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Equity Valuation of Encavis

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Abstract

This thesis evaluates Encavis AG, a leading European renewable energy producer, using Discounted Cash Flow (DCF) and relative valuation methods. The analysis incorporates industry benchmarks, financial trends, and macroeconomic forecasts to determine the company's intrinsic value. Sensitivity analysis highlights the model's dependence on assumptions, particularly the Weighted Average Cost of Capital and terminal growth rates. The DCF valuation suggests a share price of €17.29, aligned with market expectations, while relative valuation offers a range from €13.98 to €21.48. The findings support a hold recommendation, reflecting limited upside potential amid competitive pressures and stable growth prospects.

Keywords: Discounted Cash Flow Analysis, Comparable Company Analysis, Equity Valuation, Share Price, Renewable Energy, Encavis WACC

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List of Acronyms

CAGR - Compound Annual Growth Rate

CAPEX - Capital Expenditure

CCA – Comparable Company Analysis

CCC – Cash Conversion Cycle

CFO – Chief Financial Officer

CIO – Chief Investment Officer

COO – Chief Operating Officer

DCF - Discounted Cash Flow

DIO – Days Inventory Outstanding

DPO – Days Payables Outstanding

DSO – Days Sales Outstanding

EBITDA - Earnings Before Interest, Taxes, Depreciation, and Amortization

EIA - Energy Information Administration

EV - Enterprise Value

FiT - Feed-in Tariff

GW - Gigawatt

IEA - International Energy Agency

IPP - Independent Power Producer

LCOE - Levelized Cost of Energy

MW - Megawatt

NWC - Net Working Capital

OPEX - Operational Expenses

P/E - Price-to-Earnings Ratio

PPA - Power Purchase Agreement

PPE - Property, Plant, and Equipment

PV – Photovoltaic

PV – Present Value

ROA - Return on Assets

ROE - Return on Equity

ROIC - Return on Invested Capital

RONIC - Return on New Invested Capital

RR - Reinvestment Rate

RTB – Ready-to-build

UNFCCC - United Nations Framework Convention on Climate Change

WACC - Weighted Average Cost of Capital

1 Company Analysis

1.1 Company overview

Encavis AG is a German independent power producer (IPP), specializing in the acquisition and operation of onshore wind and solar PV parks. The Hamburg, Germany-based company's origins date back to 1998 when it was founded as CHORUS Group. In 2017, after Capital Stage AG and CHORUS Clean Energy AG combined into one entity, the company was renamed as Encavis. Listed on the MDAX stock exchange, the company focuses on generating electricity from renewable sources and selling it through long-term contracts. (Encavis AG 2024)

With a total installed capacity of 2.2 GW, the company currently operates over 300 renewable energy generating units, containing more than 200 solar parks and 90 wind farms. Encavis's strategic focus on renewable energy generation aligns with the global sustainability efforts, offering both environmental and economic benefits. Encavis AG is the head of the Encavis group that consists of more than 300 subsidiaries. (Encavis AG 2024)

1.2 Geographical presence

The company's operations are located in twelve different countries across Western Europe. Encavis's management has strategically selected this region for the political stability and reliable regulatory frameworks, which support renewable energy expansion. This approach helps Encavis to mitigate country and operating risk. However, it also limits the company's ability to enter underdeveloped markets with possibly higher growth potentials. As a result, the company faces severe competition in mature markets, which could affect future growth and returns to shareholders. To address this challenge, the company may consider exploring emerging markets in the long run to exploit underutilized renewable energy potential. (Encavis AG 2024)



Figure 1: Encavis geographical footprint by installed capacity
Source: Figure retrieved from Encavis Factbook 2023

In financial terms, the three most significant countries are Germany, Italy and Spain, accounting for more than 60% of revenues and assets. (Encavis AG 2024) (*Appendix 1*)

1.3 Management and Shareholder Structure

The Board of Directors at Encavis AG ensures the company operates effectively, ethically, and in alignment with strategic objectives. It provides oversight and guidance, monitoring management activities to maintain compliance with corporate goals and regulatory requirements. (Encavis AG 2024)

The Management Board, comprising Dr. Christoph Husmann (CFO) and Mario Schirru (CIO), jointly oversees the company's operations, ensuring efficient execution of its business strategy. (Encavis AG 2024) (*Appendix 2*)

The Supervisory Board, consisting of nine members, plays a critical role in governance and strategic oversight. It has established two specialized committees, with each chairman regularly reporting on their activities. (Encavis AG 2024) (*Appendix 3*)

Key responsibilities of the board include evaluating and improving the Internal Control System (ICS) to ensure operational and financial integrity, risk management, and compliance. It monitors business processes, financial reporting, and regulatory adherence while supporting staff development through regular training. (Encavis AG 2024)

Encavis's shareholder structure exhibits the presence of strong and long-term institutional investors. Majority of the shares are categorized as free float, with the remainder held by a group of core investors, including German individuals, and investment and asset management companies. This structure helps serve the high interest of anchor investors, while maintaining the rest for foundational shareholders to increase stability. (Encavis AG 2024) (*Appendix 4*)

As of September 30, 2024, the company's shares amounted to 161.72 million with a share price of 17.40, resulting in a market capitalization of €2.78 billion. (Encavis AG 2024)

1.4 Key operating metrics

Encavis achieved consistent revenue growth, driven by increased electricity generation, over the previous five years, except for 2023 due to lower prices and reduced production. Revenue and electricity generation have both surged substantially, with an 11.0% and 14.2% CAGR, respectively, between 2019 and 2023. Electricity production was boosted by constant investments in the balance sheet, especially in property, plant, and equipment (PPE), that primarily comprise power generation installations. As displayed below, the consistent revenue growth was attained at the expense of profitability, as the EBITDA margin shrank from 79% to 69% between 2019 and 2023. (Encavis AG 2024)

(in thd)	2019	2020	2021	2022	2023	5-year CAGR
Electricity production (GWh)	€ 1 728	€ 2 073	€ 2 755	€ 3 133	€ 3 354	14,2%
Operating revenues	€ 273 822	€ 292 300	€ 332 703	€ 487 342	€ 460 596	11,0%
Operating EBITDA	€ 217 626	€ 224 819	€ 256 398	€ 350 022	€ 319 249	8,0%
EBITDA margin	79,5%	76,9%	77,1%	71,8%	69,3%	
Balance sheet total	€ 2 747 035	€ 2 823 844	€ 3 215 888	€ 3 405 542	€ 3 573 555	5,4%
PPE	€ 1 749 657	€ 1 901 989	€ 2 174 952	€ 2 304 994	€ 2 431 213	6,8%
% Power generation installations in PPE	107,1%	112,1%	93,0%	90,4%	90,7%	
Equity	€ 722 713	€ 751 561	€ 1 066 388	€ 956 817	€ 1 186 929	10,4%
Equity ratio	26,3%	26,6%	33,2%	28,1%	33,2%	

Figure 2: Encavis key operating metrics
Source: Encavis 2023 Annual Report, Own Analysis

1.5 Business Model

The business model of Encavis is centered around the acquisition and operation of ground mounted PV (photovoltaic) and onshore wind parks. Besides the core business, the company engages in asset management and offers services as part of its operations. The company's

business can be categorized into five main parts: solar parks, wind parks, service, asset management and administration. (Encavis AG 2024)

Segment	Key Focus	Revenue Drivers	Risk Management	Contribution to Revenue (%)
Solar PV and Wind Parks	Acquisition and operation of solar PV and wind parks	FiTs and PPAs	Long-term, stable contracts, minimal disruption and limited currency risk, acquisition of RTB projects	66% + 22%
Service	Monitoring and maintaining renewable energy plants	Service fees from maintenance contracts	Services provided locally by specialized teams, using cutting edge technology	9%
Asset Management	Managing renewable energy assets for third parties	Management fees from institutional clients	Focuses on institutional-grade assets with low risks	2%
Administration	Managing administrative transactions for the group			1%

Figure 3: Encavis's business segments
Source: Encavis 2023 Annual Report, Own Analysis

1.6 Strategy

Encavis is dedicated to driving the ongoing energy transition, and as one of the most prominent IPPs of the region the company takes on the responsibility to provide electricity from renewable sources. In line with this mission, Encavis has launched the “Accelerated Growth Strategy 2027”, reaffirming its full dedication to this ambitious goal. To leverage the optimal combination of client potential, asset base, and favorable political environment the strategy will focus on five core markets: Germany, Italy, Spain, the Netherlands, and Denmark. While Encavis intends to sustain operations in its non-core markets with limited offerings, it does not

plan to expand into new countries for the time being. The investment strategy will remain concentrated on solar and wind power generation installations, with rooftop systems and storage solutions forming a country specific complement. (Encavis AG 2024)

Recently, Encavis has uplifted its strategic target, raising the objective for installed capacity from 2.2 GW to 7 GW, exceeding the previously set goal of 5.8 GW. The new target became achievable through a partnership with KKR & Viessmann, which eliminates funding barriers and offers strategic support to assist the attainment of the expanded target. The company plans to invest over €3 billion by the end of 2027 in order to achieve the new ambitious goal.

To finance the expansion, Encavis aims to borrow at holding level, refinance existing parks, sell minority stakes of up to 49%, and collaborate with equity partners. (Encavis AG 2024)

1.7 Historical Analysis

This section aims to analyze the historical financial and operational performance of Encavis. In order to obtain valuable insights and draw meaningful conclusions the metrics are benchmarked against the sector. For this purpose, seven peers were carefully selected to ensure operational and financial similarity. The sector comparison is based on the median values of these comparable companies. (*Appendix 5*)

1.7.1 Return

Encavis's ability to generate returns is evaluated using three key metrics: Return on Invested Capital (ROIC), Return on Assets (ROA), and Return on Equity (ROE). These metrics provide insights into the company's operational efficiency and financial performance.

ROIC reflects Encavis's efficiency in generating operational returns through effective capital utilization. Over the analyzed period:

- Remained relatively **stable between 1.7% to 2.9%**, while constantly underperforming the sector between 2017 and 2023.

ROA measures how effectively the company utilizes its assets to generate returns. Due to the inherently capital-intensive nature of the renewable energy sector, ROA has remained stable yet comparatively lower than in other industries:

- **Ranged between 0.4 - 2.6%** from 2017 to 2023, slightly underperforming the sector median and reflecting inefficient use of PPE relative to its peers.

ROE indicates how effectively Encavis generates returns for its shareholders. The company has seen notable fluctuations in this metric:

- ROE peaked at **11.8% in 2021**, supported by strong revenue performance.
- Dropped significantly to **6.3% in 2023**, driven by a decline in net income rather than changes in equity.

	Encavis AG							Sector						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
ROIC	2,2%	1,7%	2,2%	2,1%	2,5%	2,9%	2,7%	4,7%	5,2%	4,7%	5,9%	3,3%	4,8%	4,2%
ROA	1,1%	0,4%	1,1%	0,7%	2,6%	2,5%	1,6%	3,3%	1,9%	0,7%	3,8%	3,7%	3,0%	2,0%
ROE	4,6%	1,9%	5,2%	3,1%	10,1%	11,8%	6,3%	16,9%	9,8%	5,1%	9,3%	9,0%	9,1%	5,6%

Figure 4: Encavis return metrics
Source: LSEG Eikon, Own Analysis

In conclusion, Encavis achieves returns on equity, assets, and invested capital that approximately align with industry benchmarks.

1.7.2 Revenue and Profitability

In the prior seven years, Encavis has exhibited double-digit growth for revenue, except for 2020 and 2023:

- Revenue growth declined to **-3.6% in 2023**, despite a 7% increase in energy production, due to significant price reductions in Germany, the Netherlands, and Spain.
- Achieved a **13.2% revenue CAGR** between 2017 and 2023, though this growth rate was lower than the sector average.

The **gross margin** demonstrated sensitivity to energy price fluctuations:

- Remained around **53.2% between 2017 and 2021**, reflecting stable performance.
- Increased to **66.6% in 2022**, driven by higher energy prices across key markets.

- Declined to **59.1% in 2023**, following significant price reductions in core markets

The sector consistently maintained higher gross margins, indicating that Encavis faced challenges in managing costs compared to its peers.

