

MASTERS IN FINANCE

MASTERS FINAL WORK PROJECT

EQUITY RESEARCH: SHELL PLC

TIAGO ANDRÉ MANSINHO DA SILVA

JUNE 2025

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Abstract

Shell plc (“Shell”) is the fifth-largest company in the integrated oil & gas sector, with a market capitalization of \$178 billion and headquartered in London, United Kingdom. Its activities focus on the extraction, production, refining, and distribution of oil, natural gas, and related products.

This report, developed as part of the completion of a Masters in Finance, consists of an Equity Research on Shell, estimating a price target of €32.88 by the end of 2026. This value represents an upside potential of 12.48% compared to the closing price on May 30th, 2025 (equivalent to 8.15% over 12 months). Based on this analysis, a HOLD recommendation is issued, assuming a medium risk profile, justified by i) an attractive dividend policy; ii) disciplined capital allocation and cost control focused on strategic investments; iii) the outlined strategy for the energy transition; and iv) the challenges associated with the pace and scale of implementing renewable energy sources.

Shell’s valuation was conducted using several models, namely FCFF, FTE, DDM, Relative Valuation, and Economic Profit. Additionally, an analysis was carried out to identify any potential discount implicitly priced into Shell’s shares, associated with investors’ perceived risk regarding the energy transition and the geopolitical context, through the application of two regression models.

In conclusion, Shell shows market potential for investors, having registered a 2.32% appreciation over the past six months, despite economic risks stemming from the imposition of tariffs or the potential escalation of conflict in the Middle East, which could significantly impact oil prices. However, concerns remain regarding the company’s ability and resilience to navigate the transition toward a greener economy.

JEL classification: G10; G17; G31; G32; G34

Keywords: Shell plc; Equity Research; Valuation; Mergers & Acquisitions; Oil & Gas Industry.

Resumo

A Shell plc (“Shell”) é a quinta maior empresa do setor de *oil & gas* integrado, com uma capitalização bolsista de 178 mil milhões de dólares e sede em Londres, Reino Unido. A sua atividade centra-se na extração, produção, refinação e distribuição de petróleo, gás natural e produtos derivados.

O presente relatório, desenvolvido no âmbito da conclusão do Mestrado em Finanças, consiste numa Equity Research à Shell, estimando um preço-alvo de €32,88 no final de 2026. Este valor representa um potencial de valorização de 12,48% face ao preço de fecho de 30 de maio de 2025 (correspondendo a 8,15% a 12 meses). Com base nesta análise, é emitida uma recomendação de HOLD, assumindo um perfil de risco médio, justificada por i) uma política de dividendos atrativa; ii) a disciplina na alocação de capital e controlo de custos com foco em investimentos estratégicos; iii) a estratégia delineada para a transição energética; e iv) os desafios associados ao ritmo e escala de implementação de energias renováveis.

A avaliação da Shell foi conduzida através de diversos modelos, nomeadamente o FCFF, FTE, DDM, *Relative Valuation* e *Economic Profit*. Adicionalmente, foi realizada uma análise que procurou identificar um eventual desconto implícito no preço da ação da Shell, associado à perceção de risco por parte dos investidores relativamente à transição energética e contexto geopolítico, através da aplicação de dois modelos de regressão.

Posto isto, conclui-se que a Shell apresenta potencial no mercado para os investidores, tendo registado uma valorização de 2,32% nos últimos seis meses, apesar dos riscos económicos decorrentes da aplicação de tarifas ou da possível escalada de um conflito no médio oriente, que poderá impactar significativamente o preço do petróleo. No entanto, subsistem reservas quanto à capacidade e resiliência da empresa face à transição para uma economia mais verde.

Classificação JEL: G10; G17; G31; G32; G34

Palavras-Chave: Shell plc; Equity Research; Avaliação de Empresas; Fusões e Aquisições; Indústria de Oil & Gas.

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A thank you to my brother for being a constant source of support throughout this journey. His help, advice, and presence made a real difference – especially when I felt overwhelmed.

