,442)	(20,469)	(40,061)
Provisions and impairment reversals /(losses) in current assets	-	-	0	(147)	(169)	88
Results related to investments	-	-	-	(276)	14,940	10,703
Other expenses	-	(100)	(130)	(589)	(8,222)	(4,116)
Operating profit less amort. Dep. And Imp. Reversals /(losses) in non-current assets	20,400	22,700	33,021	56,541	99,921	103,110
Amortization and depreciation	(7,800)	(10,600)	(12,148)	(26,687)	(42,042)	(53,623)
Impairment reversals /(losses) in non-current assets	(5,800)	-	6,336	-	4,655	(416)
Other results related to investments	-	-	-	-	-	(4,895)
Operating profit	6,800	12,100	27,208	29,854	62,533	44,176
Financial expenses	(600)	(1,900)	(1,791)	(9,056)	(35,540)	(108,453)
Financial income	-	-	0	709	15,015	69,957
Profit/(loss) before income tax	6,200	10,200	25,417	21,507	42,008	5,680
Income tax	(1,000)	(2,600)	(6,413)	(8,239)	(8,164)	3,427
Energy sector extraordinary contribution (CESE)	-	(800)	(1,079)	(1,015)	(980)	(906)
Consolidated net profit from continuing operations	5,200	6,800	17,926	12,253	32,864	8,202
Profit/(Loss) after tax from discontinued operations	-	-	-	-	(7,372)	(11,677)
Consolidated net profit for the period	5,200	6,800	17,926	12,253	25,492	(3,476)

Source: Company Data

Appendix 10: Income Statement – Forecast

Income Statement	(Amounts Expressed in Thousands of Euros)							
	2024F	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**
Total Revenues	539,690	732,884	964,472	1,228,887	1,514,650	1,804,318	2,075,647	2,304,081
Costs of sales	(179,066)	(243,167)	(320,006)	(407,738)	(502,552)	(598,662)	(688,688)	(764,481)
External supplies and services	(142,931)	(193,163)	(253,106)	(321,211)	(394,412)	(468,136)	(536,631)	(593,628)
Payroll expenses	(50,840)	(69,039)	(90,856)	(115,764)	(142,684)	(169,971)	(195,531)	(217,050)
Provisions and impairment reversals /(losses) in current assets	-	-	-	-	-	-	-	-
Results related to investments	10,703	10,703	10,703	10,703	10,703	10,703	10,703	10,703
Other expenses	(4,413)	(5,992)	(7,886)	(10,048)	(12,384)	(14,752)	(16,971)	(18,839)
Operating profit less amort. Dep. And Imp. Reversals /(losses) in non-current assets	173,143	232,226	303,322	384,830	473,322	563,500	648,530	720,787
Amortization and depreciation	(71,664)	(97,918)	(125,735)	(156,188)	(187,502)	(217,317)	(242,934)	(261,680)
Impairment reversals /(losses) in non-current assets	-	-	-	-	-	-	-	-
Other results related to investments	-	-	-	-	-	-	-	-
Operating profit	101,479	134,308	177,587	228,642	285,820	346,182	405,596	459,108
Financial expenses	(84,221)	(104,139)	(126,893)	(151,479)	(176,363)	(199,575)	(218,929)	(232,338)
Financial income	-	-	-	-	-	-	-	-
Profit/(loss) before income tax	17,258	30,170	50,695	77,162	109,457	146,607	186,667	226,769
Income tax	(3,354)	(5,864)	(9,852)	(14,996)	(21,273)	(28,493)	(36,279)	(44,073)
Energy sector extraordinary contribution (CESE)	(906)	(906)	(906)	(906)	(906)	(906)	(906)	(906)
Consolidated net profit from continuing operations	12,998	23,400	39,936	61,260	87,278	117,208	149,482	181,791
Profit/(Loss) after tax from discontinued operations	-	-	-	-	-	-	-	-
Consolidated net profit for the period	12,998	23,400	39,936	61,260	87,278	117,208	149,482	181,791

Source: Author Analysis

Appendix 11: Cash Flow Statement – Historical

Cash Flow Statement	(Amounts Expressed in Thousands of Euros)					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Operating activities						
Receipts from customers	55,170	80,450	110,433	144,053	270,294	419,146
Payments to suppliers	(41,180)	(47,360)	(67,434)	(98,341)	(209,026)	(251,730)
Payments to personnel	-	-	-	(3,706)	(21,051)	(34,290)
Other receipts/(payments) relating to operating activities	(2,840)	890	(12,626)	(6,489)	(4,091)	(1,422)
Income tax (paid)/received	(1,970)	(3,640)	(1,729)	(7,314)	(14,355)	(7,817)
Cash flows generated by operating activities (1)	9,180	30,340	28,644	28,204	21,771	123,886
Investment activities						
Receipts arising from:						
Investments in subsidiaries	-	-	-	-	-	55
Investments in joint ventures and associates	-	-	-	-	-	1,270
Interest and similar income	-	-	-	-	212	2,829
Property, plant and equipment	-	-	-	-	1,915	5,541
Dividends	-	-	-	-	-	-
Investments granted	-	-	-	-	-	292
Loans granted	-	-	0	14	1,672	-
Payments relating to:	-	-	-	-	-	-
Investments in subsidiaries net of cash and cash equivalents acquired	-	(20)	(822)	(176,376)	(39,766)	(27,096)
Investments in joint ventures and associates	-	-	-	(572)	(48,645)	(73,042)
Loans granted	-	-	-	(19,367)	(24,345)	(34,012)
Property, plant and equipment	(43,400)	(31,830)	(2,955)	(14,951)	(84,425)	(262,589)
Intangible assets	-	-	-	(24,108)	(26,852)	(90,948)
Other financial assets	-	-	-	-	-	(553)
Other payments related to the investment activities	-	-	-	-	-	(400)
Cash flows generated by investment activities (2)	(43,400)	(31,850)	(3,777)	(235,361)	(220,235)	(478,653)
Financing activities						
Receipts arising from:						
Interest and similar income	-	-	-	-	-	9,933
Loans obtained	-	180,000	400,000	556,294	500,951	1,598,074
Shareholders loans	81,500	5,000	-	39,974	-	-
Capital contributions	-	-	10	199,500	99,994	-
Capital contributions by non-controlling interests	-	-	-	41,178	443	1,904
Other financing transactions	-	-	-	2,985	819	-
Payments relating to:	-	-	-	-	-	-
Interest and similar expenses	(780)	(1,440)	(1,442)	(8,856)	(19,835)	(47,406)
Charges with issuance of new shares	-	-	-	(7,595)	(4,263)	-
Dividends distributed	-	-	-	-	(5,792)	(7,491)
Loans obtained	(52,940)	(80,000)	(410,000)	(358,119)	(218,914)	(1,110,011)
Shareholders loans	-	(92,230)	(14,913)	(1,421)	(2,816)	(2,760)
Lease liabilities	-	(420)	(528)	(2,059)	(5,164)	(6,406)
Capital contributions / realizations	-	-	-	-	-	-
Acquisition of non-controlling interests by the Group	-	-	-	-	-	(3,090)
Other financing transactions	-	-	-	(11,161)	(19,360)	(9,887)
Cash flows generated by financing activities (3)	27,780	10,910	(26,873)	450,720	326,063	422,859
Cash and cash equivalents at the beginning of the year	13,150	6,710	16,107	14,101	258,757	380,993
Changes in the consolidation perimeter	-	-	-	1,021	-	7,208
Effect of the reclassification to group of assets classified as held for sale	-	-	-	-	-	(4,328)
Effect of exchange rate differences	-	-	-	73	(5,364)	11,349
Net increase/(decrease) in cash and cash equivalents: (1)+(2)+(3)	(6,440)	9,400	(2,007)	243,562	127,600	68,093
Cash and cash equivalents at the end of the year	6,710	16,110	14,101	258,757	380,993	463,314