Encavis's **EBITDA margin** followed a declining trend over the observed period, influenced by rising operational expenses:

- Declined from **85.6% in 2017** to **71.9% in 2023**, reflecting the impact of higher maintenance and development costs for solar and wind parks.
- The reduction aligns with a broader sector trend, where the median EBITDA margin decreased by **9.2%** during the same timeframe.

Since revenues consistently increased, the shrinking EBITDA margin was caused by higher operational expenses, especially due to an increase in the cost for solar and wind parks.

The **profit margin** exhibited notable fluctuations during the period:

- Declined from **39.5% in 2017** to **29.5% in 2020**, indicating operational inefficiencies.
- Rebounded to **46.8% in 2022**, supported by favorable energy prices.
- Settled at **36.9% in 2023**, suggesting increased pressure on operational efficiency.

Compared to its peers, Encavis's profit margin fluctuations were more pronounced, as the sector median remained within a narrower range of **35.6% - 42.4%** throughout the period.

	Encavis AG							Sector						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
Revenue growth	52,2%	11,8%	10,1%	6,7%	13,8%	46,5%	-3,6%	-7,0%	8,6%	8,6%	18,0%	14,7%	35,3%	4,2%
Gross Margin	53,2%	54,5%	53,7%	52,2%	53,2%	66,6%	59,1%	56,1%	55,3%	68,0%	64,2%	65,3%	64,0%	65,5%
EBITDA Margin	85,6%	78,5%	78,9%	76,2%	85,1%	78,1%	71,9%	70,2%	71,7%	75,0%	71,2%	70,3%	61,5%	61,0%
Profit Margin	39,5%	33,7%	33,4%	29,5%	39,6%	46,8%	36,9%	38,4%	38,9%	42,4%	35,6%	39,4%	37,7%	40,2%

Figure 5: Encavis profitability metrics
Source: LSEG Eikon, Own Analysis

1.7.3 Liquidity

Liquidity analysis typically involves three key metrics: current, quick, and cash ratio. These ratios intend to assess the firm's ability to meet its short-term obligations relative to its current activity parameters.

The **current ratio** measures the company's ability to cover its current liabilities with current assets, while the quick ratio refines this by excluding inventory and focusing on more liquid assets such as cash and receivables. (Nova School of Business and Economics, n.d.)

- Encavis's current and quick ratios remained **above 1.0** throughout most of the observed period, except in 2022.
- Both ratios align with industry standards, demonstrating the company's capability to manage short-term liabilities effectively.

The **cash ratio** offers a conservative perspective by considering only cash and cash equivalents relative to current liabilities. (Nova School of Business and Economics, n.d.)

- Encavis's cash ratio **fluctuated between 0.5 and 0.7**, with an **outlier of 1.6 in 2021**.
- This metric assumes a highly conservative scenario, making the industry median a more practical benchmark. Encavis's performance on this ratio aligns with sector norms.

In conclusion, Encavis exhibited strong liquidity throughout the observed period, meeting short-term liabilities without holding excessive free cash. This balance reflects efficient capital management and alignment with industry benchmarks.

	Encavis AG							Sector						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
Current ratio	1.5	1.3	1.2	1.5	2.1	0.8	1.0	2.1	1.9	1.8	1.2	1.1	1.4	1.2
Quick ratio	1.5	1.3	1.2	1.5	2.1	0.8	1.0	1.4	1.5	1.6	1.0	0.8	1.0	1.2
Cash ratio	0.7	0.7	0.7	0.8	1.6	0.5	0.6	0.7	1.6	1.0	0.6	0.6	0.7	0.4

Figure 6: Encavis liquidity ratios
Source: LSEG Eikon, Own Analysis

1.7.4 Cash Conversion Cycle

Encavis demonstrated strong working capital efficiency over the 2017–2023 period, consistently outperforming the sector in receivables management, as reflected in its low Days Sales Outstanding (DSO). Its inventory management was similarly efficient, with Days Inventory Outstanding (DIO) remaining significantly below sector levels, highlighting its reliance on fixed assets rather than inventory-heavy operations.

However, Encavis's Days Payables Outstanding (DPO) was consistently lower than the sector, indicating less reliance on supplier credit. This constrained its ability to optimize cash flow compared to peers.

Encavis maintained a negative Cash Conversion Cycle (CCC) throughout the period, a characteristic that appears typical in the renewable energy sector. Given that a lower CCC signifies better cash flow management and less pressure on liquidity, Encavis's consistently lower CCC compared to the sector reflects superior efficiency in managing its working capital and operational cash flow.

	Encavis AG							Sector						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
DSO	66	53	60	58	52	52	60	95	126	143	151	114	112	131
DPO	166	120	81	117	178	124	101	162	53	295	293	222	215	305
DIO	3	3	3	2	5	19	17	47	100	91	134	84	86	88
CCC	-98	-63	-18	-56	-121	-53	-25	-20	172	-61	-8	-24	-18	-86

Figure 7: Encavis cash conversion cycle
Source: Annual Reports, Own Analysis

1.7.5 Capital Structure

Before analyzing Encavis's capital structure, it is important to note that there is no definitive benchmark for optimal debt levels. Financial theory suggests balancing risk and return, as debt provides tax savings and financial discipline but may lead to excessive risk-taking and pre-bankruptcy costs. In practice, leverage is influenced by multiple factors.

To assess Encavis's leverage, two primary metrics are used:

- **Gearing Ratio:** Net debt as a percentage of invested capital.
- **Debt-to-Equity (D/E) Ratio:** Total debt relative to shareholders' equity.

Between **2017 and 2023**, the following trends emerged:

- The **gearing ratio** fell from **66.4% to 59.1%**, indicating reduced leverage.
- The **D/E ratio** dropped from **197.3% to 144.6%**, slightly above the sector median.

The **debt-to-EBITDA ratio**, reflecting debt relative to operational cash flows, improved significantly:

- It declined from **716.8% in 2017 to 505.5% in 2023**, aligning with industry trends after 2021.

At first glance, Encavis's debt level might seem excessive. However, the energy sector naturally supports higher leverage due to two key factors:

1. Substantial asset bases serve as collateral, reducing borrowing costs.
2. Stable cash flows from long-term PPAs and government-backed tariffs mitigate market risks.

An additional factor is Encavis's institutional ownership, exceeding 75%. Institutional investors typically favor debt-financed growth, aligning with Encavis's strategy.

In conclusion, Encavis's capital structure aligns with industry norms, driven by its stable revenue streams—over 90% of revenues are secured through FiTs and PPAs—and institutional investor influence. While its leverage remains slightly above sector averages, these factors justify its capital structure within the energy sector.

	Encavis AG							Sector						
	2017	2018	2019	2020	2021	2022	2023	2017	2018	2019	2020	2021	2022	2023
Gearing ratio	66,4%	67,8%	69,0%	68,5%	56,3%	65,1%	59,1%	68,2%	55,3%	54,8%	48,9%	61,9%	60,0%	53,7%
Debt-to-equity	197,3%	210,8%	222,6%	217,1%	128,8%	186,3%	144,6%	214,7%	123,7%	121,1%	95,7%	162,2%	150,3%	115,8%
Debt-to-EBITDA	716,8%	731,7%	734,0%	725,3%	483,7%	465,9%	505,5%	452,8%	428,6%	521,5%	354,2%	551,1%	496,8%	518,7%

Figure 8: Encavis capital structure metrics
Source: Encavis LSEG Eikon, Own Analysis

2 Industry

The energy industry covers all activities related to the production, distribution and consumption of energy, which has traditionally been dominated by fossil fuels. However, in the past few years, the global shift towards renewable energy sources, driven by climate goals and sustainability concerns, has given a significant role to renewable energy. This industry is increasingly competitive against conventional fuels thanks to supportive policies, technological advancements, and cost reductions.

The subsequent part provides a comprehensive examination of the energy sector, in which Encavis operates by focusing on market trends and European outlook.

2.1 Renewable Energy Frameworks

The energy industry currently is characterized by substantial transformation due to global efforts to achieve decarbonization and zero emission. A key element of this transition is the renewable energy sector, which serves as a low-cost sustainable substitute for fossil fuels. To boost this transition, international agreements and policy frameworks, such as the Paris Agreement and the Net Zero Emissions (NZE) by 2050 Scenario, have been developed.

The Paris Agreement is a global, legally binding pact that aims to hold global warming lower than 2°C, ideally to 1.5°C. This treaty, which has been signed by nearly every country, establishes a framework for monetary, technical, and capacity-building support for countries requiring assistance. (UNFCCC 2024)

The NZE by 2050 represents a global commitment to eliminate greenhouse gas emissions by transitioning from conventional to renewable energy sources in the coming decades. This policy requires radical changes and the exponential growth of green energy supply and usage, since global installed renewable capacity must triple by 2050 to achieve net-zero emissions. (IEA 2023)

Thanks to the supporting global frameworks, the energy sector experienced record levels of investment, with \$1.77 trillion in 2023 globally, representing a 17% increase from 2022. The record level investment occurred despite the global economy was burdened by geopolitical tensions and high interest rates, underpinning the resilience of the industry and the strength of global commitments. Total yearly investments in the energy sector are expected to grow substantially, reaching between \$2.0 trillion and \$3.2 trillion by 2040. This represents a significant increase of 35% to 120% from current levels, driven by the necessity to threefold

global renewable energy capacity and achieve a twofold increase in energy efficiency by 2030. (BloombergNEF 2024) (Bevilacqua et al. 2024)

These enabling frameworks and financing fueled some of the fastest technological advancements in the renewable energy sector. These improvements significantly reduced the Levelized Cost of Energy (LCOE) for solar and wind power, bringing them critically competitive with conventional forms of energy. (DNV 2024) (*Appendix 6*)

2.2 European Outlook

Europe has demonstrated a long-standing tradition in addressing climate change with commitments such as the Kyoto Protocol or the Paris Agreement. In addition to committing to global incentives, the European Union has established its own objective to become the first carbon-neutral region in the world by 2050. For this purpose, the Green Deal was introduced, setting an ambitious environmental target for the continent. (DNV 2024) (IEA 2024)

European energy demand is expected to decline by 11% between 2010 and 2030, mainly due to improved efficiency in energy solutions, driven by technological advancements. This downward trend is anticipated to continue as further technology improvements are expected to occur. The energy demand in Europe is forecasted to decrease by 14% from 2023 to 2050. While overall demand declines, the share of electricity in the energy mix is estimated to increase as electricity is expected to overtake fossil fuels as the leading energy carrier by 2046, with fossil fuels accounting for only one-third and electricity comprising half of total energy demand. (DNV 2024) (*Appendix 7*)

This transformation towards increased reliance on electricity will result in higher demand for solar, wind, and other renewable energy sources. Currently, 19% of Europe's energy is supplied by electricity (with the rest being natural gas, oil, coal, etc.), which is projected to rise to 29% by 2030, 44% by 2040, and 60% by 2050. (IEA 2024) (DNV 2024)

Alongside with the electrification of energy demand, solar energy supply is estimated to experience significant growth, expanding its current 8% share of total energy production to 30% by 2034. Following this high growth phase, solar's share is anticipated to peak at 35% by 2039, and it will stabilize thereafter. (IEA 2024) (*Appendix 8*)

Solar power generation is expected to surge through 2030, at an accelerated pace. However, from 2031, the power supplied by solar is projected to slow down to an annual growth rate of 2% to 7%. The CAGR for the initial high-growth period is estimated at 23%, while it is expected to decrease to 4% for the following period between 2031 and 2050. (DNV 2024)

Expectations regarding the growth in wind energy supply are far more modest than for solar as the expected annual growth rates ranges from 2% to 7%, between 2023 and 2050. The CAGR for the previously examined two periods are 3% and 4%, respectively. (DNV 2024) (*Appendix 8*)

3 DCF Valuation

The valuation of Encavis was conducted as of December 31, 2025, using the Discounted Cash Flow (DCF) method. The results were then compared and supplemented with a Comparable Company Analysis (CCA). This chapter presents the DCF methodology, key assumptions, and results.