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Abbreviations

AI – Artificial Intelligence

BPD – Barrels per day

BOE – Barrels of Oil Equivalent

CAPEX – Capital Expenditures

CAPM – Capital Asset Pricing Model

CCC – Cash Conversion Cycle

CCS – Carbon Capture and Storage

CO₂ – Carbon Dioxide

ECB – European Central Bank

EEA – European Environment Agency

EOR – Enhanced Oil Recovery

ESG – Environmental, Social, and Governance

EV – Electric Vehicle

FCFF – Free Cash Flow to the Firm

FCFE – Flow to Equity

FY – Financial Year

GW – Gigawatts

IEA – International Energy Agency

IMF – International Monetary Fund

IOC – Integrated Oil Company

LNG – Liquefied Natural Gas

M&A – Mergers and Acquisitions

NOC – National Oil Companies

OPEC – Organization of the Petroleum Exporting Countries

OPEX – Operating Expenses

PD – Proved Developed

PUD – Proved Undeveloped

PT – Price Target

R&D – Research & Development

R&ES – Renewables and Energy Solutions

ROA – Return on Assets

ROIC – Return on Invested Capital

ROE – Return on Equity

SCF – Standard Cubic Foot

UN – United Nations

YTD – Year to Date

WACC – Weighted Average Cost of Capital

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1. Research Snapshot

We initiate a **HOLD recommendation** for Shell plc (Shell) with a **FY2026 price target of €32.88/share**, using a DCF model and converted from USD using the USD/EUR exchange rate, implying an **8.15% annualized upside potential** from May 30th, 2025, **closing price of €29.23**, with a **Medium Risk**.

Shell's integrated business model leverages its presence across the energy value chain, combining oil and gas production, Liquefied Natural Gas (LNG) operations, refining, and low-carbon energy. This allows Shell to i) **maintain strong cash flow from its core hydrocarbon businesses**, ii) **invest in clean energy solutions**, and iii) **position itself as one of the main energy suppliers** (Figure 1, 2 and 3).

Preserving dividends

Shell has demonstrated resilience in its commitment to shareholder returns, maintaining a focus on dividends and share buybacks despite market volatility. The company **disciplined cost management and portfolio optimization**, such as divesting lower-margin assets, has further strengthened its ability to deliver reliable returns to investors (Shell, 2024).

Disciplined capital spending and targeted growth investments

Shell has maintained **financial strength through disciplined capital allocation, channeling resources toward high-return assets while expanding its presence in emerging energy markets** (Shell, 2024).

Strategy for energy transition

Shell has committed to achieving net-zero emissions by 2050, aligning its strategy with the global shift toward decarbonization. A substantial portion of its capital expenditure has been allocated to renewable energy, biofuels, and carbon capture technologies. Shell's approach combines growing its low-carbon energy portfolio with continued leadership in LNG, which is expected to serve as a bridge fuel during the transition (Shell, 2024).

Challenges remain in achieving scale and pace in renewables

Despite its ambitions, **Shell faces the challenge of balancing its dependency on fossil fuel revenues with the need to accelerate growth in renewable energy**. While its investments in clean energy are expanding, they remain a relatively small portion of their overall portfolio. Scaling low-carbon technologies, such as hydrogen and renewables, **require significant capital, time, and technological advancements**, which could delay meaningful financial contributions from these segments. This reliance on hydrocarbons to fund its transition creates an inherent tension, exposing Shell to stakeholder concerns and **regulatory risks** if progress on net-zero targets is perceived as too slow (Shell, 2024).

Figure 1 – Company Information on 30th May 2025

Ticker	Shell
Type	Stock
Market	Euronext Amsterdam
Previous Close	€ 29.23
Market Cap (€ millions)	178,751
Number of Units (millions)	6,115
52-Week Range (€)	26.53 € - 34.47 €
YTD	1.08%
Float	100%

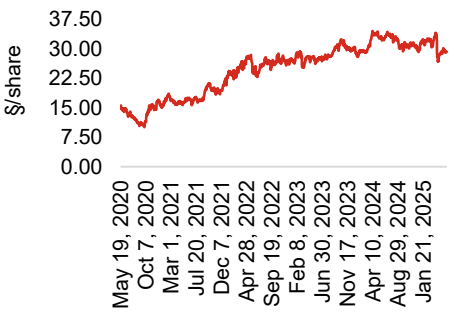
Source: Euronext

Figure 2 – Shell Financials (\$ millions)

	2024	2025F	2029F
Revenues	284,312	299,680	336,269
EBITDA	59,209	65,107	72,085
EBIT	32,337	38,027	43,357
Net Income	16,094	21,242	23,876
Assets	387,609	392,532	403,072
Liabilities	207,441	204,938	228,471
Equity	180,168	187,594	174,601
CFO	54,687	53,452	61,512
CAPEX	19,601	19,754	20,379
FCF	29,518	20,451	12,340
ROA	4.26%	5.52%	6.03%
ROE	9.17%	11.55%	13.92%
Debt to Equity	42.78%	40.63%	48.34%
Int. Coverage	6.76x	9.52x	9.80x

Source: Company Data and Author Analysis

Figure 3 – Shell Stock Price Evolution 2019 – 2025



Source: Bloomberg

2. Business Description

Shell plc (or just “Shell”) is a leading **global** (Appendix 1) **integrated oil company (IOC)** that operates across all major areas of the oil, natural gas, and chemicals sectors. The company is the **5th largest IOC** with a **Market Capitalization of \$178 billion**, **96 000 employees**, and **Total Assets of \$406 billion** in **Financial Year (FY) 2024** (Shell, 2024).