Source: Company Data

Appendix 12: Cash Flow Statement – Forecast

Cash Flow Statement	(Amounts Expressed in Thousands of Euros)							
	2024F	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**
Operating activities								
Receipts from customers	522,411	715,637	943,798	1,205,282	1,489,140	1,778,458	2,051,424	2,283,688
Payments to suppliers	(306,956)	(431,243)	(567,015)	(721,987)	(889,440)	(1,059,171)	(1,218,175)	(1,352,094)
Payments to personnel	(50,840)	(69,039)	(90,856)	(115,764)	(142,684)	(169,971)	(195,531)	(217,050)
Other receipts/(payments) relating to operating activities	6,291	4,711	2,818	656	(1,681)	(4,049)	(6,268)	(8,135)
Income tax (paid)/received	(4,260)	(6,770)	(10,758)	(15,902)	(22,179)	(29,399)	(37,185)	(44,979)
Cash flows generated by operating activities (1)	166,645	213,296	277,986	352,284	433,156	515,868	594,266	661,430
Investment activities								
Receipts arising from:								
Investments in subsidiaries	-	-	-	-	-	-	-	-
Investments in joint ventures and associates	-	-	-	-	-	-	-	-
Interest and similar income	-	-	-	-	-	-	-	-
Property, plant and equipment	-	-	-	-	-	-	-	-
Dividends	-	-	-	-	-	-	-	-
Investments granted	-	-	-	-	-	-	-	-
Loans granted	-	-	-	-	-	-	-	-
Payments relating to:	-	-	-	-	-	-	-	-
Investments in subsidiaries net of cash and cash equivalents acquired	-	-	-	-	-	-	-	-
Investments in joint ventures and associates	(36,090)	(25,821)	(30,520)	(34,311)	(36,438)	(36,174)	(32,989)	(26,704)
Loans granted	-	-	-	-	-	-	-	-
Property, plant and equipment	(335,379)	(411,784)	(495,224)	(569,312)	(622,864)	(644,623)	(625,519)	(561,034)
Intangible assets	(149,872)	(119,623)	(112,986)	(91,478)	(53,700)	(1,046)	61,775	127,005
Other financial assets	-	-	-	-	-	-	-	-
Other payments related to the investment activities	-	-	-	-	-	-	-	-
Cash flows generated by investment activities (2)	(521,341)	(557,227)	(638,730)	(695,101)	(713,001)	(681,843)	(596,732)	(460,733)
Financing activities								
Receipts arising from:								
Interest and similar income	-	-	-	-	-	-	-	-
Loans obtained	380,794	372,662	423,098	453,893	455,396	420,051	344,581	231,696
Shareholders loans	-	-	-	-	-	-	-	-
Capital contributions	-	-	-	-	-	-	-	-
Capital contributions by non-controlling interests	-	-	-	-	-	-	-	-
Other financing transactions	-	-	-	-	-	-	-	-
Payments relating to:	-	-	-	-	-	-	-	-
Interest and similar expenses	(84,221)	(104,139)	(126,893)	(151,479)	(176,363)	(199,575)	(218,929)	(232,338)
Charges with issuance of new shares	-	-	-	-	-	-	-	-
Dividends distributed	-	-	-	-	-	-	-	-
Loans obtained	-	-	-	-	-	-	-	-
Shareholders loans	-	-	-	-	-	-	-	-
Lease liabilities	(12,948)	(17,583)	(23,139)	(29,483)	(36,339)	(43,288)	(49,798)	(55,278)
Capital contributions / realizations	-	-	-	-	-	-	-	-
Acquisition of non-controlling interests by the Group	-	-	-	-	-	-	-	-
Other financing transactions	-	-	-	-	-	-	-	-
Cash flows generated by financing activities (3)	283,626	250,941	273,066	272,930	242,694	177,188	75,855	(55,920)
Cash and cash equivalents at the beginning of the year	463,517	392,446	299,455	211,778	141,892	104,740	115,952	189,341
Changes in the consolidation perimeter	-	-	-	-	-	-	-	-
Effect of the reclassification to group of assets classified as held for sale	-	-	-	-	-	-	-	-
Effect of exchange rate differences	-	-	-	-	-	-	-	-
Net increase/(decrease) in cash and cash equivalents: (1)+(2)+(3)	(71,071)	(92,991)	(87,678)	(69,886)	(37,151)	11,212	73,389	144,777
Cash and cash equivalents at the end of the year	392,446	299,455	211,778	141,892	104,740	115,952	189,341	334,118

Source: Author Analysis

Appendix 13: Common-size Balance Sheet – Historical

Common-size BS	2018	2019	2020	2021	2022	2023
ASSETS						
NON-CURRENT ASSETS						
Property, plant and equipment	85%	82%	82%	37%	32%	32%
Right-of-use assets	0%	3%	3%	7%	5%	4%
Goodwill	0%	0%	0%	11%	8%	8%
Intangible assets	1%	1%	3%	10%	11%	14%
Investments in joint ventures	0%	0%	0%	0%	3%	2%
Other investments	0%	0%	0%	0%	0%	0%
Other non-current assets	0%	0%	0%	0%	0%	0%
Other debts from third parties	0%	0%	0%	0%	2%	3%
Derivative financial instruments	0%	0%	0%	0%	1%	1%
Deferred tax assets	1%	1%	1%	2%	1%	1%
Total non-current assets	88%	86%	89%	67%	64%	65%
CURRENT ASSETS						
Inventories	1%	1%	0%	0%	2%	2%
Trade receivables	0%	0%	0%	1%	2%	1%
Assets associated with contracts with customers	5%	4%	4%	3%	2%	5%
Other receivables	1%	0%	0%	2%	4%	3%
Income tax receivable	0%	0%	0%	0%	0%	0%
State and other public entities	1%	0%	0%	0%	1%	2%
Other current assets	0%	0%	0%	0%	0%	0%
Derivative financial instruments	0%	0%	0%	0%	0%	0%
Cash and cash equivalents	4%	8%	7%	26%	25%	20%
Total current assets	12%	14%	11%	33%	36%	33%
Group of assets classified as held for sale	0%	0%	0%	0%	0%	1%
Total assets	100%	100%	100%	100%	100%	100%
EQUITY AND LIABILITIES						
EQUITY						
Share capital	0%	0%	0%	27%	24%	16%
Issuance premiums deducted from costs with the issue of shares	0%	0%	0%	0%	0%	0%
Other equity instruments	0%	0%	0%	0%	0%	2%
Legal reserve	0%	0%	0%	0%	0%	0%
Supplementary capital	8%	6%	5%	0%	0%	0%
Other reserves and retained earnings	9%	10%	20%	3%	2%	3%
Amounts recognized in other comprehensive income	0%	0%	0%	0%	0%	0%
Consolidated net profit for the year attributable to Equity holders of the parent	3%	3%	9%	1%	1%	0%
Total equity attributable to shareholders of the Parent Company	20%	20%	34%	31%	27%	20%
Non-controlling interests	0%	0%	0%	4%	3%	5%
Total equity	20%	20%	34%	35%	30%	25%
LIABILITIES						
NON-CURRENT LIABILITIES						
Bank loans	0%	0%	0%	16%	10%	10%
Bond loans	0%	24%	25%	17%	27%	25%
Other loans	0%	0%	0%	4%	3%	4%
Shareholders loans	0%	0%	0%	4%	3%	2%
Lease liabilities	0%	3%	3%	7%	5%	4%
Other payables	0%	0%	0%	2%	1%	1%
Other non-current liabilities	1%	0%	0%	0%	0%	0%
Deferred tax liabilities	2%	1%	2%	4%	3%	2%
Provisions	5%	6%	6%	2%	1%	1%
Derivative financial instruments	0%	0%	0%	4%	4%	3%
Total non-current liabilities	8%	35%	36%	58%	56%	51%
CURRENT LIABILITIES						
Bank loans	0%	0%	0%	1%	5%	2%
Bond loans	0%	0%	1%	0%	0%	3%
Other loans	0%	24%	20%	2%	3%	9%
Shareholders loans	66%	12%	0%	0%	0%	1%
Lease liabilities	0%	0%	0%	0%	0%	0%
Trade payables	4%	6%	4%	2%	2%	2%
Liabilities associated with contracts with customers	0%	0%	0%	0%	0%	0%
Other payables	2%	1%	2%	2%	3%	5%
Income tax payable	1%	0%	2%	0%	0%	0%
State and other public entities	0%	2%	0%	0%	0%	0%
Other current liabilities	0%	0%	0%	1%	1%	1%
Derivative financial instruments	0%	0%	0%	0%	0%	0%
Total current liabilities	72%	46%	30%	7%	14%	23%
Liabilities directly associated with the group of assets classified as held for sale	0%	0%	0%	0%	0%	0%
Total liabilities	80%	80%	66%	65%	70%	75%
Equity + Liabilities	100%	100%	100%	100%	100%	100%