3.1 Methodology Overview

The DCF analysis determines a company's value by the present value of its forecasted free cash flows (FCF). The valuation output is commonly referred to as "intrinsic value", as it is independent from the prevailing market sentiments and focuses on the company's underlying fundamentals. (Rosenbaum and Pearl 2009)

In a DCF model, the cash flows are usually projected for a period of 5 to 10 years, depending on the industry and certain characteristics of the company. Beyond the explicit projection period, a terminal value is used to determine the remainder value of the company. (Rosenbaum and Pearl 2009)

The projected cash flows are discounted back to the valuation date using the company's weighted average cost of capital (WACC). The enterprise value (EV) is obtained by combining the present value of forecasted free cash flows with the present value of the terminal value. From this, the equity value is calculated by subtracting net debt and non-controlling interests. Finally, dividing the equity value by the total number of outstanding shares provides the estimated price per share. (Rosenbaum and Pearl 2009)

3.2 Valuation Assumptions

In order to conduct a DCF analysis, short- and long-term assumptions regarding the outlook of Encavis, the renewable energy sector, and the macroeconomic variables have to be established.

3.2.1 Revenue

Forecasting revenue in a DCF is a crucial step since it influences the value of several items on the balance sheet and income statement. Approximately 95% of Encavis's total revenue is generated from the solar and wind sections, while the remaining is attributable to the asset management, services, and administration segment. For this reason, a more granular projection model was used for the majority of the revenue, with using less sophisticated method for the remainder.

For forecasting purposes, the revenue from solar PV parks and wind farms was broken down into three components: installed capacity, capacity factor and selling price. Installed capacity is the nominal quantity of electricity that can be produced at a 100% utilization rate, whereas the capacity factor represents the percentage of actual electricity generated relative to the installed

capacity over a given period. The product of installed capacity, capacity factor, and the number of hours in a year determines the total yearly energy generation. This value, when multiplied by the selling price, yields the revenue per year. (U.S. EIA 2024)

The installed capacity projections for the solar PV and wind segments are divided into short-term and long-term stage.

In the short-term, projections are based on Encavis's Accelerated Growth Strategy 2027, according to which the company seeks to expand its current 2.2 GW installed capacity to 7.0 GW by 2027. However, to adopt a more conservative approach and to account for potential optimism bias in the management report, the expansion forecast was delayed until 2030 and limited to 5.8 GW – a target set prior to the new ambitious goal of 7.0 GW. Furthermore, it was assumed that the additional capacity would be proportionally distributed between solar and wind based on their 2023 levels, due to the absence of detailed information.

Beyond 2030, in the long term, capacity expansion is expected to decelerate and stabilize at a CAGR of 2% for both sectors.

Capacity factors for solar PV and wind were derived from projections provided by the IEA. The decline in capacity factors accounts for the gradual degradation of solar panels and wind turbines over time. (*Appendix 9*)

Industry projections for installed capacity and capacity factors were adjusted for the period between 2031 and 2045 to account for the diminishing availability of suitable areas for solar and wind parks, as well as heightened competition

The average selling price of Encavis was estimated based on the company's historical trends and adjusted for inflation. No additional price projections were made, as over 90% of the price component of revenue is secured through fixed long-term contracts or hedging strategies. See detailed revenue forecast in *Appendix 10*, including other segments.

	Solar PV				Wind			
	2023	2027E	2030E	2045E	2023	2027E	2030E	2045E
Installed Capacity (MW)	1 600	3 205	4 408	5 933	530	1 023	1 392	1 873
Capacity Factor (%)	15,0%	14,5%	14,0%	12,0%	30,0%	29,4%	28,9%	26,0%
Energy Generation (GWh)	2 106	3 930	5 406	6 237	1 248	2 687	3 658	4 923
Average Selling Price (EUR/MWh)	0.15	0.16	0.17	0.23	0.10	0.11	0.11	0.15

Figure 9: Revenue driver projections

Source: Encavis Annual Reports, DVN Projections, Own Analysis

3.2.2 Net Working Capital

Net Working Capital (NWC) was calculated as the difference between core current assets and core current liabilities. The analysis assumed that operating cash represents 2% of total revenue.

(Cogman and Wang 2011)

The historical proportion of all items in the NWC relative to revenue were calculated, and their projections were derived by applying these historical percentages to the expected revenue.

(Appendix 11)

3.2.3 Non-Core Invested Capital

Non-core invested capital includes long and short-term assets and liabilities that are not essential for Encavis's operations. Due to their non-recurrent nature, they are forecasted to remain constant at their 3-year historical averages, at -€ 182 753 thousand.

3.2.4 Capital Expenditures and Other Long-Term Assets

One component of the long-term assets is intangible assets, which primarily consist of project rights and feed-in contracts. Since these contracts are intrinsically linked to the company's installations, their growth was projected in line with long-term capital expenditure trends. However, as expansion slows over time, the need for new contracts and project rights diminishes, leading to a gradual reduction in their growth rate.

The analysis assumed no new acquisitions for Encavis, leading to the projection of goodwill remaining constant at the 3-year historical average. (Appendix 12)

PPE and other non-current liabilities were forecasted as a percentage of revenue.

Capital expenditures were determined by the difference between PPE in the current and previous year, adjusted for non-cash expenses such as depreciation, amortization, and impairment. The model assumed a long-term reduction in CAPEX to account for the decreasing LCOE and the diminishing investment requirements as the company approaches perpetuity. In perpetuity, CAPEX was estimated as the sum of depreciation and amortization and a reinvestment component, estimated as 10%. This approach reflects the assumption that the company will maintain stable operations, sustain its current asset base, and support a modest level of growth in line with its steady-state operational strategy. (*Appendix 13*)

3.2.5 Operational Expenses

Operational expenses include COGS, SG&A, and personnel expenses. The analysis calculated EBITDA margins for each segment of Encavis and used the historical 3-year averages, scaled by expected revenue, to project future OPEX. These expenses were adjusted with decreasing LCOE projections. (*Appendix 14*)

3.2.6 Equity, Debt and Interest Expense

Debt and equity were projected based on their book value and as percentages of total invested capital. Their proportions were determined using industry standards and calculated as the 3-year average of peer ratios. The D/E ratio helped derive the shares of debt and equity relative to the total invested capital. Debt accounted for 56% and equity for 44%, remaining constant throughout the projection period. The analysis forecasted interest expense as a percentage of the prior year's debt. (*Appendix 15*)

3.3 WACC

3.3.1 Cost of Debt

Encavis's cost of debt was estimated using the CAPM model, with the debt beta derived from its BBB credit rating, which was assessed at 0.10. (*Appendix 16*)

The yield on the 10-year Eurozone Government Bond, measured at 2.87%, was employed as the risk-free rate, as it satisfies the criteria of being free from both default risk and interest rate risk. This selection ensures alignment with the risk-free requirements and geographic relevance. *(Appendix 17)*

3.3.2 Cost of Equity

The cost of equity was also estimated by the CAPM, which requires three inputs: risk free rate, beta and the market risk premium.

The market risk premium, representing the excess return of the Western European equity market, was derived from Damodaran's database. *(Appendix 18)*

Encavis's equity beta was estimated through statistical linear regression, using the sensitivity of historical stock returns to market performance. MSCI Europe was chosen as the proxy market portfolio, since Encavis's operations are spread across Western Europe. The linear regression analysis used three years of weekly historical returns for Encavis and MSCI Europe. *(Appendix 19)*

3.3.3 WACC Calculation

Using a statutory tax rate of 29%, with 56% equity and 44% debt, Encavis's WACC was calculated to be 5.17%. *(Appendix 20)*

3.4 FCF Projection

Projecting the unlevered free cash flows (FCF) of Encavis is a critical step as these form the foundation of the DCF valuation model. Unlevered FCF is the cash generated by the company's operations after deducting operating expenses, taxes, CAPEX, working capital and other investment needs, but prior to interest payment. In essence, it represents the cash available to all investors, whether they are debt holders or equity holders. (Rosenbaum and Pearl 2009)

$$\text{Unlevered FCF} = \text{NOPAT} + D\&A - \Delta NWC - \text{CAPEX} \quad (1)$$

The FCFs were explicitly forecasted until 2045, at which point Encavis is assumed to enter the steady growth phase. The 17-year projection period is justified, as Encavis and the broader renewable energy sector are expected to undergo significant technological advancements within the next one to two decades. Additionally, the high initial investments and low free cash flows would cause a shorter projection period to overly amplify the significance of the terminal value within the valuation, which is not desirable. (*Appendix 21*)

3.5 Terminal Value

Since free cash flows cannot be projected indefinitely, a terminal value was employed to estimate Encavis's residual value beyond the explicit forecast period. This value is commonly calculated using one of two approaches: the exit multiple method or the perpetuity growth method. To align with the DCF framework, the perpetuity growth method was selected, as it emphasizes the company's intrinsic value and its capacity to generate future cash flows. In contrast, the exit multiple method relies on market-based valuation assumptions. (Rosenbaum and Pearl 2009)

$$Terminal\ Value_n = \frac{Unlevered\ FCF_{n+1}}{WACC - g_{stable}} \quad (2)$$

For the terminal formula the unlevered FCF and WACC was already calculated previously. Two methods are commonly applied to estimate long-term stable growth: the growth rate of the unlevered FCF and a sustainable growth rate derived from the product of RONIC and the RR. In both approaches, the upper limit is typically set by the expected nominal growth of the economy in which the company operates. For the valuation model, a blended approach was adopted, combining the European GDP growth forecast with the RONIC and RR method, resulting in an estimated growth rate of 1.5% by 2045.

The calculated terminal value amounted to €14.47 billion. (*Appendix 22*)

3.6 Valuation Result

The final step in the valuation process involves calculating the present value of all components by discounting them using the estimated WACC. The present value of the terminal value was calculated to be €5 284 million, and the discounted cash flows during the projection period amounted to €641 million. Non-core items, valued at their book value, totaled €-182 million. Collectively, these components resulted in an enterprise value of €5 924 billion. (*Appendix 23*) To determine the equity value, net debt of €2 104 million, hybrid capital of €531 million, and non-controlling interests of €12 million were deducted, yielding €3 094 million. Using 179 million projected shares—calculated based on a 3-year historical growth rate reflecting consistent past increases—the resulting price per share is €17.29, indicating a -0.80% downside compared to the current share price of €17.43.

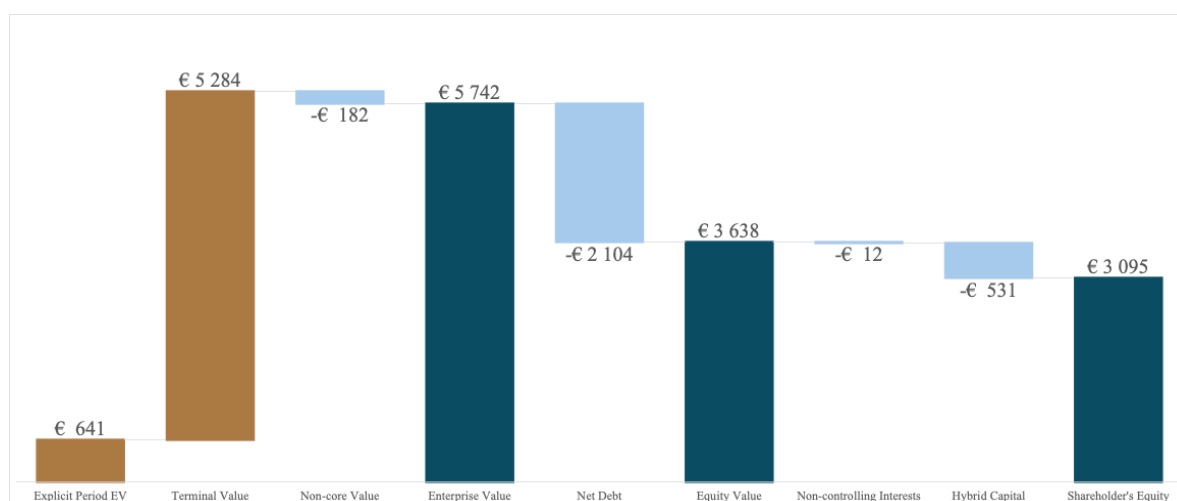


Figure 10: DCF Analysis Result (thd)
Source: Own Calculations

4 Relative Valuation

4.1 Methodology

Relative valuation or Comparable Company Analysis (CCA) determines the value of a firm relative to its peers. It offers a market-based benchmark, enabling financial professionals to

determine the valuation of private or public companies at a specific moment in time. (Rosenbaum and Pearl 2009)