Founded in 1907, after the **merge of Shell Transport and Trading Company with Royal Dutch**, the company has its traces to 1833 when Marcos Samuel decided to expand its business, selling antiques, and began an export-importing business that specialized in the oil transport (Shell, 2025a).

During the 20th century, Shell expanded its operations by continuous innovation, enjoying the discovery of oil in the Middle East and assuming a crucial role during both World Wars. In the 1986 oil price crash, adapted to the circumstances by improving some of its business' units. More recently the company has focused (Appendix 2) on integrating cleaner energy solutions and addressing global sustainability goals (Shell, 2025a).

Geographic and Business Segments

The company divides its operation into 6 main business segments (Appendix 3): 1) **Integrated Gas**, 2) **Upstream**, 3) **Marketing**, 4) **Chemicals and Products**, 5) **Renewables and Energy Solutions (R&ES)**, 6) **Corporate** (Figure 4) (Shell, 2023). From a geographical perspective, Shell operates globally, organizing its disclosures into four main regions: 1) **Europe**, 2) **Asia, Oceania, Africa**, 3) **USA**, and 4) **Other Americas**. In FY2024, Asia, Oceania, Africa emerged as the largest market, generating 35% of total revenue, followed closely by Europe at 32%. The USA and Other Americas contributed with smaller proportions (Figure 5) (Bloomberg, 2024a).

Integrated Gas

This business line (Appendix 4.1) **is responsible for Shell's liquefied natural gas and conversion of natural gas into gas-to-liquids fuels and base oils**. It focuses on the production, processing, and marketing of natural gas, playing a critical role in providing cleaner-burning fuels for power generation, heating, and transportation. Integrated Gas also engages in trading activities to connect global markets with energy solutions (Shell, 2023).

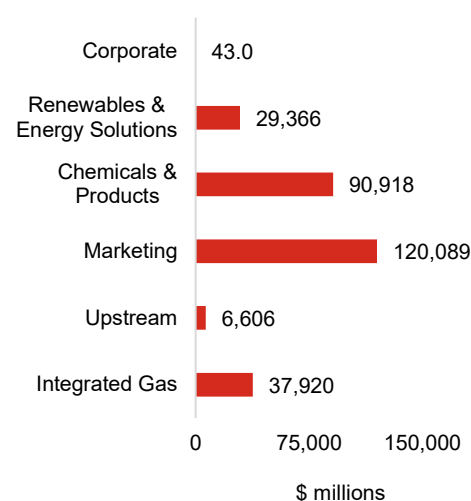
This segment reported in **FY2024 Segment Earnings of \$9.6 billion** reflecting the effect of higher volumes, lower operating expenses and favorable deferred tax movements, and **Capital Expenditures (Capex) of around \$4.4 billion** (Figure 6) (Shell, 2024).

Shell operates globally, with significant activities in Australia, Egypt, Oman, and Qatar (substantial stakes in natural gas projects) (Shell, 2023).

Upstream

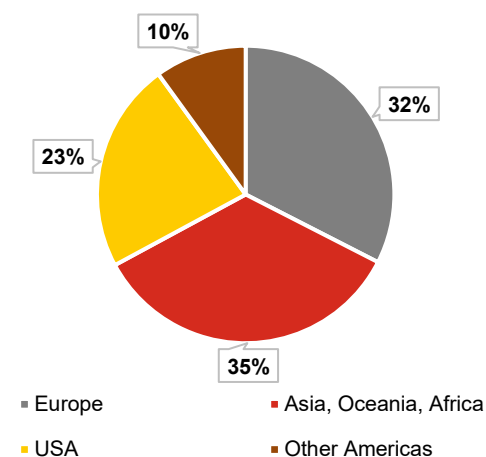
The Upstream segment (Appendix 4.2) **manages the exploration and extraction of crude oil and natural gas resources**. It also markets and transports oil and gas and operates the infrastructure necessary to deliver them to the market. It takes advantage of advanced technologies to optimize recovery while trying to minimize environmental impacts (Shell, 2023).