Source: Author Analysis

Appendix 14: Common-size Balance Sheet – Forecast

Common-size BS	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
ASSETS								
NON-CURRENT ASSETS								
Property, plant and equipment	36%	42%	46%	50%	54%	56%	58%	59%
Right-of-use assets	6%	7%	8%	9%	10%	10%	11%	11%
Goodwill	6%	5%	5%	4%	3%	3%	3%	3%
Intangible assets	16%	17%	16%	15%	14%	12%	9%	6%
Investments in joint ventures	3%	3%	3%	4%	4%	4%	4%	4%
Other investments	0%	0%	0%	0%	0%	0%	0%	0%
Other non-current assets	0%	0%	0%	0%	0%	0%	0%	0%
Other debts from third parties	3%	2%	2%	2%	2%	1%	1%	1%
Derivative financial instruments	1%	1%	1%	1%	1%	1%	1%	0%
Deferred tax assets	1%	1%	1%	1%	1%	1%	0%	0%
Total non-current assets	73%	79%	83%	86%	87%	88%	87%	85%
CURRENT ASSETS								
Inventories	2%	2%	2%	3%	3%	3%	3%	3%
Trade receivables	2%	2%	2%	2%	3%	3%	3%	3%
Assets associated with contracts with customers	4%	3%	3%	2%	2%	2%	2%	2%
Other receivables	2%	2%	1%	1%	1%	1%	1%	1%
Income tax receivable	0%	0%	0%	0%	0%	0%	0%	0%
State and other public entities	2%	1%	1%	1%	1%	1%	1%	1%
Other current assets	0%	0%	0%	0%	0%	0%	0%	0%
Derivative financial instruments	0%	0%	0%	0%	0%	0%	0%	0%
Cash and cash equivalents	14%	9%	6%	3%	2%	2%	3%	5%
Total current assets	26%	20%	16%	14%	12%	12%	13%	14%
Group of assets classified as held for sale	1%	1%	1%	1%	1%	0%	0%	0%
Total assets	100%	100%	100%	100%	100%	100%	100%	100%
EQUITY AND LIABILITIES								
EQUITY								
Share capital	13%	11%	10%	8%	7%	6%	6%	5%
Issuance premiums deducted from costs with the issue of shares	0%	0%	0%	0%	0%	0%	0%	0%
Other equity instruments	1%	1%	1%	1%	1%	1%	1%	1%
Legal reserve	0%	0%	0%	0%	0%	0%	0%	0%
Supplementary capital	0%	0%	0%	0%	0%	0%	0%	0%
Other reserves and retained earnings	2%	2%	2%	2%	3%	3%	4%	5%
Amounts recognized in other comprehensive income	0%	0%	0%	0%	0%	0%	0%	0%
Consolidated net profit for the year attributable to Equity holders of the parent	0%	0%	1%	1%	1%	1%	1%	2%
Total equity attributable to shareholders of the Parent Company	17%	15%	13%	12%	12%	12%	12%	13%
Non-controlling interests	4%	4%	4%	4%	4%	4%	5%	6%
Total equity	21%	19%	17%	16%	16%	16%	17%	18%
LIABILITIES								
NON-CURRENT LIABILITIES								
Bank loans	11%	11%	12%	12%	12%	12%	12%	12%
Bond loans	29%	30%	32%	32%	33%	33%	33%	32%
Other loans	3%	4%	4%	4%	4%	4%	4%	4%
Shareholders loans	1%	1%	1%	1%	1%	1%	1%	1%
Lease liabilities	6%	7%	8%	8%	9%	9%	9%	10%
Other payables	1%	1%	1%	1%	1%	1%	1%	0%
Other non-current liabilities	0%	0%	0%	0%	0%	0%	0%	0%
Deferred tax liabilities	2%	2%	1%	1%	1%	1%	1%	1%
Provisions	1%	1%	0%	0%	0%	0%	0%	0%
Derivative financial instruments	2%	2%	2%	1%	1%	1%	1%	1%
Total non-current liabilities	57%	59%	60%	61%	62%	62%	61%	60%
CURRENT LIABILITIES								
Bank loans	5%	5%	6%	6%	6%	6%	6%	6%
Bond loans	2%	2%	2%	2%	2%	2%	2%	2%
Other loans	6%	7%	7%	7%	7%	7%	7%	7%
Shareholders loans	1%	1%	1%	1%	1%	0%	0%	0%
Lease liabilities	0%	0%	0%	0%	0%	0%	0%	0%
Trade payables	2%	3%	3%	3%	4%	4%	4%	4%
Liabilities associated with contracts with customers	0%	0%	0%	0%	0%	0%	0%	0%
Other payables	4%	3%	3%	3%	2%	2%	2%	2%
Income tax payable	0%	0%	0%	0%	0%	0%	0%	0%
State and other public entities	0%	0%	0%	0%	0%	0%	0%	0%
Other current liabilities	1%	1%	0%	0%	0%	0%	0%	0%
Derivative financial instruments	0%	0%	0%	0%	0%	0%	0%	0%
Total current liabilities	22%	22%	22%	22%	22%	22%	22%	22%
Liabilities directly associated with the group of assets classified as held for sale	0%	0%	0%	0%	0%	0%	0%	0%
Total liabilities	79%	81%	83%	84%	84%	84%	83%	82%
Equity + Liabilities	100%	100%	100%	100%	100%	100%	100%	100%