In a CCA, a set of peer companies that are similar in operational and financial terms are selected. (Appendix 5)

Based on this group, median valuation metrics—such as EV/EBITDA, EV/Revenue, or P/E—were calculated. These metrics are then multiplied by the target company’s corresponding financial figures to derive its enterprise value or share price directly. (Rosenbaum and Pearl 2009)

4.2 Valuation Result

The relative valuation was performed using three trading multiples: EV/Revenue, EV/EBITDA, and the P/E ratio. Comparable company ratios were retrieved from LSEG Eikon for the last twelve months (LTM) and for 2025, while the 2026 numbers are own estimations. Since the valuation date is December 31, 2025, the one-year forward multiples were applied. The estimated share price based on EV/Revenue, EV/EBITDA, and P/E are €13.98, €17.03, and €21.48, respectively. (Appendix 24)

	Median Multiple	Applicable Company Figure (in mn)	Implied Share Price
FY 26 EV / Revenue:	6,9 x	€ 746,32	€ 13,98
FY 26 EV / EBITDA:	11,0 x	€ 516,88	€ 17,03
FY 26 P / E:	22,9 x	€ 168,15	€ 21,48

Figure 11: Comparable Company Analysis Results
Source: Encavis Annual Reports, LSEG Eikon, Own Analysis

5 Sensitivity Analysis

One of the critical limitations of a DCF analysis is the various assumptions incorporated, some of which are more impactful on the results than others. These assumptions are fundamentally uncertain and impossible to estimate completely accurately. Consequently, it is more meaningful to interpret the model’s results as a range of values rather than a single definitive

figure. To determine this range, a sensitivity analysis was conducted on the most influential variables: the WACC and the terminal growth rate. (Rosenbaum and Pearl 2009)

The analysis revealed that the valuation ranges from €7.77 and €35.02. This demonstrates that Encavis's valuation model is highly sensitive to both variables, particularly to the discount rate.

		Terminal Growth Rate						
Share price	€ 17,29	0,90%	1,10%	1,30%	1,50%	1,70%	1,90%	2,10%
WACC	5,67%	€ 7,77	€ 8,71	€ 9,74	€ 10,86	€ 12,10	€ 13,47	€ 15,00
	5,54%	€ 8,95	€ 9,97	€ 11,08	€ 12,31	€ 13,66	€ 15,15	€ 16,83
	5,42%	€ 10,22	€ 11,32	€ 12,52	€ 13,85	€ 15,32	€ 16,97	€ 18,80
	5,29%	€ 11,56	€ 12,75	€ 14,06	€ 15,51	€ 17,12	€ 18,92	€ 20,95
	5,17%	€ 12,99	€ 14,28	€ 15,71	€ 17,29	€ 19,06	€ 21,04	€ 23,28
	5,04%	€ 14,52	€ 15,92	€ 17,48	€ 19,21	€ 21,15	€ 23,33	€ 25,82
	4,92%	€ 16,15	€ 17,68	€ 19,38	€ 21,28	€ 23,42	€ 25,83	€ 28,60
	4,79%	€ 17,90	€ 19,57	€ 21,43	€ 23,52	€ 25,88	€ 28,57	€ 31,65
	4,67%	€ 19,78	€ 21,61	€ 23,65	€ 25,95	€ 28,57	€ 31,56	€ 35,02

Figure 12: Sensitivity Analysis
Source: Own Analysis

6 ESG Analysis

Environmental, Social, and Governance (ESG) performance has become increasingly important for investors as they align their portfolios with sustainable and ethical practices. Companies like Encavis AG, operating in the renewable energy sector, are under greater scrutiny to showcase their contribution to climate goals, social inclusiveness, and governance excellence. This analysis compares Encavis's ESG performance to the sector average, highlighting its strengths and areas for improvement.

Encavis AG demonstrates a significantly better carbon performance than the sector average. The emission per turnover for Encavis stands at 621 t CO₂e/€ million, which is less than half of the sector median of 1,461 t CO₂e/€ million, reflecting the company's superior operational efficiency and carbon management practices. Furthermore, Encavis saves 447% of carbon emissions relative to its total emissions, compared to the sector's 205%, highlighting its exceptional contribution to reducing carbon footprints through its renewable energy projects. These results position Encavis as a leader in environmental sustainability, which is a key consideration for ESG-focused investors.

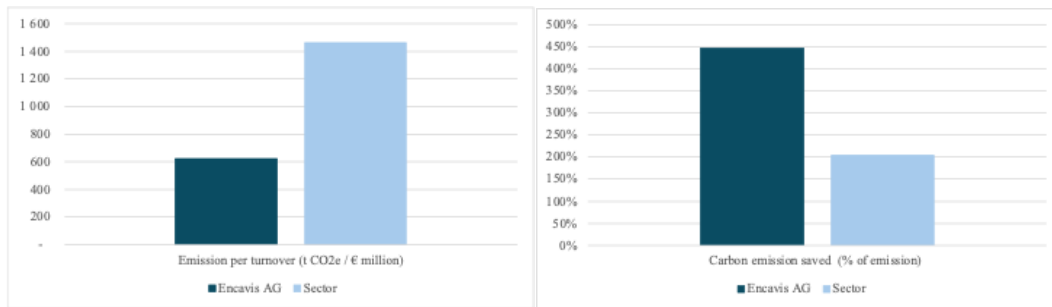


Figure 13: Environmental pillar of ESG analysis
Source: Companies' ESG reports, Own Analysis

In terms of social metrics, Encavis AG has a slightly lower workforce diversity with 29% of women compared to the sector's 30%. This indicates room for improvement in promoting gender inclusivity within the company. However, Encavis performs far better regarding employee turnover, with a significantly lower rate of 7%, while the sector median is 13%. A lower turnover suggests higher employee satisfaction, stronger workplace stability, and a more attractive organizational culture, which positively reflects on the company's long-term social strategy.

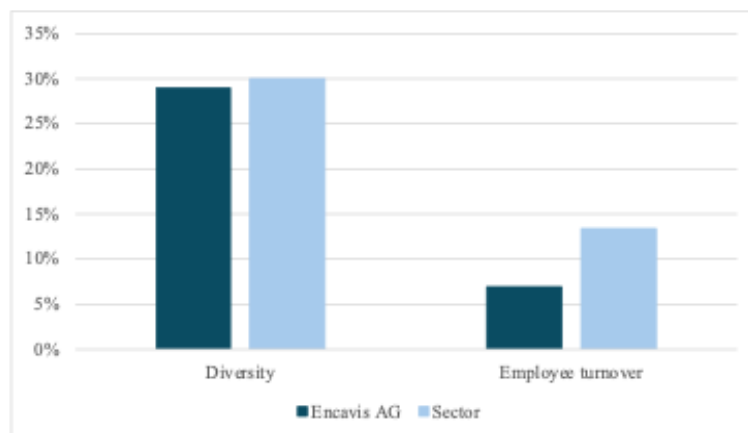


Figure 14: Social pillar of ESG analysis
Source: Companies' ESG reports, Own Analysis

On governance, Encavis's board independence matches the sector average at 56%, showing alignment with industry governance standards. However, Encavis has a lower representation of women on the board at 22%, compared to the sector average of 32%. While Encavis meets governance best practices in terms of independence, increasing female *representation* on the board would help align it more closely with broader diversity goals and investor expectations.

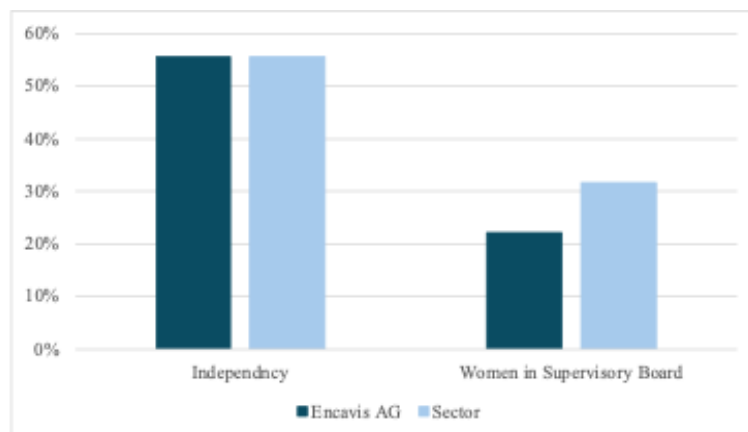


Figure 15: Governance pillar of ESG analysis
Source: Companies' ESG reports, Own Analysis

Encavis outperforms the sector in environmental efficiency and employee retention but lags slightly in diversity metrics under the social and governance pillars. By addressing these gaps, particularly board diversity, Encavis can strengthen its position as a leading ESG performer in the renewable energy sector, further attracting ESG-focused investors. (Appendix 25)

7 Target Price and Recommendation

Encavis AG is a **key player in the renewable energy sector**, leveraging its **extensive portfolio of solar and wind parks** and a strong focus on **Western European markets**. These regions provide **stable regulatory frameworks**, enabling predictable cash flows through **PPAs** and **FiT contracts**.

The company's **Accelerated Growth Strategy 2027** demonstrates its ambition to expand installed capacity significantly, aligning well with the **global shift towards renewable energy**. Encavis has shown **strong operational performance** and consistent **profitability metrics**, often **outperforming sector medians**. This, combined with its **alignment with long-term industry trends**, reinforces Encavis's position as a leader in the energy transition.

While the valuation indicates **limited short-term upside potential**, Encavis's **solid fundamentals** and ability to **capitalize on increasing renewable energy demand** make it a compelling investment for long-term growth-oriented investors.

The valuation of Encavis AG was conducted using the **DCF model** and a **relative valuation method**. The DCF valuation implied a share price of **€17.29**, while the relative valuation, based on **EV/Revenue**, **EV/EBITDA**, and **P/E multiples**, provided implied prices of **€13.98**, **€17.03**, and **€21.48**. As of December 1 2024, the **share price stands at €17.43**.

Based on the DCF analysis, which determined a **target price of €17.29**, and further supported by **relative valuation methods**, a **Hold recommendation** is issued. The target price closely aligns with the **current market price**, reflecting limited upside potential. Investors are advised to monitor Encavis's **growth strategy execution** and evolving **sector trends**, which could influence future valuations.

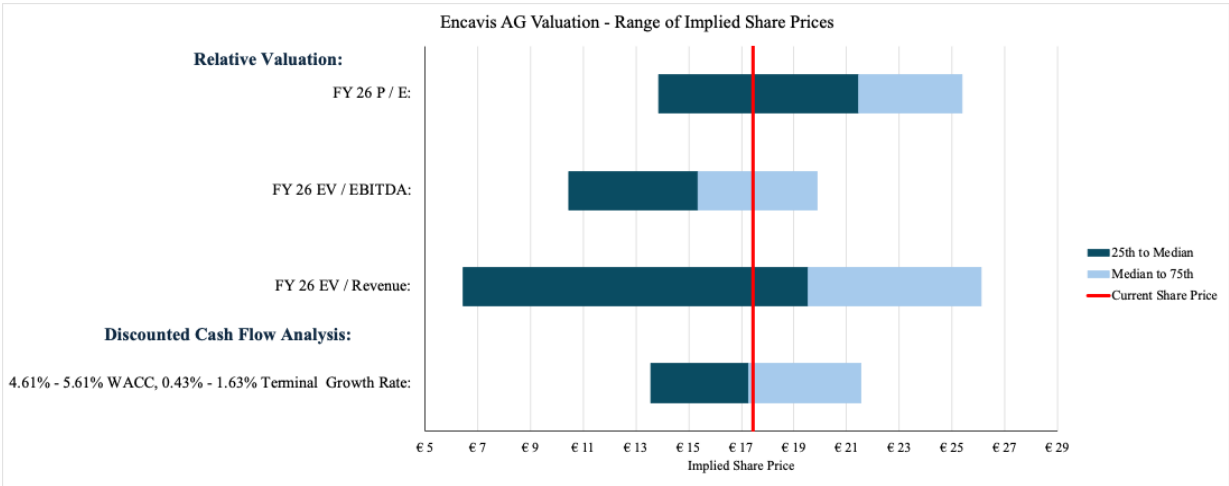


Figure 16: Range of Implied Share Prices
Source: Encavis Annual Reports, LSEG Eikon, Own Analysis

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Appendix

Appendix 1: Geographical distribution of assets and revenues

The below two tables display how Encavis AG's revenues and assets are distributed geographically. The values are based on the 2023 Annual Report and showed in thousands.