Figure 4 – Revenue per Segment 2024



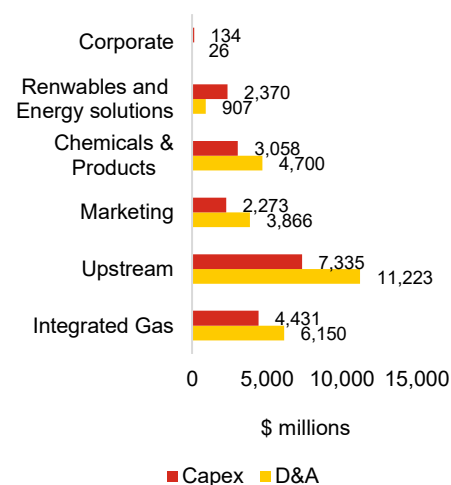
Source: Company Data

Figure 5 – Percentage of Revenue per region 2024



Source: Company Data

Figure 6 – Shell Capex and D&A, 2024



Source: Company Data

The upstream segment reported **FY2024 earnings of \$7.8 billion**, compared to \$8.5 billion in FY2023 (Bloomberg, 2024). This decline was primarily **due to lower realized oil and gas prices, as well as unfavorable tax movements**. During FY2024, Shell's proved reserves decreased to a total of **9,620 million barrels of oil equivalent (Boe)**, driven by revisions, reclassification and the maturation of undeveloped reserves. After accounting for production, Shell's proved developed (PD) reserves grew to **6,863 million Boe**, while proved undeveloped reserves (PUD) decreased to **2,757 million Boe** (Figure 7). Additionally, Shell invested **\$8.2 billion in developing its undeveloped reserves** to meet future production and delivery commitments (Shell, 2024).

Marketing

Marketing comprises Mobility, Lubricants, and Sectors and Decarbonisation activities (Appendix 4.3). Mobility operates a retail network, including electric vehicle (EV) charging services. Lubricants produce, market and sell lubricants for road transport, and for machinery used in manufacturing, mining, power generation, agriculture and construction. Through Sectors and Decarbonisation Shell provide services, fuels and other products that help customers reduce emissions in the aviation, marine and agricultural sectors, among others (Shell, 2023).

This segment was responsible for **\$1.9 billion earnings** in FY2024 and reported **2,843 thousand barrels per day (bpd) in sales volumes**. Segment earnings in FY2024 were 38% lower than in FY2023, reflecting lower unit margins in Sectors and Decarbonisation and unfavorable tax movements (Shell, 2024).

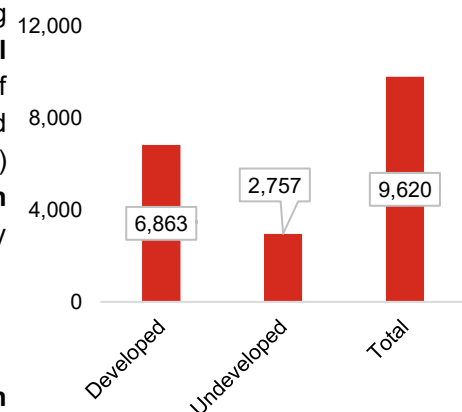
Shell in **FY2024** operates over **44,000 locations worldwide** (Figure 8), serving **33 million customers** daily with fuel, EV charging, and convenience products. The company is upgrading its network, expanding Shell Cafe offerings, and growing its EV charging infrastructure, including a massive station in China. It is also involved in the supply of lubricants and solutions for heavy-duty vehicles, including bioLNG and EV charging while recent acquisitions support its shift toward low-carbon energy (Shell, 2024).

Chemicals and Products

This segment includes refineries (Appendix 4.4) which turn crude oil and other feedstocks into a range of products. It also includes chemicals manufacturing plants with their own marketing network. It is dedicated to refining crude oil into products such as **fuels, lubricants, and petrochemicals** while producing key chemical products used in everyday materials like plastics and detergents. Shell is increasingly emphasizing sustainable practices, including bio-based materials and recycling technologies, to support the transition to a circular economy and meet customers' low-carbon and sustainability needs (Shell, 2023).

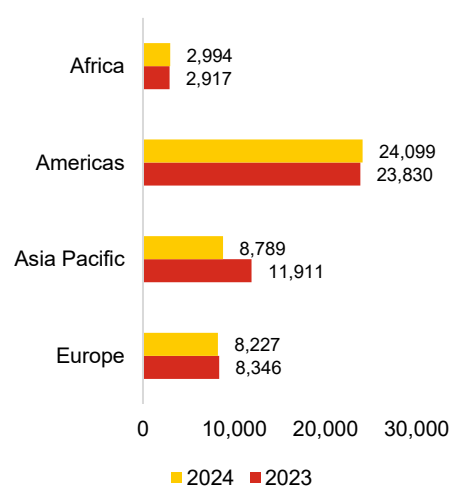
Shell operates a refining capacity of **1.6 million (bpd) across nine refineries**, with a **utilization rate of 80-85%** (Figure 9), which was calculated and forecasted for the period in analysis. Its trading offices manage crude, low-carbon fuels, and refined products on a global scale. Additionally, Shell's extensive pipeline network transports crude, refined products, and chemicals. The company is also active in oil sands, holding a 50% stake in the Athabasca Oil Sands Project, which produces synthetic crude oil (Shell, 2024).