Source: Author Analysis

Appendix 15: Common-size Income Statement – Historical

Common-Size Income Statement	2018	2019	2020	2021	2022	2023
Sales	94%	99%	100%	92%	88%	48%
Services rendered	0%	0%	0%	7%	11%	42%
Other income	6%	1%	0%	1%	2%	10%
Total Revenues	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Costs of sales	-37%	-38%	-43%	-31%	-31%	-40%
External supplies and services	-25%	-27%	-20%	-24%	-22%	-24%
Payroll expenses	0%	0%	0%	-5%	-8%	-10%
Provisions and impairment reversals /(losses) in current assets	0%	0%	0%	0%	0%	0%
Results related to investments	0%	0%	0%	0%	6%	3%
Other expenses	0%	0%	0%	0%	-3%	-1%
Operating profit less amort. Dep. And Imp. Reversals /(losses) in non-current assets	**38%**	**35%**	**37%**	**40%**	**41%**	**27%**
Amortization and depreciation	-14%	-16%	-13%	-19%	-17%	-14%
Impairment reversals /(losses) in non-current assets	-11%	0%	7%	0%	2%	0%
Other results related to investments	0%	0%	0%	0%	0%	-1%
Operating profit	**13%**	**19%**	**30%**	**21%**	**26%**	**11%**
Financial expenses	-1%	-3%	-2%	-6%	-15%	-28%
Financial income	0%	0%	0%	1%	6%	18%
Profit/(loss) before income tax	**12%**	**16%**	**28%**	**15%**	**17%**	**1%**
Income tax	-2%	-4%	-7%	-6%	-3%	1%
Energy sector extraordinary contribution (CESE)	0%	-1%	-1%	-1%	0%	0%
Consolidated net profit from continuing operations	**10%**	**10%**	**20%**	**9%**	**14%**	**2%**
Profit/(Loss) after tax from discontinued operations	0%	0%	0%	0%	-3%	-3%
Consolidated net profit for the period	**10%**	**10%**	**20%**	**9%**	**11%**	**-1%**

Source: Author Analysis

Appendix 16: Common-size Income Statement – Forecast

Common-Size Income Statement	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
Sales	0%	0%	0%	0%	0%	0%	0%	0%
Services rendered	0%	0%	0%	0%	0%	0%	0%	0%
Other income	0%	0%	0%	0%	0%	0%	0%	0%
Total Revenues	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Costs of sales	-33%	-33%	-33%	-33%	-33%	-33%	-33%	-33%
External supplies and services	-26%	-26%	-26%	-26%	-26%	-26%	-26%	-26%
Payroll expenses	-9%	-9%	-9%	-9%	-9%	-9%	-9%	-9%
Provisions and impairment reversals /(losses) in current assets	0%	0%	0%	0%	0%	0%	0%	0%
Results related to investments	2%	1%	1%	1%	1%	1%	1%	0%
Other expenses	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Operating profit less amort. Dep. And Imp. Reversals /(losses) in non-current assets	**32%**	**32%**	**31%**	**31%**	**31%**	**31%**	**31%**	**31%**
Amortization and depreciation	-13%	-13%	-13%	-13%	-12%	-12%	-12%	-11%
Impairment reversals /(losses) in non-current assets	0%	0%	0%	0%	0%	0%	0%	0%
Other results related to investments	0%	0%	0%	0%	0%	0%	0%	0%
Operating profit	**19%**	**18%**	**18%**	**19%**	**19%**	**19%**	**20%**	**20%**
Financial expenses	-16%	-14%	-13%	-12%	-12%	-11%	-11%	-10%
Financial income	0%	0%	0%	0%	0%	0%	0%	0%
Profit/(loss) before income tax	**3%**	**4%**	**5%**	**6%**	**7%**	**8%**	**9%**	**10%**
Income tax	-1%	-1%	-1%	-1%	-1%	-2%	-2%	-2%
Energy sector extraordinary contribution (CESE)	0%	0%	0%	0%	0%	0%	0%	0%
Consolidated net profit from continuing operations	**2%**	**3%**	**4%**	**5%**	**6%**	**6%**	**7%**	**8%**
Profit/(Loss) after tax from discontinued operations	0%	0%	0%	0%	0%	0%	0%	0%
Consolidated net profit for the period	**2%**	**3%**	**4%**	**5%**	**6%**	**6%**	**7%**	**8%**

Source: Author Analysis

Appendix 17: Common-size Cash Flow Statement – Historical

Common-size Cash Flow Statement	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Operating activities						
Receipts from customers	103%	123%	123%	102%	104%	109%
Payments to suppliers	-77%	-73%	-75%	-69%	-80%	-65%
Payments to personnel	0%	0%	0%	-3%	-8%	-9%
Other receipts/(payments) relating to operating activities	-5%	1%	-14%	-5%	-2%	0%
Income tax (paid)/received	-4%	-6%	-2%	-5%	-6%	-2%
Cash flows generated by operating activities (1)	17%	47%	32%	20%	8%	32%
Investment activities						
Receipts arising from:						
Investments in subsidiaries	0%	0%	0%	0%	0%	0%
Investments in joint ventures and associates	0%	0%	0%	0%	0%	0%
Interest and similar income	0%	0%	0%	0%	0%	1%
Property, plant and equipment	0%	0%	0%	0%	1%	1%
Dividends	0%	0%	0%	0%	0%	0%
Investments granted	0%	0%	0%	0%	0%	0%
Loans granted	0%	0%	0%	0%	1%	0%
Payments relating to:	0%	0%	0%	0%	0%	0%
Investments in subsidiaries net of cash and cash equivalents acquired	0%	0%	-1%	-125%	-15%	-7%
Investments in joint ventures and associates	0%	0%	0%	0%	-19%	-19%
Loans granted	0%	0%	0%	-14%	-9%	-9%
Property, plant and equipment	-81%	-49%	-3%	-11%	-33%	-68%
Intangible assets	0%	0%	0%	-17%	-10%	-24%
Other financial assets	0%	0%	0%	0%	0%	0%
Other payments related to the investment activities	0%	0%	0%	0%	0%	0%
Cash flows generated by investment activities (2)	-81%	-49%	-4%	-166%	-85%	-124%
Financing activities						
Receipts arising from:						
Interest and similar income	0%	0%	0%	0%	0%	3%
Loans obtained	0%	276%	444%	393%	193%	415%
Shareholders loans	151%	8%	0%	28%	0%	0%
Capital contributions	0%	0%	0%	141%	38%	0%
Capital contributions by non-controlling interests	0%	0%	0%	29%	0%	0%
Other financing transactions	0%	0%	0%	2%	0%	0%
Payments relating to:	0%	0%	0%	0%	0%	0%
Interest and similar expenses	-1%	-2%	-2%	-6%	-8%	-12%
Charges with issuance of new shares	0%	0%	0%	-5%	-2%	0%
Dividends distributed	0%	0%	0%	0%	-2%	-2%
Loans obtained	-98%	-123%	-455%	-253%	-84%	-288%
Shareholders loans	0%	-141%	-17%	-1%	-1%	-1%
Lease liabilities	0%	-1%	-1%	-1%	-2%	-2%
Capital contributions / realizations	0%	0%	0%	0%	0%	0%
Acquisition of non-controlling interests by the Group	0%	0%	0%	0%	0%	-1%
Other financing transactions	0%	0%	0%	-8%	-7%	-3%
Cash flows generated by financing activities (3)	52%	17%	-30%	319%	126%	110%