Revenue by Country		
Germany	€ 140 232	30%
Italy	€ 102 093	22%
Spain	€ 52 792	11%
France	€ 43 267	9%
United Kingdom	€ 42 635	9%
Denmark	€ 36 905	8%
Netherlands	€ 31 667	7%
Lithuania	€ 6 097	1%
Finland	€ 4 667	1%
Sweden	€ 242	0%

Assets by Country		
Germany	€ 893 543	31%
Spain	€ 492 647	17%
Italy	€ 380 168	13%
France	€ 311 832	11%
Denmark	€ 227 458	8%
Netherlands	€ 209 636	7%
United Kingdom	€ 139 938	5%
Lithuania	€ 116 711	4%
Finland	€ 75 909	3%
Sweden	€ 12 975	0%

Appendix 2: Management board

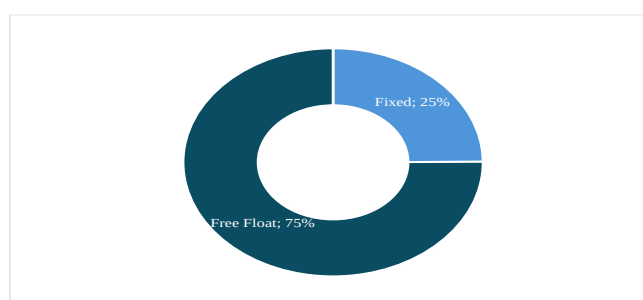
Name	Role	Year of Birth	Start Date	Entity
Dr. Christoph Husmann	CFO/Spokesman	1965	2014	Encavis AG
Dr. Manfred Krüper	CIO/COO	1980	2022	Encavis AG
Karsten Mieth	Management Board	N/A	N/A	Encavis Asset Management AG
Alexander Stütz	Management Board	N/A	N/A	Encavis Asset Management AG
Ernesto Magnani	Managing Director	N/A	N/A	Stern Energy S.p.A.
Stefan Torri	Managing Director	N/A	N/A	Stern Energy S.p.A.
Mario Schirru	Board Member	N/A	N/A	Stern Energy S.p.A.

Appendix 3: Supervisory board

Name	Role	Year of Birth	Start Date	Committee Membership	Independent
Dr. Rolf Martin Schmitz	Chairman	1957	2023	Audit, ESG, personnel and nominating	No
Dr. Manfred Krüper	Deputy Chairman	1941	2007	Personnel and nomination	No
Ayleen Oehmen-Görisch	Member	1987			Yes
Dr. Henning Kreke	Member	1965	2017		Yes
Isabella Pfaller	Member	1968	2022	Chairwoman of audit and ESG	Yes
Chirstine Scheel	Member	1956	2016		Yes
Dr. Marcus Schenck	Member	1965	2019	Personnel and nominating, audit and ESG	Yes
Thorsten Testorp	Member	1970	2022	Personnel and nominating	No
Prof. Dr. Fritz Vahrenholt	Member	1949	2012	Audit and ESG	No

Appendix 4: Encavis's shareholder structure

Investor	Ownership (%)	Type (Free Float/Fixed)
Pool of AMCO Service GmbH and Related Entities	24.92%	Fixed
- AMCO Service GmbH		
- ABACON CAPITAL GmbH		
- Dr. Liedtke Vermögensverwaltung GmbH		
- PELABA Vermögensverwaltung GmbH & Co. KG		
- ALOPIAS Anlagenverwaltungs GmbH & Co. KG		
- Krüper GmbH		
- Sebastian Krüper		
- Dr. Manfred Krüper		
JPMorgan Chase & Co.	4.9%	Free Float
UBS Group AG	4.9%	Free Float
Bank of America Corporation	4.7%	Free Float
The Goldman Sachs Group, Inc.	4.6%	Free Float
BlackRock, Inc.	3.8%	Free Float
BayerInvest KVG mbH	3.3%	Free Float
Lobelia Beteiligungsgesellschaft/Kreke Immobilien KG	3.0%	Free Float
Allianz Global Investors GmbH	2.8%	Free Float
Morgan Stanley & Co. International plc	2.7%	Free Float
Norges Bank Investment Management	2.3%	Free Float
The Vanguard Group, Inc.	2.3%	Free Float
Invesco Capital Management LLC	1.7%	Free Float
AMUNDI Asset Management	1.6%	Free Float
Schroder Investment Management Ltd	1.6%	Free Float
Management of Encavis AG	1.0%	Free Float
Rest	31.2%	Free Float

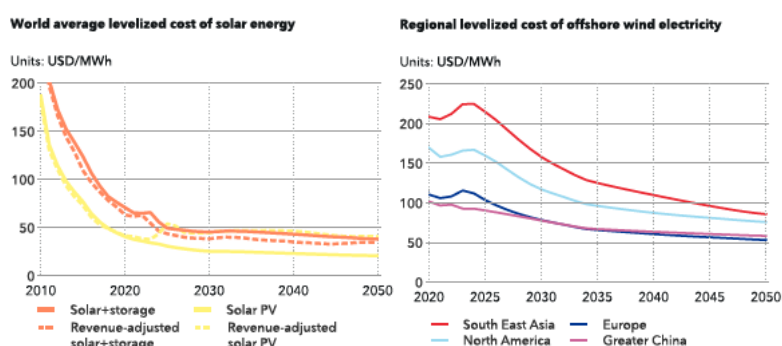


Appendix 5: Peer company selection

The selection of companies was based on financial and operational metrics. An initial, longer list of firms was retrieved from LSEG Eikon, then narrowed down according to similarity requirements. The chosen companies have analogous size, profitability, growth and capital structure. The operational analysis (not shown in the table) involved a thorough examination of the peers' business models and their geographical footprint.

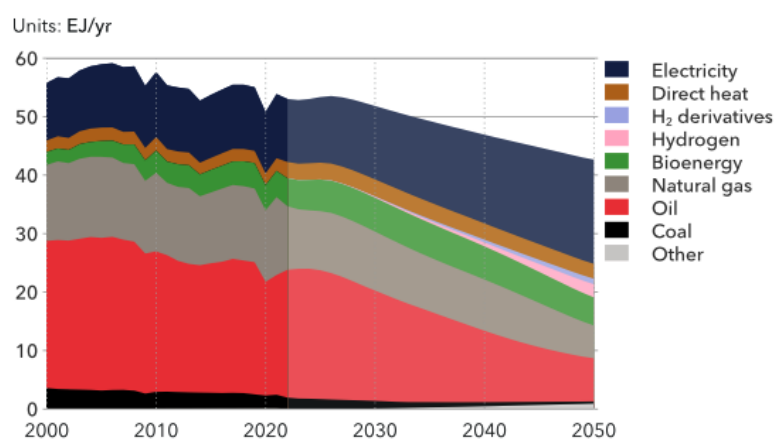
Identifier (RIC)	Company Name	Market Cap	Size		Profitability		ROE	ROA	ROIC	Growth	Capital Structure
			Revenue	EBITDA	EBITDA Margin	Revenue 5-year				D/E	
NEOEN.PA	Neoen SA	4 606	524	475	106.2%	6%	2%	2%	21%	112%	
SCATC.OI	Scatec ASA	1 167	708	395	67.1%	13%	3%	23%	269%		
VLISA.PA	Voltaia SA	1 368	495	240	42.9%	7%	1%	19%	116%		
SLRS.MC	Solaria Energía y Medio Ambiente SA	2 325	191	199	104.5%	21%	7%	7%	44%	188%	
EDPRLS	EDP Renovaveis SA	19 270	2 239	1 964	61.0%	4%	2%	7%	62%		
ORSTED.CO	Oersted A/S	21 110	10 640	2 672	30.4%	-36%	-7%	7%	64%		
EKTG.DE	Energiekontor AG	1 154	242	126	56.0%	45%	12%	12%	29%	118%	

Appendix 6: LCOE for Solar and Wind Energy

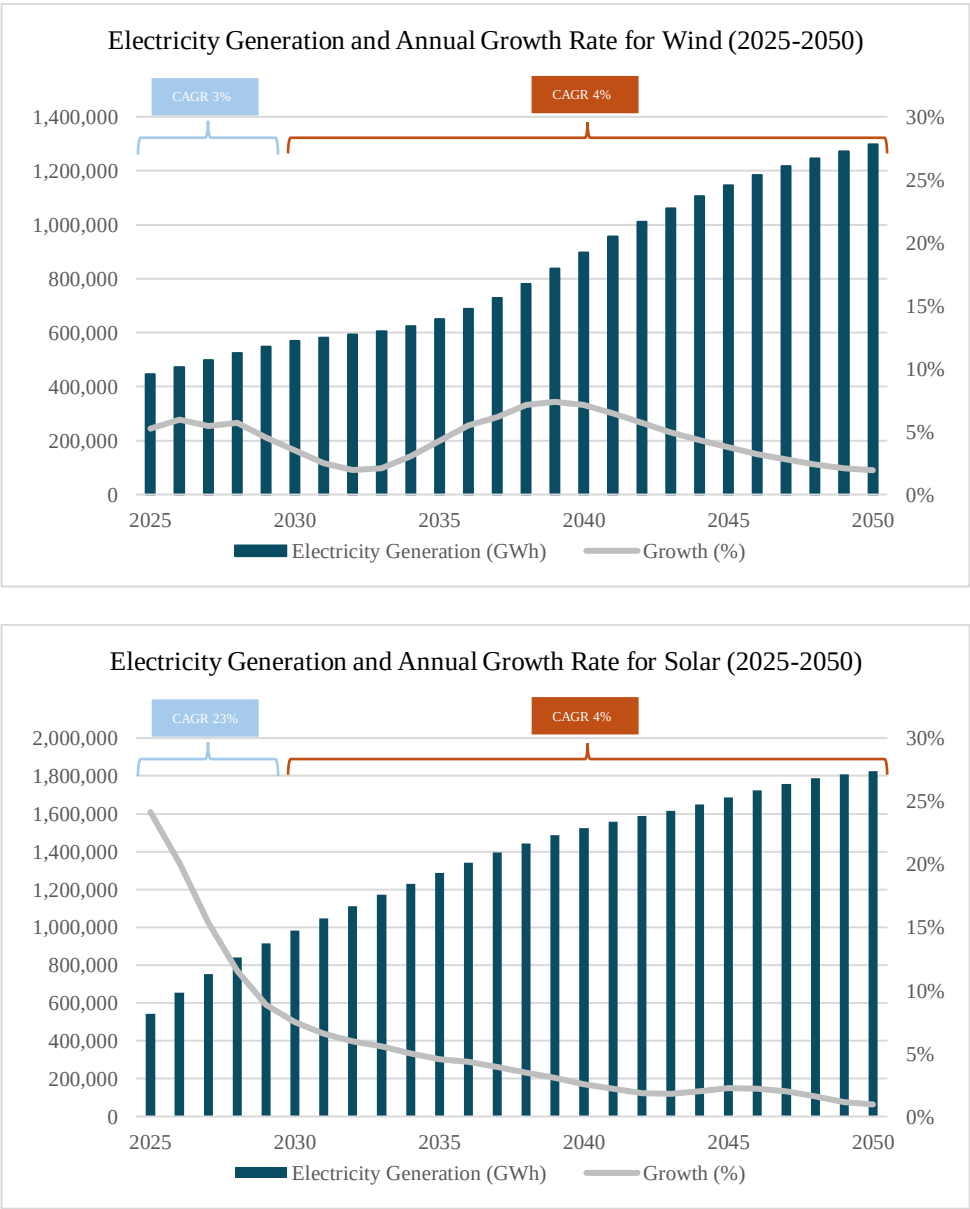


Appendix 7: Proportion of Energy Carriers in the World

Picture was retrieved from DNV.