Figure 7 – Proved Reserves, 2023 (million boe)



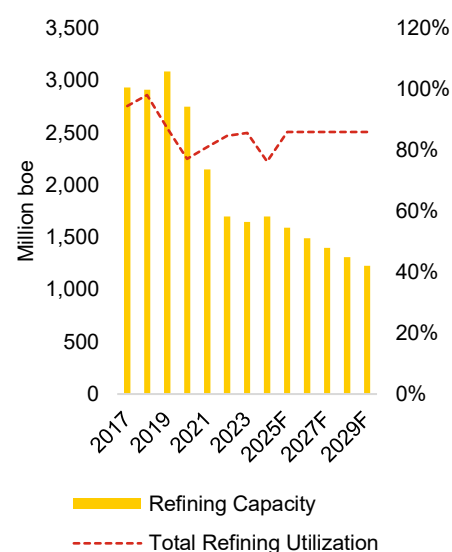
Source: Company Data

Figure 8 – Marketing Retail Sites, 2023-24



Source: Company Data

Figure 9 – Refining Capacity



Source: Company Data and Author Analysis

Renewables and Energy Solutions

Shell's Renewables and Energy Solutions (Appendix 4.5) division focuses on developing and scaling up renewable energy projects, including wind, solar, and hydrogen. It includes renewable power generation, the marketing and trading and optimization of power and pipeline gas, as well as carbon credits and digitally enabled customer solutions. R&ES also include hydrogen production and marketing, development of commercial carbon capture and storage hubs, investment in nature-based projects that avoid or reduce carbon emissions, and Shell Ventures, which invests in companies working to accelerate the energy and mobility transformation, aiming to achieve net-zero emissions (Shell, 2023).

R&ES was responsible in **FY2024 for \$1.2 billion loss and high capital expenditure of \$2.4 billion.** The Renewable power generation capacity reached, in FY2024, **3.4 Gigawatts (GW) in operation and 4.0 GW in development** (Figure 10), with 59% located in the Americas, followed by Europe (Figure 11). Additionally, Shell is expanding its focus on hydrogen, carbon capture, and nature-based solutions to decarbonize its operations and support customers' energy transitions (Shell, 2024).

Corporate

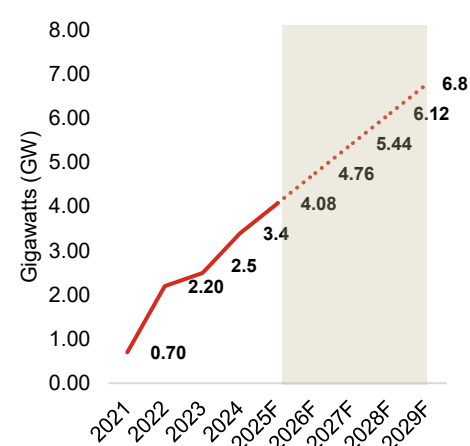
The Corporate segment encompasses Shell's centralized non-operating support functions, including strategy development, finance, human resources, legal, and sustainability governance, ensuring the effective operation of the organization. In FY2024, Corporate registered a **loss of \$3.0 billion**, however all finance expenses, income and related taxes are included in this segment earnings rather than the business segment earnings (Shell, 2024).

Includes the Holdings and Treasury organization, which acts as the point of contact between Shell and external capital markets. It manages corporate entities and engages in activities such as raising debt, conducting foreign exchange transactions, and other financial operations, supported by treasury centers in London and Singapore. Most costs incurred by Corporate are recovered from Shell's business segments, while Unrecovered costs are retained within the corporate segment. (Shell, 2023).

Key Drivers of Profitability

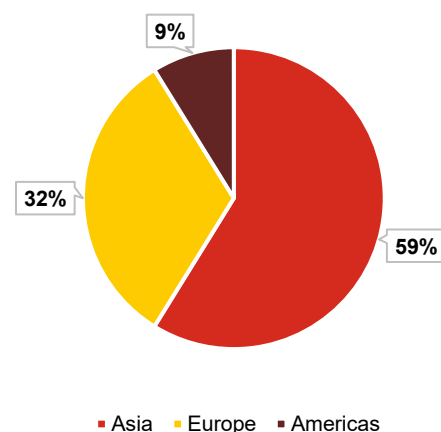
- **Commodity Prices:** Shell's revenues are highly sensitive to crude oil (Brent) and natural gas (Henry Hub) prices, which, according to Deloitte's projections for 2025–2029 (Deloitte, 2024b), are expected to fluctuate (Figures 12 and 13). These fluctuations will directly impact Shell's earnings, given its reliance on global markets and minimal hedging strategies. Understanding macroeconomic factors, geopolitical events, and Organization of the Petroleum Exporting Countries (OPEC) decisions are essential. Maintaining cost-efficient production helps Shell navigate price volatility and protect margins (Shell, 2023).
- **Value Chain Integration:** Shell's integrated model, covering refining, petrochemicals, and marketing, enhances profitability by capturing synergies across its value chain. This integration diversifies revenue and reduces reliance on upstream earnings (Shell, 2023).
- **Resource Management:** Managing and securing proven reserves is key to Shell's long-term profitability. Strategic reserve replacement through exploration and acquisitions ensures steady resource flow, mitigating risks and supporting growth (Shell, 2023).