Source: Author Analysis

Appendix 18: Common-size Cash Flow Statement – Forecast

Common-size Cash Flow Statement	**2024F**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**2031F**
Operating activities								
Receipts from customers	97%	98%	98%	98%	98%	99%	99%	99%
Payments to suppliers	-57%	-59%	-59%	-59%	-59%	-59%	-59%	-59%
Payments to personnel	-9%	-9%	-9%	-9%	-9%	-9%	-9%	-9%
Other receipts/(payments) relating to operating activities	1%	1%	0%	0%	0%	0%	0%	0%
Income tax (paid)/received	-1%	-1%	-1%	-1%	-1%	-2%	-2%	-2%
Cash flows generated by operating activities (1)	31%	29%	29%	29%	29%	29%	29%	29%
Investment activities								
Receipts arising from:								
Investments in subsidiaries	0%	0%	0%	0%	0%	0%	0%	0%
Investments in joint ventures and associates	0%	0%	0%	0%	0%	0%	0%	0%
Interest and similar income	0%	0%	0%	0%	0%	0%	0%	0%
Property, plant and equipment	0%	0%	0%	0%	0%	0%	0%	0%
Dividends	0%	0%	0%	0%	0%	0%	0%	0%
Investments granted	0%	0%	0%	0%	0%	0%	0%	0%
Loans granted	0%	0%	0%	0%	0%	0%	0%	0%
Payments relating to:	0%	0%	0%	0%	0%	0%	0%	0%
Investments in subsidiaries net of cash and cash equivalents acquired	0%	0%	0%	0%	0%	0%	0%	0%
Investments in joint ventures and associates	-7%	-4%	-3%	-3%	-2%	-2%	-2%	-1%
Loans granted	0%	0%	0%	0%	0%	0%	0%	0%
Property, plant and equipment	-62%	-56%	-51%	-46%	-41%	-36%	-30%	-24%
Intangible assets	-28%	-16%	-12%	-7%	-4%	0%	3%	6%
Other financial assets	0%	0%	0%	0%	0%	0%	0%	0%
Other payments related to the investment activities	0%	0%	0%	0%	0%	0%	0%	0%
Cash flows generated by investment activities (2)	-97%	-76%	-66%	-57%	-47%	-38%	-29%	-20%
Financing activities								
Receipts arising from:								
Interest and similar income	0%	0%	0%	0%	0%	0%	0%	0%
Loans obtained	71%	51%	44%	37%	30%	23%	17%	10%
Shareholders loans	0%	0%	0%	0%	0%	0%	0%	0%
Capital contributions	0%	0%	0%	0%	0%	0%	0%	0%
Capital contributions by non-controlling interests	0%	0%	0%	0%	0%	0%	0%	0%
Other financing transactions	0%	0%	0%	0%	0%	0%	0%	0%
Payments relating to:	0%	0%	0%	0%	0%	0%	0%	0%
Interest and similar expenses	-16%	-14%	-13%	-12%	-12%	-11%	-11%	-10%
Charges with issuance of new shares	0%	0%	0%	0%	0%	0%	0%	0%
Dividends distributed	0%	0%	0%	0%	0%	0%	0%	0%
Loans obtained	0%	0%	0%	0%	0%	0%	0%	0%
Shareholders loans	0%	0%	0%	0%	0%	0%	0%	0%
Lease liabilities	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
Capital contributions / realizations	0%	0%	0%	0%	0%	0%	0%	0%
Acquisition of non-controlling interests by the Group	0%	0%	0%	0%	0%	0%	0%	0%
Other financing transactions	0%	0%	0%	0%	0%	0%	0%	0%
Cash flows generated by financing activities (3)	53%	34%	28%	22%	16%	10%	4%	-2%

Source: Author Analysis

Appendix 19: Forecast Assumptions – General

Item	Description
General	
Number of Years the Forecast	8Y, from 2024 to 2031, considering the period of time (10Y) when a comparable company stabilized Revenues
Risk Free Rate	10Y German Bonds of May 31, 2024
Equity Risk Premium	Damodaran Data
Beta	Pure-Play Method
Cost of Debt	Greenvolt Public Listed Bonds – Average Yield to Maturity
Target Capital Structure	Average Peers' Capital Structure
Terminal Growth Rate	Real GDP Growth Approach

Source: Author Analysis

Appendix 20: Forecast Assumptions – Income Statement

Item	Description
Income Statement	
Revenues – Biomass	2024-2031 Short/medium-term growth expectation of company, meeting Market Growth Forecast
Revenues – Utility-Scale	2024-2031 Short/medium-term growth expectation of company, meeting Market Growth Forecast
Revenues – Distributed Energy	2024-2031 Short/medium-term growth expectation of company, meeting Market Growth Forecast
Cost of Sales	Based on average % of revenues of 2021, 2022 and 2023.
External supplies and services	
Subcontracts	Average % of revenues of 2021, 2022 and 2023
Specialized services	Average % of revenues of 2021, 2022 and 2023
Maintenance and repairs	Average % of PP&E 2021, 2022 and 2023
Energy and fluids	Average % of revenues of 2021, 2022 and 2023
Environmental costs	Average % of revenues of 2021, 2022 and 2023
Insurance	Average % of Non-Current Assets 2021, 2022 and 2023
Business rates	Average % of revenues of 2021, 2022 and 2023
Transport costs	Average % of Revenues 2022 and 2023
Rents and leases	Average % of Revenues 2022 and 2023
Others	Average % of Revenues 2022 and 2023
Payroll expenses	
Remunerations	Average % of Revenues 2022 and 2023
Charges on remuneration	Average % of Revenues 2022 and 2023
Insurance	Average % of Revenues 2022 and 2023
Costs with pensions	Average % of Revenues 2022 and 2023
Other payroll expenses	Average % of Revenues 2022 and 2023
Provisions and impairment reversals /(losses) in current assets	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Results related to investments	Company will keep investments on joint ventures, will have results but cannot predict. 2023 value constant.
Other Expenses	
Windfall tax	No Windfall tax in 2023, as don't mention nothing on notes, consider zero
Expenses on derivative instruments (vPPAs)	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Indirect taxes	Average % of Revenues 2022 and 2023
Donations	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Inventory losses	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Direct taxes	Average % of Revenues 2022 and 2023
Others	Average % of Revenues 2022 and 2023
Amortization and depreciation	Average 2021, 2022 and 2023 % of PP&E + Rights of Use + Intangible assets
Impairment reversals /(losses) in non-current assets	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Other results related to investments	Nothing mentioned on notes regarding this item, cannot predict, consider zero
Financial Expenses	Average YTM of Greenvolt's Bonds
Financial Income	Results from exchange rate gains and interests from related parties, it's not recurring from business, consider zero
Income tax	% of EBT 2022 or zero if EBT is negative
Energy sector extraordinary contribution (CESE)	Constant 2023 CESE value