Appendix 8: Solar and Wind Generation Forecast in Europe



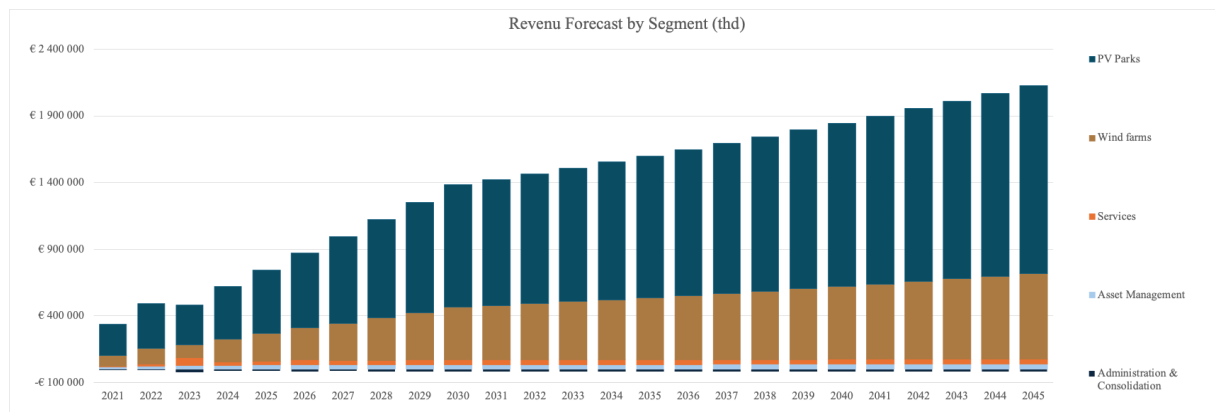
Appendix 9: Capacity Factor Projection

The image was retrieved from IEA Net Zero by 2050 report.

	Financing rate (%)	Capital costs (\$/kW)			Capacity factor (%)			Fuel, CO ₂ and O&M (\$/MWh)			LCOE (\$/MWh)		
	All	2020	2030	2050	2020	2030	2050	2020	2030	2050	2020	2030	2050
United States													
Nuclear	8.0	5 000	4 800	4 500	90	80	75	30	30	30	105	110	110
Coal	8.0	2 100	2 100	2 100	20	n.a.	n.a.	90	170	235	220	n.a.	n.a.
Gas CCGT	8.0	1 000	1 000	1 000	55	25	n.a.	50	80	105	70	125	n.a.
Solar PV	3.7	1 140	620	420	21	22	23	10	10	10	50	30	20
Wind onshore	3.7	1 540	1 420	1 320	42	43	44	10	10	10	35	35	30
Wind offshore	4.5	4 040	2 080	1 480	42	46	48	35	20	15	115	60	40
European Union													
Nuclear	8.0	6 600	5 100	4 500	75	75	70	35	35	35	150	120	115
Coal	8.0	2 000	2 000	2 000	20	n.a.	n.a.	120	205	275	250	n.a.	n.a.
Gas CCGT	8.0	1 000	1 000	1 000	40	20	n.a.	65	95	120	100	150	n.a.
Solar PV	3.2	790	460	340	13	14	14	10	10	10	55	35	25
Wind onshore	3.2	1 540	1 420	1 300	29	30	31	15	15	15	55	45	40
Wind offshore	4.0	3 600	2 020	1 420	51	56	59	15	10	5	75	40	25
China													
Nuclear	7.0	2 800	2 800	2 500	80	80	80	25	25	25	65	65	60
Coal	7.0	800	800	800	60	n.a.	n.a.	75	135	195	90	n.a.	n.a.
Gas CCGT	7.0	560	560	560	45	35	n.a.	75	100	120	90	115	n.a.
Solar PV	3.5	750	400	280	17	18	19	10	5	5	40	25	15
Wind onshore	3.5	1 220	1 120	1 040	26	27	27	15	10	10	45	40	40
Wind offshore	4.3	2 840	1 560	1 000	34	41	43	25	15	10	95	45	30
India													
Nuclear	7.0	2 800	2 800	2 800	70	70	70	30	30	30	75	75	75
Coal	7.0	1 200	1 200	1 200	50	n.a.	n.a.	35	50	75	65	n.a.	n.a.
Gas CCGT	7.0	700	700	700	55	50	n.a.	45	45	50	55	60	n.a.
Solar PV	5.8	580	310	220	20	21	21	5	5	5	35	20	15
Wind onshore	5.8	1 040	980	940	26	28	29	10	10	10	50	45	40
Wind offshore	6.6	2 980	1 680	1 180	32	37	38	25	15	10	130	70	45

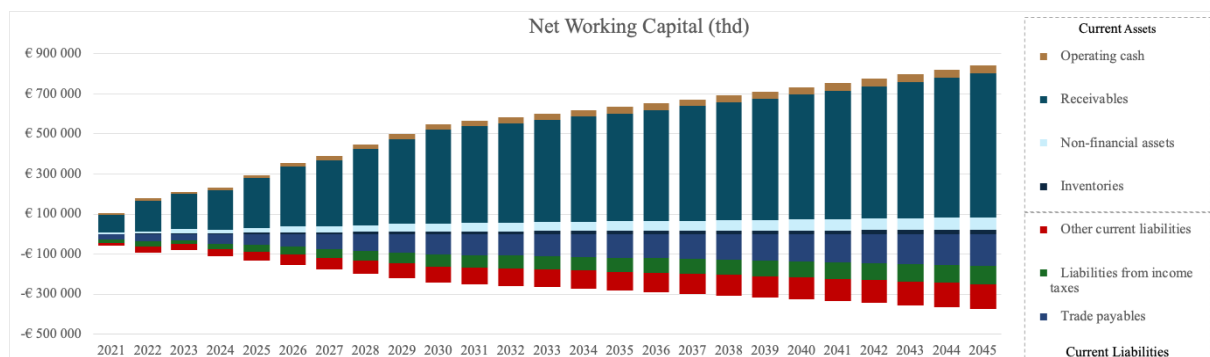
Appendix 10: Revenue Forecast

(in Bn \$/yr)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
PV Parks																												
Revenue	4 186 957	4 289 124	4 198 429	4 234 731	4 334 423	4 289 764	4 352 768	4 476 449	4 561 804	4 648 615	4 737 625	4 827 681	4 918 371	4 948 896	4 975 936	4 1 032 322	4 1 062 495	4 1 093 341	4 1 123 572	4 1 158 881	4 1 191 446	4 1 223 713	4 1 260 818	4 1 296 773	4 1 331 596	4 1 371 279	4 1 409 851	
Capacity	n.a.	n.a.	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Installed Capacity (MW)	1 100	1 300	1 300	1 400	1 500	1 600	2 001	2 402	2 803	3 203	3 604	4 007	4 408	4 496	4 586	4 676	4 771	4 867	4 964	5 063	5 163	5 268	5 373	5 500	5 702	5 818	5 933	
Energy Supplied (in MWh)	857 504	985 550	1 047 911	1 115 000	1 186 500	1 265 900	1 350 776	1 445 988	1 548 537	1 658 422	1 774 644	1 898 202	2 029 097	2 044 544	2 059 996	2 075 448	2 090 900	2 106 352	2 121 804	2 137 256	2 152 708	2 168 160	2 183 612	2 199 064	2 214 516	2 229 968	2 245 420	
Capacity Factor	n.a.	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	
Average Selling Price	n.a.	0.22	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	
Wind farms																												
Revenue	4 57 639	4 60 115	4 77 325	4 77 885	4 121 474	4 89 302	4 151 753	4 284 514	4 242 908	4 275 222	4 317 481	4 359 132	4 399 758	4 408 786	4 422 277	4 436 193	4 450 527	4 465 352	4 480 621	4 496 387	4 512 606	4 529 349	4 546 613	4 564 411	4 582 750	4 601 675	4 621 149	4 641 202
Capacity	n.a.	n.a.	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Installed Capacity (MW)	3340	4120	4278	4320	4900	5360	653	776	899	1 023	1 146	1 269	1 392	1 420	1 448	1 477	1 507	1 537	1 568	1 599	1 631	1 664	1 697	1 731	1 765	1 801	1 837	
Energy Supplied (in MWh)	655 711	762 913	1 024 943	940 100	998 600	1 247 600	1 714 489	2 027 126	2 333 683	2 636 131	2 934 689	3 228 696	3 518 817	3 565 544	3 612 271	3 659 000	3 705 729	3 752 458	3 800 187	3 847 916	3 895 645	3 943 374	3 991 103	4 038 832	4 086 561	4 134 290	4 182 019	
Capacity Factor	n.a.	25%	21%	27%	28%	27%	28%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	
Average Selling Price	n.a.	0	0	0	0	0	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
Services																												
Revenue	4 1 4 437	4 4 469	4 4 469	4 4 386	4 1 2 007	4 1 2 006	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955
Capacity	n.a.	n.a.	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Administration																												
Revenue	4 4 4 437	4 4 469	4 4 469	4 4 386	4 1 2 007	4 1 2 006	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955
Capacity	n.a.	n.a.	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Consolidation																												
Revenue	4 4 4 437	4 4 469	4 4 469	4 4 386	4 1 2 007	4 1 2 006	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955	4 1 24 955
Capacity	n.a.	n.a.	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Revenue CAGR							2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%



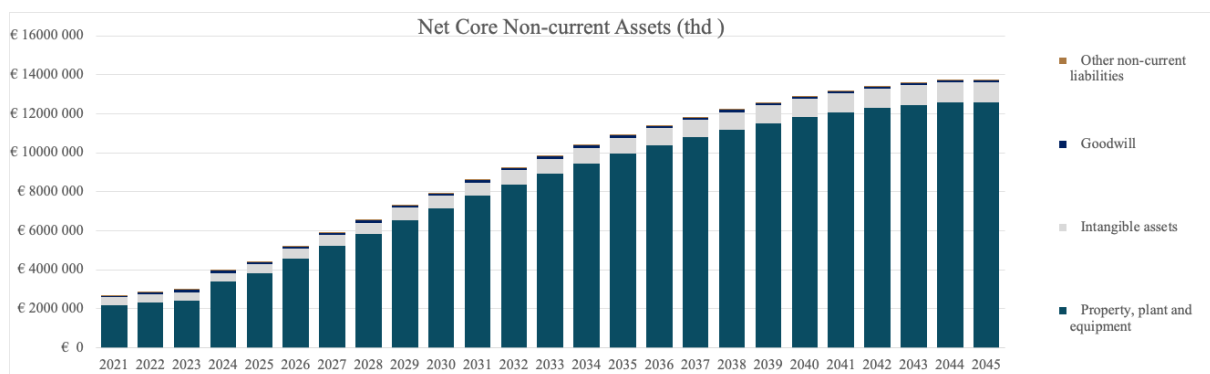
Appendix 11: Net Working Capital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Operating cash	€ 4 654	€ 9 747	€ 9 393	€ 12 395	€ 14 928	€ 17 490	€ 19 856	€ 22 441	€ 25 047	€ 27 666	€ 30 292	€ 32 934	€ 35 592	€ 38 264	€ 40 951	€ 43 654	€ 46 374	€ 49 111	€ 51 864	€ 54 634	€ 57 421	€ 60 225	€ 63 046	€ 65 884	€ 68 739
Receivables	€ 751	€ 5 612	€ 5 312	€ 5 160	€ 7 755	€ 8 739	€ 9 495	€ 11 191	€ 12 327	€ 13 947	€ 14 961	€ 16 426	€ 18 045	€ 19 708	€ 21 415	€ 23 166	€ 24 962	€ 26 803	€ 28 690	€ 30 624	€ 32 605	€ 34 634	€ 36 711	€ 38 836	€ 40 999
Non-financial assets	€ 6 086	€ 8 502	€ 19 476	€ 15 888	€ 20 984	€ 27 716	€ 28 247	€ 33 020	€ 37 400	€ 40 469	€ 43 047	€ 45 333	€ 47 442	€ 49 386	€ 51 166	€ 52 791	€ 54 262	€ 55 591	€ 56 778	€ 57 824	€ 58 740	€ 59 526	€ 60 192	€ 60 735	€ 61 157
Receivables	€ 89 444	€ 153 869	€ 177 556	€ 187 920	€ 215 249	€ 230 948	€ 239 775	€ 253 363	€ 263 863	€ 270 426	€ 274 072	€ 276 129	€ 276 686	€ 276 743	€ 276 300	€ 275 357	€ 273 914	€ 271 971	€ 269 528	€ 266 585	€ 263 142	€ 259 200	€ 254 757	€ 249 814	€ 244 371
Liabilities from income taxes	-€ 15 614	-€ 26 286	-€ 16 979	-€ 28 193	-€ 33 600	-€ 36 918	-€ 43 951	-€ 49 217	-€ 54 414	-€ 60 674	-€ 62 289	-€ 64 062	-€ 66 055	-€ 67 945	-€ 69 935	-€ 72 002	-€ 74 092	-€ 76 251	-€ 78 473	-€ 80 746	-€ 83 063	-€ 85 421	-€ 87 820	-€ 90 260	-€ 92 740
Trade payables	-€ 28 686	-€ 37 218	-€ 32 600	-€ 47 497	-€ 54 939	-€ 63 644	-€ 73 808	-€ 82 539	-€ 92 130	-€ 100 130	-€ 108 932	-€ 116 072	-€ 121 299	-€ 124 522	-€ 127 897	-€ 131 324	-€ 134 800	-€ 138 326	-€ 141 901	-€ 145 526	-€ 149 201	-€ 152 926	-€ 156 701	-€ 160 526	-€ 164 401
Other current liabilities	-€ 12 047	-€ 28 528	-€ 31 400	-€ 13 387	-€ 44 653	-€ 52 755	-€ 57 952	-€ 66 438	-€ 74 190	-€ 81 450	-€ 84 291	-€ 86 677	-€ 89 145	-€ 91 858	-€ 94 817	-€ 97 233	-€ 100 144	-€ 103 042	-€ 106 038	-€ 109 131	-€ 112 271	-€ 115 511	-€ 118 856	-€ 122 246	-€ 125 740
Net Working Capital	€ 46 588	€ 83 698	€ 130 518	€ 122 271	€ 161 663	€ 201 464	€ 213 215	€ 247 510	€ 277 903	€ 303 065	€ 314 157	€ 325 411	€ 332 187	€ 342 464	€ 352 417	€ 362 412	€ 372 316	€ 382 159	€ 391 911	€ 401 584	€ 411 189	€ 420 726	€ 430 195	€ 439 594	€ 448 923