Figure 10 – Renewable Power Generation Capacity



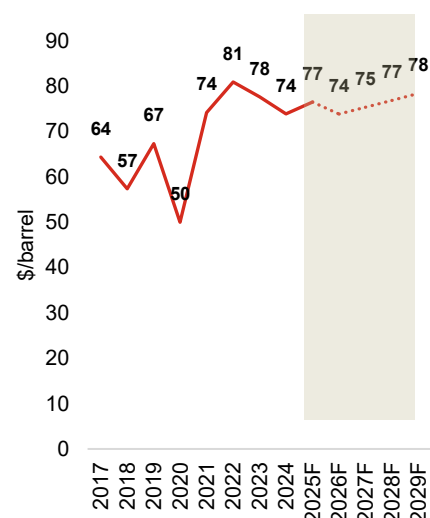
Source: Company Data and Author Analysis

Figure 11 – Renewable Power Generation Capacity per Region, 2024



Source: Company Data

Figure 12 – Oil Price (Brent) Forecast



Source: Deloitte

- **Transition to Renewable Energy:** Shell's shift towards renewables like wind, solar, hydrogen, and biofuels is critical for future growth. These investments reduce dependence on fossil fuels, help meet regulatory requirements, and position Shell for long-term sustainability in the expanding renewable energy market (Shell, 2023).

Company Strategies

Renewable Energy and Low-Carbon Investments

In FY2024, **Shell allocated \$19.6 billion for capital expenditure**. Out of this, \$10-15 billion was directed specifically toward renewable energy, low-carbon fuels, and energy solutions (Shell, 2024). Shell currently operates **over 3 GW of renewable energy capacity** globally, including offshore wind farms and solar installations and aims to expand this capacity to 50 GW by 2030, with substantial investments planned in key markets like Europe, the United States, and Asia. In the **electric vehicle sector**, it has set ambitious targets to expand its network **to 500,000 charging points by 2025 and 2.5 million by 2030** to support the increasing adoption of electric vehicles globally. Shell is reshaping its portfolio to balance traditional oil and gas assets with cleaner energy sources (Shell, 2023).

Operational Efficiency and Cost Management

Shell continues to focus on **driving down Operating Expenses (Opex) through lean processes, automation, and optimization, ensuring profitability** even as it transitions to cleaner energy, which is reflected in the increase of the operating margin (Figure 14) (Shell, 2023).

Financial Strategy

The company is dedicated to delivering value to shareholders, underpinned by robust cash flows, alongside expanding investments in renewable energy. In addition to paying dividends, **Shell announced recently a shares repurchased program of \$3.5 billion worth of shares for the 1st quarter of 2025** (Shell, 2025b). This move reflects confidence in the company's prospects and boosts shareholder returns by reducing the number of outstanding shares. This balanced financial approach enables Shell to effectively manage its energy transition while continuing to reward investors (Shell, 2023).

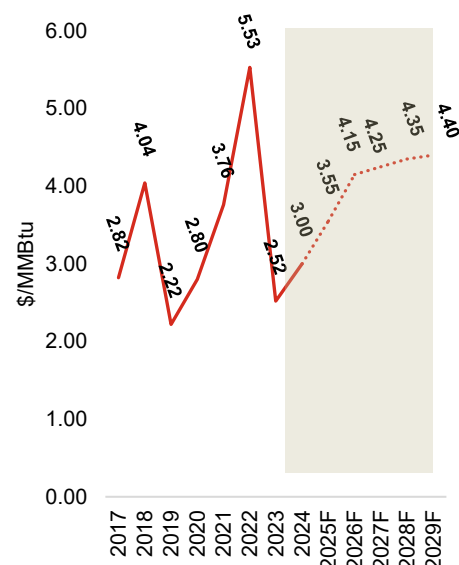
Digital Transformation

Shell is leveraging technology to improve and enhance customer experience. This includes the use of Artificial Intelligence (AI), data analytics, and digital platforms (Shell, 2023).

Ownership Structure

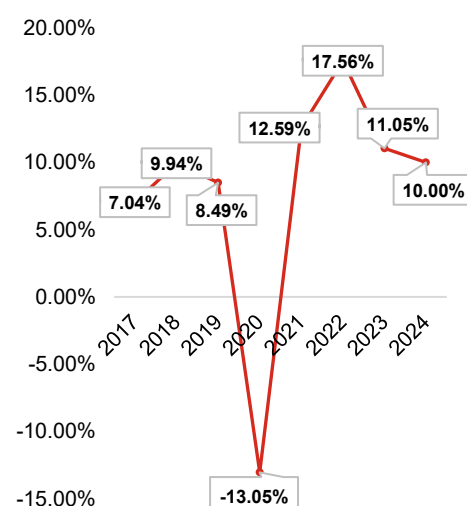
Shell's ownership structure is publicly traded, with **6,115 million shares**, listed on the **London, Amsterdam and New York stock** exchanges. The company's float is close to 100% and the shares are held (Appendix 6) both by institutional investors like BlackRock (7.6%) and Vanguard (5.5%), and retail investors (Table 1) (Bloomberg, 2024). The company operates under a **unitary board structure**, with **executive and non-executive directors overseeing operations**. Governmental influence is limited and shareholder activism, particularly on environmental issues, plays a role in its governance (Shell, 2023).