Source: Author Analysis

Appendix 21: Forecast Assumptions – Balance Sheet

Item	Description
Balance Sheet	
Assets	
Property, plant and equipment	PP&E/Revenues 2023 from Greenvolt progressively matching the Peers PP&E/Revenues
Right-of-use assets	Average % of Revenues 2021, 2022 and 2023
Goodwill	Constant value
Intangible assets	Intangible Assets/Revenues 2023 from Greenvolt progressively matching the Peers Intangible Assets/Revenues
Investments in joint ventures	Average % of PP&E 2022 and 2023
Other investments	Constant value
Other non-current assets	Constant value
Other debts from third parties	Constant value
Derivative financial instruments	Constant value
Deferred tax assets	Constant value
Inventories	Average % of Cost of Sales 2022 and 2023
Trade receivables	Average % of Revenues 2021, 2022 and 2023
Assets associated with contracts with customers	Constant value
Other receivables	Constant value
Income tax receivable	Constant value
State and other public entities	Constant value
Other current assets	Constant value
Derivative financial instruments	Constant value
Cash and cash equivalents	Result from Cash Flow Statement
Group of assets classified as held for sale	Constant value
Equity	
Share capital	Constant value
Issuance premiums deducted from costs with the issue of shares	Constant value
Other equity instruments	Constant value
Legal reserve	Constant value
Supplementary capital	Constant value
Other reserves and retained earnings	Company retains profits, as it doesn't distribute dividends. Add net profit for the year attributable to Equity holders of the parent YoY
Amounts recognized in other comprehensive income	Constant value
Consolidated net profit for the year attributable to Equity holders of the parent	Net Income minus Non-controlling interests (effect in IS)
Non-controlling interests	
Non-controlling interests – Effects on Income Statement	Average % of Net Profit 2021, 2022 and 2023
Non-controlling interests – Effect on Balance Sheet	Constant value
Liabilities	
Bank loans (Non-Current)	Average % of (Total Assets – Cash) 2022 and 2023
Bond loans (Non-Current)	Average % of (Total Assets – Cash) 2022 and 2023
Other loans (Non-Current)	Average % of (Total Assets – Cash) 2022 and 2023
Shareholders loans (Non-Current)	Constant value
Lease liabilities (Non-Current)	Based on Rights of Use Growth minus Lease Payments
Other payables (Non-Current)	Constant value
Other non-current liabilities (Non-Current)	Constant value
Deferred tax liabilities (Non-Current)	Constant value
Provisions (Non-Current)	Constant value
Derivative financial instruments (Non-Current)	Constant value
Bank loans (Current)	Average % of (Total Assets – Cash) 2022 and 2023
Bond loans (Current)	Average % of (Total Assets – Cash) 2022 and 2023
Other loans (Current)	Average % of (Total Assets – Cash) 2022 and 2023
Shareholders loans (Current)	Constant value
Lease liabilities (Current)	Based on Rights of Use Growth minus Lease Payments
Trade payables (Current)	Average % of Cost of Sales 2021, 2022 and 2023
Liabilities associated with contracts with customers (Current)	Constant value
Other payables (Current)	Constant value
Income tax payable (Current)	Constant value
Other tax liabilities (Current)	Constant value
Other current liabilities (Current)	Constant value
Derivative financial instruments (Current)	Constant value
Liabilities directly associated with the group of assets classified as held for sale	Constant value

Source: Author Analysis

Appendix 22: Capital Asset Pricing Model

CAPM	
Rf	2.67%
Beta	0.61
Equity Risk Premium	6.35%
Ke	**6.57%**

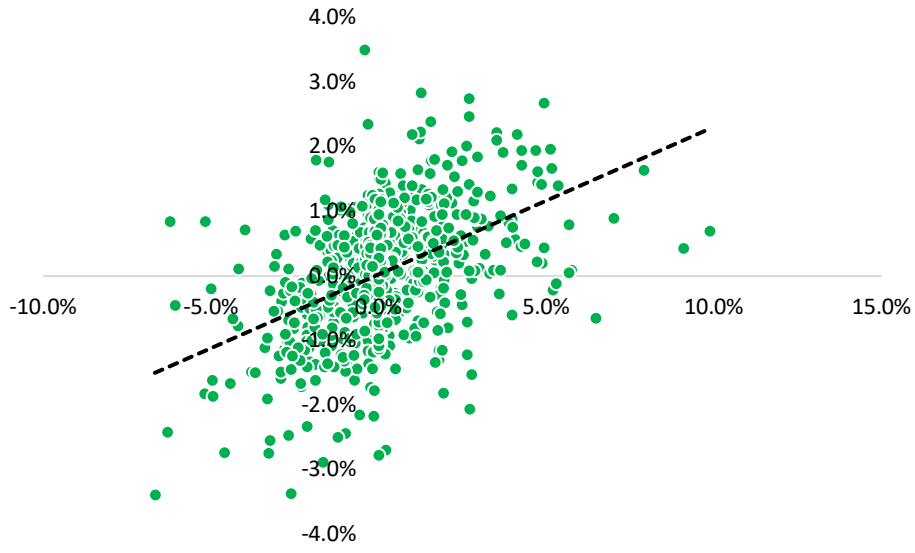
Source: Author Analysis

Appendix 23: Beta – Pure-Play Method

Peer Company	Beta	Market Cap	Debt	Tax Rate	Beta Unlevered
Vestas Wind Systems	1.25	€ 28,145,000,000.00	€3,387,000,000.00	25%	1.15
Grenergy Renovables	1.26	€ 807,411,000.00	€ 752,209,000.00	25%	0.74
EDP	0.55	€ 15,980,000,000.00	€ 22,635,699,000.00	25%	0.27
Iberdrola	0.57	€ 77,549,000,000.00	€ 61,646,000,000.00	25%	0.36
Acciona	0.63	€ 6,615,000,000.00	€ 10,880,000,000.00	25%	0.28
Acciona Energías Renovables	0.40	€ 7,092,000,000.00	€ 4,617,000,000.00	25%	0.27
Beta Unlevered					
Mean	0.51				
Median	0.32				
Greenvolt – Energias Renováveis	**0.61**	€1,156,000,000.00	€1,350,937,800.00	21%	

Source: Author Analysis and Yahoo Finance

Appendix 24: Beta – Linear Regression (Daily, PSI20)



Unadjusted Beta	Beta with Blume Adjustment
0.9961	0.9974

Source: Author Analysis

Appendix 25: Cost of Debt – Yield to Maturity

	GREEN262510NOV28	GREEN 5,2% 18NOV27	GREEN 4,65%14FEB29
Payment Periods Left	5	8	10
Coupon	2.625%	5.20%	4.65%
Payment Amount	2.63	2.60	2.33
Market Value	-94.6	-100.6	-99.4
Face Value	100	100	100
YTM	**3.83%**	**5.03%**	**4.79%**
Nominal Value	€ 100,000,000.00	€ 150,000,000.00	€ 100,000,000.00
Market Value	€ 94,600,000.00	€ 150,900,000.00	€ 99,400,000.00
Weighted Average	**4.63%**		

Source: Author Analysis and Euronext

Appendix 26: Cost of Debt – Direct Method

	2018	2019	2020	2021	2022	2023
Interest Expenses	€ 600,000.00	€ 1,900,000.00	€ 1,791,223.00	€ 9,056,049.00	€ 35,540,136.00	€ 108,452,503.00
Debt + Lease Liabilities	€ 111,300,000.00	€ 131,000,000.00	€ 96,137,258.00	€ 508,312,453.00	€ 828,726,205.00	€ 1,350,937,803.00
Cost of Debt		1.45%	1.86%	1.78%	4.29%	8.03%
Average Kd	6.158%					
Marginal tax rate	21%					
After Tax Kd	4.865%					

Source: Author Analysis and Company Data

Appendix 27: Cost of Debt – Credit Spreads

Credit Spreads Method	
Risk Free Rate	2.67%
Interest Coverage Ratio	1.64
Rating	B3/B-
Credit Risk Spread (Damodaran)	5.24%
Cost of Debt	7.91%

Source: Author Analysis

Appendix 28: Average Peers Capital Structure

Peer Company	Debt	Equity	E/(E+D)	D/(E+D)
Vestas Wind Systems	3,387,000.00	3,042,000.00	0.47	0.53
Grenergy Renovables	752,209.00	343,730.00	0.31	0.69
EDP	22,635,699.00	16,656,803.00	0.42	0.58
Iberdrola	61,646,000.00	60,292,000.00	0.49	0.51
Acciona	10,880,000.00	6,851,000.00	0.39	0.61
Acciona Energías Renovables	4,617,000.00	6,339,000.00	0.58	0.42
Average			**0.45**	**0.55**