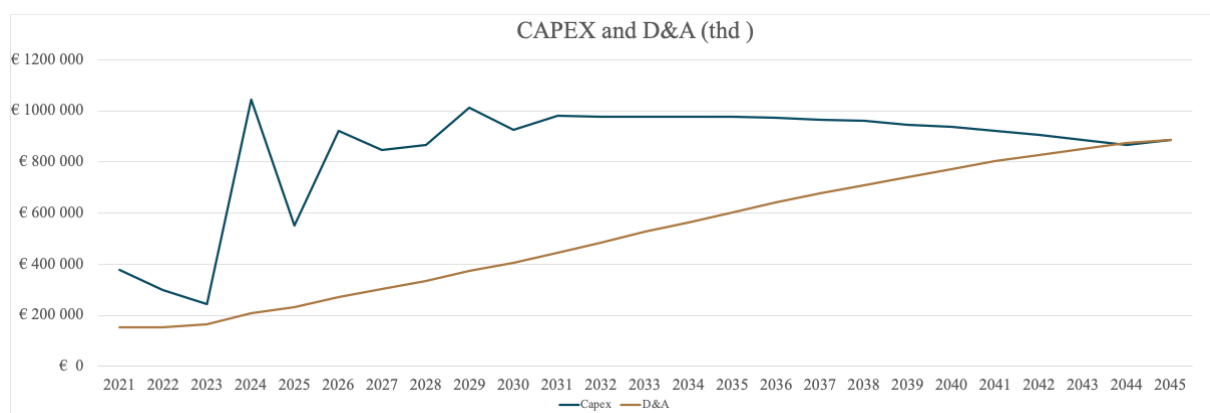
Appendix 12: Net Core Non-Current Assets

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Intangible assets	€ 440 320	€ 446 891	€ 429 696	€ 453 382	€ 462 705	€ 511 608	€ 542 368	€ 574 959	€ 607 484	€ 640 969	€ 642 316	€ 718 296	€ 713 442	€ 787 650	€ 820 469	€ 813 847	€ 860 847	€ 901 901	€ 912 414	€ 914 170	€ 912 596	€ 908 580	€ 9 100 694	€ 1 007 367	€ 1 014 414
Goodwill	€ 27 466	€ 107 129	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151	€ 107 151
Property, plant and equipment	€ 2 174 952	€ 2 304 994	€ 2 413 213	€ 3 364 086	€ 3 815 082	€ 4 586 516	€ 5 233 729	€ 5 845 234	€ 6 564 567	€ 7 187 111	€ 7 794 340	€ 8 396 448	€ 8 963 950	€ 9 593 519	€ 10 400 172	€ 10 811 229	€ 11 584 020	€ 12 157 961	€ 12 812 430	€ 12 666 822	€ 12 289 632	€ 12 453 824	€ 12 583 645	€ 12 591 774	€ 12 591 774
Other non-current liabilities	€ 9 845	€ 5 817	-€ 4 350	€ 7 979	€ 8 458	€ 9 747	€ 11 097	€ 12 815	€ 14 539	€ 15 978	€ 16 345	€ 16 854	€ 17 349	€ 17 837	€ 18 390	€ 18 930	€ 19 470	€ 20 040	€ 20 631	€ 21 238	€ 21 843	€ 22 475	€ 23 120	€ 23 784	€ 24 464
Net Core Non-current Assets	€ 2 642 693	€ 2 853 193	€ 2 963 620	€ 3 953 513	€ 4 413 397	€ 5 214 892	€ 5 894 945	€ 6 540 129	€ 7 295 461	€ 7 936 209	€ 8 600 015	€ 9 228 767	€ 9 821 961	€ 10 378 609	€ 10 897 528	€ 11 377 960	€ 11 818 745	€ 12 219 120	€ 12 578 157	€ 12 894 980	€ 13 168 752	€ 13 398 679	€ 13 583 989	€ 13 723 947	€ 13 737 803

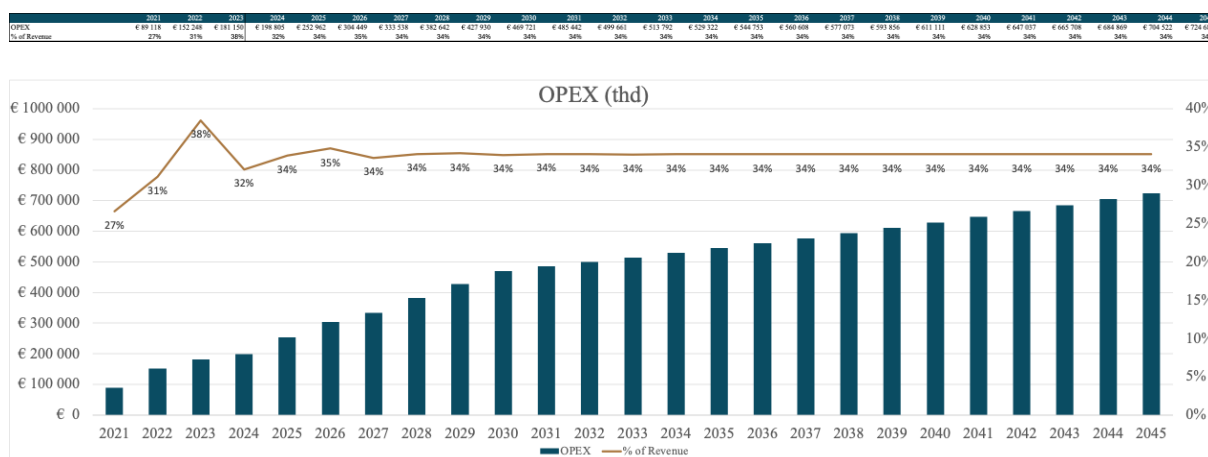


Appendix 13: CAPEX and D&A

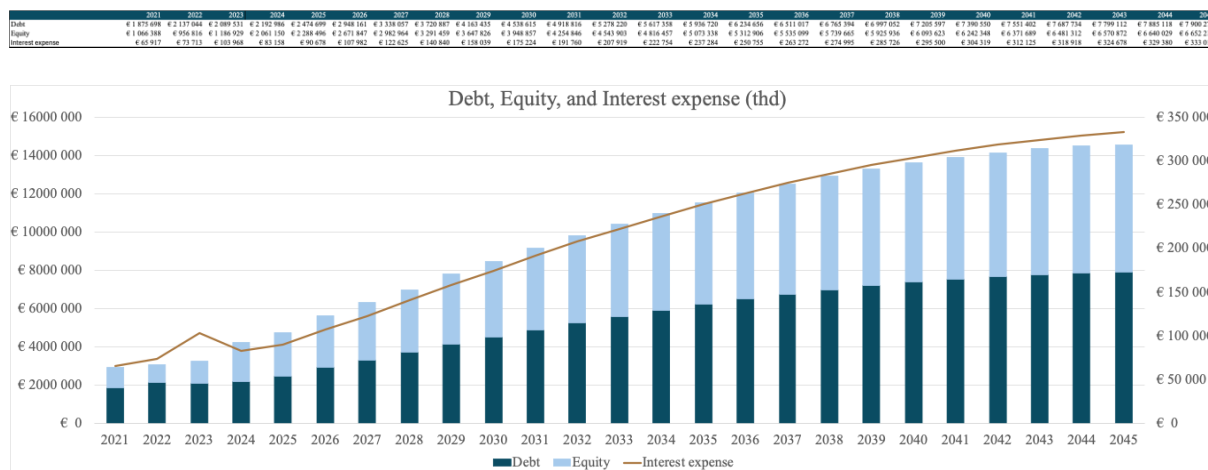
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Capex	€ 376 185	€ 267 712	€ 243 392	€ 718 335	€ 525 501	€ 878 820	€ 828 936	€ 877 169	€ 1 039 719	€ 1 068 819	€ 1 055 286	€ 714 660	€ 737 929	€ 781 912	€ 857 039	€ 930 278	€ 922 800	€ 977 459	€ 1 017 358	€ 1 051 964	€ 1 097 991	€ 1 140 260	€ 1 184 976	€ 1 233 799	€ 1 049 529
D&A	€ 551 444	€ 152 620	€ 164 114	€ 150 513	€ 229 829	€ 256 290	€ 308 653	€ 352 055	€ 403 436	€ 456 036	€ 485 169	€ 510 866	€ 549 219	€ 583 052	€ 648 950	€ 718 690	€ 703 652	€ 741 081	€ 774 569	€ 793 942	€ 826 621	€ 867 354	€ 906 950	€ 950 436	€ 954 117



Appendix 14: OPEX



Appendix 15: Debt, Equity, and Interest Expense



Appendix 16: Debt Beta

TABLE 12.3

Average Debt Betas by Rating and Maturity¹⁵

By Rating	A and above	BBB	BB	B	CCC
Avg. Beta	< 0.05	0.10	0.17	0.26	0.31
By Maturity	(BBB and above)	1–5 Year	5–10 Year	10–15 Year	> 15 Year
Avg. Beta		0.01	0.06	0.07	0.14

Source: S. Schaefer and I. Strebulaev, "Risk in Capital Structure Arbitrage," Stanford GSB working paper, 2009.