Figure 13 – Henry Hub (Natural Gas) Forecast



Source: Deloitte

Figure 14 – Operating Margin



Source: Author Analysis

Table 1 – Shell Holders

Holders	
Name	% Stake
BlackRock Ltd.	7.59%
Vanguard Group	5.49%
Norges Bank	2.76%
Equiniti Financial Services Ltd.	1.82%
Capital Group Companies Inc.	1.67%
People's Republic Of China	1.52%
Others	79.15%
Total	100%

Source: Bloomberg

3. Management and ESG

Shell plc demonstrates an Environmental, Social, and Governance (ESG) **score of 7.11**, as assessed by Bloomberg's methodology. This places the company in a **leading position and ahead of its industry peers** (Figure 15) in ESG performance. Looking at which of the 3 pillars (Figure 16), the company performs **above the competitors** in all three, particularly in Governance (Bloomberg, 2024).

Environmental

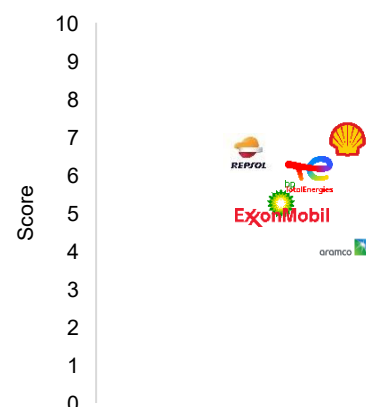
The company **scored 7.53 in the Environmental** metric. These results align with Shell's target of achieving net-zero carbon emissions by 2050. To meet these goals, the company is adopting a balanced strategy that involves delivering oil and gas to meet current energy needs while transitioning to renewable energy sources such as wind, solar, and biofuels (Bloomberg, 2024).

Shell is committed to reducing emissions across operations and enabling customers to transition to cost-competitive, cleaner energy across **Integrated Gas, Upstream and Downstream, Renewables, and Energy Solutions segments**. (Shell, 2023)

In FY2024, Shell reported an investment of **\$21.1 billion in energy transition** across multiple sectors (Figure 17) and **\$1 099 million in Research & Development (R&D) related to decarbonization** allowing to withstand volatility in oil and gas markets while advancing internal and external energy transition opportunities and meeting the company strategy, which include (Shell, 2023):

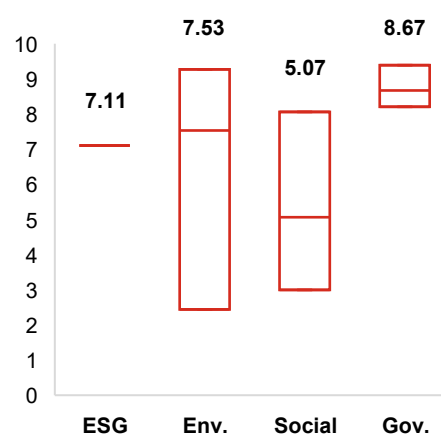
- **Liquefied Natural Gas:** As a global leader with **40 million tonnes of capacity**, the company aims to provide more affordable, reliable, and cleaner energy **through LNG**, particularly in countries that rely heavily on coal-fired power generation, planning to grow its business by **20-30% by 2030** compared to 2022. In October 2023, the company extended its partnership with Oman LNG, ensuring business operations continue beyond 2024, remaining the largest private shareholder in Oman LNG, holding a 30% interest (Shell, 2023).
- **Refining Transformation:** Aligned with its **Powering Progress** strategy, Shell is transitioning its refining business into energy and chemicals parks to deliver lower-carbon and sustainable products. At the Energy and Chemicals Park Rheinland in Germany, Shell is converting a hydrocracker unit to produce premium base oils, **reducing Scope 1 and 2 emissions** (Figure 18) by approximately **620,000 tonnes annually by 2025** (Shell, 2023).
- **Biofuels:** Shell prioritizes biofuels as a cornerstone of its decarbonization strategy, producing sustainable aviation fuel, biodiesel, and renewable natural gas. Collaborating with Raízen (44% Shell stake), **Shell remains one of the largest global biofuels distributors** (Shell, 2023).
- **Downstream, Renewables and Energy Solutions:** This segment encompasses biofuels, EV charging, renewable power, hydrogen, and carbon capture and storage. In FY2023, the company increased its spending on Carbon Capture and Storage (CCS) **to \$340 million**, successfully **capturing and storing 0.5 million tonnes of Carbon Dioxide (CO₂)**. Additionally, it entered joint ventures with partners in Australia and the Netherlands to further advance its CCS initiatives (Shell, 2023).