Source: Author Analysis and Yahoo Finance

Appendix 29: Discounted Cash Flow Approach

(Amounts Expressed in Thousands of Euros)

	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
EBIT	101,479	134,308	177,587	228,642	285,820	346,182	405,596	459,108
EBIT (1-t)	80,168	106,104	140,294	180,627	225,798	273,484	320,421	362,695
Depreciation and Amortization	71,664	97,918	125,735	156,188	187,502	217,317	242,934	261,680
Changes in NWC	2,238	12,160	14,577	16,643	17,987	18,233	17,078	14,379
CAPEX	485,251	531,406	608,210	660,789	676,563	645,669	563,744	434,029
Free Cash Flow to the Firm	(335,656)	(339,546)	(356,758)	(340,618)	(281,251)	(173,100)	(17,467)	175,967
Discounted FCFF	(335,656)	(323,511)	(323,859)	(294,604)	(231,770)	(135,910)	(13,067)	125,420

Discounted Cash Flow Model		
FCFF PV (2024YE)		(1,197,300.44)
Terminal Value		5,565,958.60
Terminal Value PV (2024YE)		3,967,113.94
Enterprise Value		2,769,813.50
Debt		1,639,795.75
Cash		392,446.03
Non-Controlling Interests		115,985.39
Equity Value		1,406,478.39
Number of Shares Outstanding		139,169,046.00
Equity Value per Share (2024)	**€**	**10.11**

Source: Author Analysis

Appendix 30: Adjusted Present Value Approach

(Amounts Expressed in Thousands of Euros)

	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
Free Cash Flow to the Firm	(335,656)	(339,546)	(356,758)	(340,618)	(281,251)	(173,100)	(17,467)	175,967
Discounted FCFF	(335,656)	(321,855)	(320,552)	(290,105)	(227,062)	(132,468)	(12,671)	120,995
FCFF Terminal Value								4,766,000
Discounted FCFF Terminal Value								3,277,112
Interest Expenses	84,221	104,139	126,893	151,479	176,363	199,575	218,929	232,338
Tax Shield	16,368	20,239	24,662	29,440	34,276	38,787	42,549	45,155
Discounted Tax Shield	16,368	19,185	22,159	25,074	27,672	29,683	30,865	31,049
TS Terminal Value								1,223,004
Discounted TS Terminal Value								840,940

Adjusted Present Value Approach		
PV FCFF (2024YE)		2,093,395
PV Interest Tax Shield		1,026,626
Adjusted Present Value		**3,120,021**
Debt		1,639,796
Cash		392,446
Non-Controlling Interests		115,985
Equity Value		**1,756,686**
Number of Shares Outstanding		139,169,046
Equity Value per Share (2024)	**€**	**12.62**

Source: Author Analysis

Appendix 31: Flow to Equity Approach

(Amounts Expressed in Thousands of Euros)

	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
Free Cash Flow to the Firm	(335,656)	(339,546)	(356,758)	(340,618)	(281,251)	(173,100)	(17,467)	175,967
Interest Expenses (1-t)	(67,852)	(83,899)	(102,231)	(122,039)	(142,087)	(160,788)	(176,380)	(187,183)
Net Debt	451,865	465,653	510,775	523,779	492,547	408,839	271,193	86,919
Free Cash Flow to the Equity	48,356	42,208	51,786	61,122	69,210	74,951	77,345	75,703
Discounted FCFE	48,356	39,604	45,594	50,495	53,649	54,516	52,787	48,480

Flow to Equity Approach		
Present Value FCFE		345,125
Terminal Value		1,593,354
Discounted Terminal Value		1,020,370
Non-Controlling Interests		115,985
Non-Operating Assets		392,446
Equity Value		**1,641,956**
Number of Shares Outstanding		139,169,046
Equity Value per Share	**€**	**11.80**

Source: Author Analysis

Appendix 32: Relative Valuation – Multiples Approach

Peer Company	P/E	P/S	P/BV	EV/Sales	EV/EBIT	EV/EBITDA
Greenvolt	**(332.61)**	**3.34**	**2.02**	**5.93**	**34.79**	**18.21**
Vestas Wind Systems A/S	360.83	1.83	9.25	1.91	87.06	26.06
Grenergy Renovables SA	15.81	4.51	2.35	8.04	16.53	13.70
EDP	12.00	0.99	0.96	2.21	11.68	6.99
Iberdrola	14.38	1.57	1.29	2.43	13.18	8.04
Acciona S.A.	10.65	0.37	0.97	0.74	9.94	5.45
Acciona Energías Renovables	12.51	2.00	1.12	3.07	12.04	7.75
Multiples Mean	**13.37**	**2.09**	**2.56**	**3.47**	**26.46**	**12.32**

Multiple Analysis	P/E	P/S	P/BV	EV/Sales	EV/EBIT	EV/EBITDA
Implied Price (€)	(0.33)	5.18	10.55	2.12	4.69	3.45

	Max	Min
Price Range (€)	10.55	2.12
Price Target (€)	**5.20**	

Source: Author Analysis

Appendix 33: Consensus Recommendation

Contributor	Target Price (€)	Price Target Date
ALANTRA EQUITIES	8.32	28-Mar-2024
ODDO BHF	10.00	27-Mar-2024
BNP PARIBAS EXANE	8.30	19-Jan-2024
BANCO SANTANDER	8.70	22-Dec-2023
CAIXABANK BPI	8.30	21-Dec-2023
Undisclosed	8.00	01-Dec-2023
JB CAPITAL	Undisclosed	11-Oct-2023
ESN/CAIXA BANCO DE INVESTIMENTO (PORTUGAL)	Undisclosed	28-Jun-2023

Source: Refinitiv

Appendix 34: Greenvolt Financial Ratios – Historical

	2018	2019	2020	2021	2022	2023
Profitability Ratios						
Profit Margin	9.67%	10.43%	19.90%	8.66%	10.52%	-0.90%
Turnover	31.68%	31.93%	45.87%	14.04%	15.83%	16.85%
Leverage	5.07	5.12	2.92	2.88	3.29	4.00
ROE (Dupont)	15.54%	17.06%	26.63%	3.50%	5.47%	-0.61%
ROA	3.06%	3.33%	9.13%	1.22%	1.67%	-0.15%
Activity Ratios						
Working Capital Turnover	21.02	(9.67)	(10.46)	5.30	3.29	3.57
Fixed Asset Turnover	37.10%	39.09%	56.15%	38.24%	49.44%	53.07%
Total Assets Turnover	31.68%	31.93%	45.87%	14.04%	15.83%	16.85%
Liquidity Ratios						
Current Ratio	17.07%	29.61%	37.95%	443.15%	258.39%	142.66%
Quick Ratio	5.45%	17.21%	24.10%	366.58%	187.98%	92.30%
Cash Ratio	5.45%	17.21%	24.07%	348.88%	177.28%	86.53%
Solvency Ratios						
Debt Ratios						
Debt to Assets	65.55%	61.02%	45.83%	43.69%	49.17%	55.04%
Debt to Equity	3.33	3.13	1.34	1.26	1.62	2.20
Debt to Capital	65.55%	61.02%	45.83%	43.69%	49.17%	55.04%
Coverage Ratios						
Interest Coverage	11.33	6.37	15.19	3.30	1.76	0.41
Fixed Charge Coverage	8.72	6.28	13.54	2.55	2.29	0.70
Valuation Ratios						
Price close YE	N/A	N/A	N/A	€ 6.35	€ 7.80	€ 8.18
Shares Outstanding	N/A	N/A	N/A	139,169,046	139,169,046	139,169,046
Market Cap	N/A	N/A	N/A	€ 883,723,442.10	€ 1,085,518,558.80	€ 1,138,402,796.28
Price to Earnings	N/A	N/A	N/A	72.12	42.58	(327.55)
Price to Cash Flow	N/A	N/A	N/A	3.63	8.51	16.72
Price per Sales	N/A	N/A	N/A	6.25	4.48	2.95
Price per Book Value	N/A	N/A	N/A	2.52	2.33	1.99
Dividend Payout Ratio	0	0	0	0	0	0
Dividend Yield	0	0	0	0	0	0