Appendix 17:Risk-free Rate



Appendix 18: Equity Risk Premium

Country	Region	Moody's rating	Rating-based Default Spread	Total Equity Risk Premium	Country Risk Premium	Sovereign CDS, net of US	Total Equity Risk Premium2	Country Risk Premium3
Andorra (Principality of)	Western Europe	Baa2	2,07%	7,38%	2,78%	NA	NA	NA
Austria	Western Europe	Aa1	0,44%	5,18%	0,58%	0,00%	4,60%	0,00%
Belgium	Western Europe	Aa3	0,65%	5,48%	0,88%	0,00%	4,60%	0,00%
Cyprus	Western Europe	Baa2	2,07%	7,38%	2,78%	0,53%	5,31%	0,71%
Denmark	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Finland	Western Europe	Aa1	0,44%	5,18%	0,58%	0,00%	4,60%	0,00%
France	Western Europe	Aa2	0,54%	5,32%	0,72%	0,00%	4,60%	0,00%
Germany	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Greece	Western Europe	Ba1	2,73%	8,26%	3,66%	0,70%	5,54%	0,94%
Guernsey (States of)	Western Europe	A1	0,77%	5,63%	1,03%	NA	NA	NA
Iceland	Western Europe	A2	0,92%	5,84%	1,24%	0,30%	5,00%	0,40%
Ireland	Western Europe	Aa3	0,65%	5,48%	0,88%	0,00%	4,60%	0,00%
Isle of Man	Western Europe	Aa3	0,65%	5,48%	0,88%	NA	NA	NA
Italy	Western Europe	Baa3	2,39%	7,81%	3,21%	0,76%	5,62%	1,02%
Jersey (States of)	Western Europe	Aa3	0,65%	5,48%	0,88%	NA	NA	NA
Liechtenstein	Western Europe	Aaa	0,00%	4,60%	0,00%	NA	NA	NA
Luxembourg	Western Europe	Aaa	0,00%	4,60%	0,00%	NA	NA	NA
Malta	Western Europe	A2	0,92%	5,84%	1,24%	NA	NA	NA
Netherlands	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Norway	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Portugal	Western Europe	A3	1,31%	6,35%	1,75%	0,17%	4,83%	0,23%
Spain	Western Europe	Baa1	1,74%	6,94%	2,34%	0,20%	4,87%	0,27%
Sweden	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Switzerland	Western Europe	Aaa	0,00%	4,60%	0,00%	0,00%	4,60%	0,00%
Turkey	Western Europe	B3	7,08%	14,11%	9,51%	3,28%	9,00%	4,40%
United Kingdom	Western Europe	Aa3	0,65%	5,48%	0,88%	0,00%	4,60%	0,00%
Average			1,03%	5,98%	1,38%	0,31%	5,02%	0,42%

Appendix 19: Beta regression results

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,372133495
R Square	0,138483338
Adjusted R Square	0,132889074
Standard Error	0,047867705
Observations	156

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0,056720464	0,056720464	24,75452302	1,72267E-06
Residual	154	0,352862846	0,002291317		
Total	155	0,40958331			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	0,000620891	0,003834521	0,161921289	0,871580088	-0,00695416	0,008195941	-0,00695416	0,008195941
X Variable 1	0,967452124	0,194447427	4,975391745	1,72267E-06	0,583323553	1,351580694	0,583323553	1,351580694

Appendix 20: WACC Calculation

Risk-free rate	2,87%
Beta_d	0,1
MRP	5,98%
Cost of Debt	3,47%
Risk-free rate	2,87%
MRP	5,98%
Beta_e	1,0
Cost of equity	8,66%
Tax rate	29%
W_equity	44%
W_debt	56%
WACC	5,17%

Appendix 21: Unlevered Free Cash Flow

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
NOFAT	€ 120.993	€ 133.395	€ 134.351	€ 237.577	€ 362.467	€ 400.098	€ 457.981	€ 527.168	€ 586.852	€ 648.122	€ 682.042	€ 728.973	€ 818.452	€ 900.736	€ 970.120	€ 1.043.862	€ 1.104.483	€ 1.178.944	€ 1.278.031	€ 1.380.813	€ 1.497.323	€ 1.622.356	€ 1.688.452	€ 1.809.452	€ 1.872.034
D&A	€ 131.783	€ 234.637	€ 169.464	€ 207.856	€ 230.183	€ 270.667	€ 303.219	€ 331.066	€ 372.156	€ 404.284	€ 445.290	€ 485.815	€ 525.724	€ 564.866	€ 602.990	€ 640.013	€ 675.711	€ 709.910	€ 742.432	€ 773.995	€ 805.715	€ 828.114	€ 852.111	€ 873.526	€ 887.086
ANWC	€ 9.282	€ 39.110	€ 44.820	€ 9.286	€ 39.302	€ 39.801	€ 11.751	€ 14.296	€ 30.392	€ 21.162	€ 11.993	€ 9.284	€ 9.776	€ 19.277	€ 9.953	€ 10.195	€ 10.704	€ 10.842	€ 11.133	€ 11.404	€ 11.788	€ 12.077	€ 12.397	€ 12.712	€ 13.046
CAPEX	€ 176.100	€ 207.458	€ 243.382	€ 1.044.013	€ 351.080	€ 700.314	€ 487.270	€ 460.433	€ 1.022.375	€ 924.637	€ 981.811	€ 977.536	€ 979.235	€ 970.384	€ 973.404	€ 973.804	€ 964.862	€ 959.499	€ 966.451	€ 977.636	€ 923.327	€ 901.658	€ 897.357	€ 861.822	€ 867.180
Other Non-Cash Adj.	€ 1.138	€ 1.127.979	€ 36.639	€ 73.103	€ 81.005	€ 88.899	€ 80.392	€ 97.066	€ 102.771	€ 108.051	€ 114.625	€ 118.930	€ 121.071	€ 120.901	€ 120.209	€ 122.344	€ 123.793	€ 127.749	€ 129.237	€ 140.155	€ 140.516	€ 140.303	€ 139.516	€ 138.159	€ 136.249
Unlevered FCF	€ 97.283	€ 430.784	€ 866	€ 4.613.799	€ 79.338	€ 373.268	€ 173.282	€ 136.618	€ 186.986	€ 4.966	€ 19.979	€ 9.768	€ 38.493	€ 58.843	€ 78.402	€ 89.852	€ 146.872	€ 176.784	€ 222.432	€ 264.629	€ 315.439	€ 372.630	€ 431.510	€ 496.454	€ 522.732

Appendix 22: Terminal Value

Present year	2025
Year of terminal value	2045
WACC (%) as of 10/24	5,17%
Terminal growth (%)	1,50%
Terminal core unlevered FCF	€ 522 732
Terminal value	€ 14 470 765

Appendix 23: DCF Valuation

Valuation (M€)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
RONIC	8,4	8	4%	5%	9%	9%	9%	9%	9%	9%	9%	8%	7%	4%	5%	5%	5%	5%	5%	4%	4%	4%	4%	1%	1%	1%
Growth rate (g)	8,4	8	5%	5%	20%	11%	17%	12%	11%	11%	9%	8%	7%	4%	5%	4%	3%	3%	3%	2%	2%	2%	1%	1%	1%	
Core Unlevered FCF	€ 97.283	€ 430.784	€ 866	€ 4.613.799	€ 79.338	€ 373.268	€ 173.282	€ 136.618	€ 186.986	€ 6.954	€ 19.979	€ 9.768	€ 38.493	€ 58.843	€ 78.402	€ 89.852	€ 146.872	€ 176.784	€ 222.432	€ 264.629	€ 315.439	€ 372.630	€ 431.510	€ 496.454	€ 522.732	
WACC	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
PV of Core FCF	€ 613.399	€ 79.338	€ 353.011	€ 134.794	€ 117.449	€ 152.585	€ 5.806	€ 14.469	€ 6.161	€ 20.379	€ 32.308	€ 47.375	€ 61.969	€ 78.058	€ 91.830	€ 110.373	€ 124.301	€ 140.889	€ 158.226	€ 174.259	€ 190.637	€ 190.866				

Core Business Value	€ 5 924 584
NPV	€ 640 839
Discounted terminal value	€ 5 283 745
Terminal value	
Present year	€ 2 025
Year of terminal value	2045
WACC (%) as of 10/24	5,17%
Terminal growth (%)	1,50%
Terminal RONIC (%)	4,74%
Terminal core unlevered FCF	€ 522 732
Terminal value	€ 14 470 765
Discounted terminal value	€ 5 283 745
Valuation	
Core Value	€ 5 924 584
Non-core Value	€ 182 202
Enterprise Value	€ 5 742 382
Total debt	€ 2 474 699
Cash	€ 370 337
Net debt	€ 2 104 362
Hybrid capital	€ 531 423
Non-controlling interests	€ 11 690
Equity value	€ 3 094 907
Number of shares issued	€ 178 991
Price per Share	€ 17,29
Market Cap as of 01/12/2024	2819000
Share price	€ 17,43
Downside (%)	-0,80%

Discount rate	
W_equity	44%
W_debt	56%
Risk-free rate	2,87%
Equity risk prx	5,98%
Beta_e	1,0
Cost of equity	8,66%
Beta_d	0,1
Cost of debt	3,47%
WACC	5,17%

Appendix 24: Comparable Company Analysis

Valuation Summary (in m EUR, m #shares)		Range of Valuation Multiples / Premiums						Implied Per Share Value Range					
Methodology Name	Maximum Multiple	75th Percentile Multiple	Median Multiple	25th Percentile Multiple	Minimum Multiple	Applicable Company Figure	Minimum Multiple	25th Percentile Multiple	Median Multiple	75th Percentile Multiple	Maximum Multiple		
Public Company Comparables:													
LTM EV / Revenue:	17,4 x	13,8 x	8,2 x	5,8 x	3,1 x	€ 620	-€	4,06	€	5,42	€	13,55	€ 45,67
FY 25 EV / Revenue:	12,7 x	9,8 x	6,9 x	4,2 x	2,4 x	€ 746	-€	4,89	€	2,96	€	13,98	€ 38,19
FY 26 EV / Revenue:	9,2 x	7,1 x	5,8 x	3,1 x	1,8 x	€ 874	-€	5,91	€	0,53	€	13,62	€ 30,40
LTM EV / EBITDA:	17,1 x	14,4 x	13,2 x	11,2 x	7,7 x	€ 433	€	3,79	€	12,42	€	17,27	€ 26,53
FY 25 EV / EBITDA:	15,4 x	12,3 x	11,0 x	9,1 x	7,1 x	€ 517	€	5,76	€	11,63	€	17,03	€ 29,62
FY 26 EV / EBITDA:	13,8 x	10,5 x	9,1 x	7,7 x	6,5 x	€ 589	€	6,61	€	10,47	€	15,35	€ 30,76
LTM P / E:	52,9 x	42,1 x	27,1 x	25,3 x	19,0 x	€ 152	€	16,19	€	21,54	€	23,13	€ 45,04
FY 25 P / E:	36,3 x	32,6 x	22,9 x	18,3 x	15,0 x	€ 168	€	14,08	€	17,22	€	21,48	€ 34,06
FY 26 P / E:	26,8 x	24,5 x	20,7 x	13,4 x	10,4 x	€ 185	€	10,75	€	13,85	€	21,46	€ 27,79
Implied Enterprise Value:		5 684											
(+/-) Cash & Cash-Equivalents:		370											
(-/-) Total Debt:		(2 475)											
(-/-) Hybrid Capital:		(531)											
(-/-) Noncontrolling Interests:		(12)											
Implied Equity Value:		3 036,1											
Diluted Shares Outstanding:		178,991											
Implied Share Price from DCF:		16,96											
Premium / (Discount) to Current:		(2,7%)											
							Implied Enterprise Value or Equity Value at a Range of Multiples:						
							Enterprise Value -->	€	1 909	€	3 606	€	5 062
							Enterprise Value -->	€	1 760	€	3 165	€	5 137
							Enterprise Value -->	€	1 578	€	2 731	€	5 073
							Enterprise Value -->	€	3 314	€	4 858	€	5 726
							Enterprise Value -->	€	3 668	€	4 718	€	5 684
							Enterprise Value -->	€	3 819	€	4 510	€	5 382
							Equity Value -->	€	2 898	€	3 856	€	4 140
							Equity Value -->	€	2 520	€	3 082	€	3 845
							Equity Value -->	€	1 925	€	2 479	€	3 842

Appendix 25: ESG Analysis

	Environmental			Carbon emission saved (in t CO2e)	Social		Governance	
	Carbon footprint (in t CO2e)	Emission per turnover (in t CO2e / € million)			Diversity % of women	Employee turnover	Independency	% of women in Board
Enceva AG	285 069		621	1 275 223		29%	7%	56%
Neon SA	609 813		1 163	3 265 084		34%	14%	86%
EDP Renovaveis SA	12 627 000		6 289	25 841 000		29%	13%	56%
Oersted AS	17 454 000		1 134	18 200 000		33%	12%	88%
Saatchi ASA	1 470 910		5 137	1 900 000		30%	11%	43%
Volant SA	723 300		1 461	1 643 000		34%	19%	43%
Energickontor AG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Solaria Energia y Medio Ambiente SA	317 000		1656,892569	619983		17%	26%	33%
Sector	723 300		1 461	1 900 000		30%	13%	56%