Source: Author Analysis

Appendix 35: Greenvolt Financial Ratios – Forecast

	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
Profitability Ratios								
Profit Margin	2.41%	3.19%	4.14%	4.98%	5.76%	6.50%	7.20%	7.89%
Turnover	19.29%	22.38%	25.15%	27.56%	29.59%	31.26%	32.57%	33.53%
Leverage	4.78	5.38	5.91	6.28	6.42	6.31	5.99	5.52
ROE (Dupont)	2.22%	3.84%	6.16%	8.63%	10.95%	12.82%	14.05%	14.59%
ROA	0.46%	0.71%	1.04%	1.37%	1.71%	2.03%	2.35%	2.65%
Activity Ratios								
Working Capital Turnover	4.89	5.98	7.04	7.99	8.82	9.50	10.03	10.41
Fixed Asset Turnover	53.07%	53.59%	54.13%	54.68%	55.24%	55.81%	56.39%	56.98%
Total Assets Turnover	19.29%	22.38%	25.15%	27.56%	29.59%	31.26%	32.57%	33.53%
Liquidity Ratios								
Current Ratio	116.75%	91.13%	72.33%	60.12%	53.97%	53.32%	57.76%	67.13%
Quick Ratio	70.84%	49.71%	34.52%	25.08%	20.93%	21.61%	26.81%	36.45%
Cash Ratio	63.10%	40.80%	24.55%	14.15%	9.14%	9.05%	13.55%	22.56%
Solvency Ratios								
Debt Ratios								
Debt to Assets	58.60%	61.44%	63.51%	64.80%	65.35%	65.23%	64.49%	63.18%
Debt to Equity	2.80	3.31	3.75	4.07	4.20	4.12	3.86	3.48
Debt to Capital	58.60%	61.44%	63.51%	64.80%	65.35%	65.23%	64.49%	63.18%
Coverage Ratios								
Interest Coverage	1.20	1.29	1.40	1.51	1.62	1.73	1.85	1.98
Fixed Charge Coverage	0.91	0.96	1.03	1.10	1.17	1.25	1.32	1.40
Valuation Ratios								
Price close EoY	€ 8.30							
Shares Outstanding	139,169,046.00							
Market Cap	€ 1,155,103,081.80							
Price to Earnings	88.87							
Price to Cash Flow	(16.25)							
Price per Sales	2.14							
Price per Book Value	1.97							
Dividend Payout Ratio	0							
Dividend Yield	0							

Source: Author Analysis

Appendix 36: Sensitive Analysis – WACC and Terminal Growth Rate

Terminal Growth Rate \ WACC	3.96%	4.46%	4.96%	5.46%	5.96%
0.74%	€ 11.60	€6.77	€3.13	€0.31	€ (1.93)
1.24%	€ 17.33	€ 10.84	€6.15	€2.62	€ (0.12)
1.74%	€ 25.65	€ 16.41	€ 10.11	€5.55	€2.13
2.24%	€ 38.81	€ 24.49	€ 15.52	€9.40	€4.98
2.74%	€ 62.80	€ 37.28	€ 23.37	€14.66	€8.72

Source: Author Analysis

Appendix 37: Sensitive Analysis – Revenues Growth 2024

Shift Revenue Growth 2024				
-10%	-5%	0%	5%	10%
€ 7.97	€ 8.97	€ 10.11	€ 11.41	€ 12.88

Source: Author Analysis

Appendix 38: Scenario Analysis

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
Revenues	Industry Growth	Expectation Meeting Industry	Company Expectation
	-53.91%	21.62%	38.87%
Price (€)	3.83	10.11	11.54
	Sell	Buy	Strong Buy

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
WACC	5.96%	4.96%	3.96%
	-74.37%	21.62%	208.66%
Price (€)	2.13	10.11	25.65
	Sell	Buy	Strong Buy

	Pessimistic Scenario	Base Scenario	Optimistic Scenario
g	0.74%	1.74%	2.74%
	-62.33%	21.62%	181.23%
Price (€)	3.13	10.11	23.37
	Sell	Buy	Strong Buy

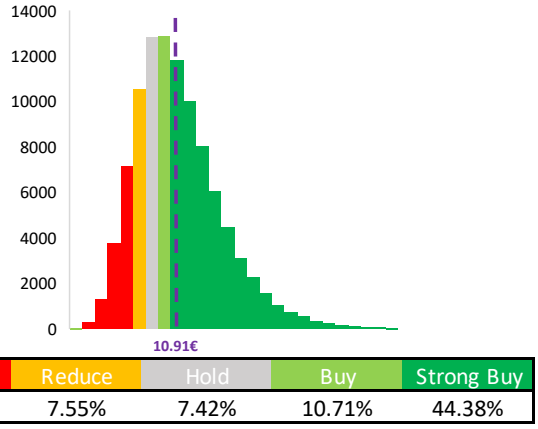
Black Swan Scenario	
Revenues	Industry Growth
g	0.74%
WACC	5.96%
	-107.58%
Price (€)	-0.63
	Sell

2023 Revenues Growth	
Revenues	Meeting Industry
	60%
Price (€)	13.33
	Strong Buy

Source: Author Analysis

Appendix 39: Monte Carlo Simulation

Testing Variables		
Variable	**Mean**	**Standard Deviation**
Rf	2.67%	0.14%
g	1.74%	0.50%



Indicator		Value
Trials		100,000.00
Base case	€	10.11
Minimum	€	(1.58)
Maximum	€	63.59
Mean	€	10.91
Median	€	10.13
Standard Deviation		5.14
Skewness		1.18
Kurtosis		3.10
10th percentil	€	5.22
90th percentil	€	17.50

Source: Author Analysis

Appendix 40: Risk Matrix

Risk	Classification	Code	Severity	Likelihood	Risk Impact	Classification
Limited availability of feedstocks to Biomass	Operational	O1	5	1	5	Low
Intermittency of Solar energy	Operational	O2	4	1	4	Low
Intermittency of Wind energy	Operational	O3	4	1	4	Low
Development of another energy sources	Operational	O4	3	5	15	High
Technological evolution may not perform as expected	Operational	O5	4	2	8	Medium
Changes in Political Support and tax exemptions	Political	P1	4	1	4	Low
Decrease in fossil fuel prices	Market	M1	4	2	8	Medium
Oils and Gas purchase Renewable Businesses	Market	M2	4	2	8	Medium
Financing Costs Increase	Market	M3	4	3	12	Medium
Negative environmental impacts	Social	S1	5	2	10	Medium

Source: Author Analysis