Figure 15 – ESG Score of Shell and Peers



Source: Bloomberg

Figure 16 – Shell ESG Score per criteria

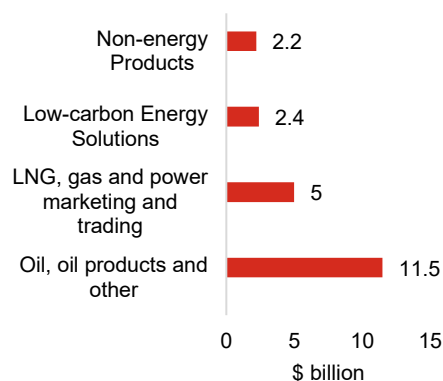


Legend:

The lower boundary of each box denotes the minimum score within the pillar, while the upper boundary signifies the maximum. The central line represents the weighted average total score for the respective category.

Source: Bloomberg

Figure 17 – Shell Investment in energy transition per sector, 2024



Source: Company Data

Shell continues to invest in energy transition to support its goal to net-zero carbon emissions by 2050. The company is **focused on balancing current energy needs with long-term sustainability** through its strategic initiatives across various sectors (Wael Sawan, 2024).

Social

According to Bloomberg's methodology, **Shell scored 5.07**, which, although above the median, is the lowest score among the ESG criteria. The company performed poorly compared to peers in metrics such as **i) Occupational Health & Safety Management, ii) Labor and Employment Practices** and **iii) Ethics & Compliance** (Bloomberg, 2024).

Shell performs better in both **i) Operational Risk Management** and **ii) Community Rights and Relations** indicators. This results from the company implementing strict safety protocols and advanced technologies to monitor and mitigate risks, ensuring safe operations and minimizing environmental impact (e.g. Shell uses real-time data and risk assessments to enhance safety measures). In terms of **Community Rights and Relations** (Table 2), Shell engages with local communities to ensure their rights are respected, particularly through consultations with indigenous groups and supporting local development. An example is its local content programs in Nigeria, which focus on education, infrastructure, and creating employment opportunities to foster positive relationships (Shell, 2023).

Overall, while Shell **faces some challenges** in its social criteria, the company **performs better** than its peers and is taking proactive steps to address these issues.

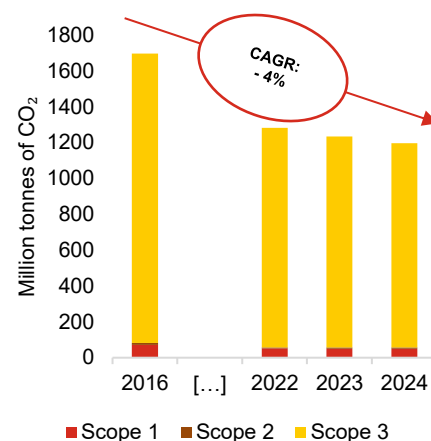
Governance

According to Bloomberg's methodology, the company **scored 8.67 in Governance**, assuming a leading position in all metrics, **i) Board Composition, ii) Executive Compensation, iii) Shareholder Rights**, and **iv) Audit** (Bloomberg, 2024).

Board of Shell plc

The Board of Shell (Table 3) is composed of **13 members**, including the Chairman, Sir Andrew Mackenzie (Figure 19), and 9 independent directors. In terms of diversity, the Board consists of **42% females and 58% males**, with 75% of members identifying as White British or of another White ethnicity. The composition is determined by the **Annual General Meeting**, and its responsibilities include: **i) Approving strategy and overseeing management, ii) Changing the structure and capital, iii) Approving financial reports and dividends, iv) Overseeing risk management and controls, v) Managing succession and Board appointments, vi) Setting remuneration for leadership, and vii) Ensuring corporate governance.** The Board comprises 4 Board Committees: **i) Audit and Risk Committee** responsible for overseeing risk management, financial reporting integrity, and audit functions, **ii) Sustainability Committee** oversees Shell's progress on sustainability and reviews the non-financial aspects of the Powering Progress strategy, **iii) Nomination and Succession Committee** oversees Board and Senior Management appointments, succession planning, corporate governance, and diversity, equity, and inclusion strategies, and **iv) Remuneration Committee** sets remuneration policy, determines individual packages for senior leaders, and monitors executive pay structures (Shell, 2023).

Figure 18 – Shell scope 1, 2, 3 emissions



Source: Company Data

Table 2 – Shell Activism Campaigns

Activism Campaigns	
Pillar	Key Highlights
Access to Energy	Improving electricity and cooking access in underserved communities
Entrepreneurship	Supports young entrepreneurs
Worker Welfare	Improving safety and rights of supplier staff
Supplier Standards	Expect suppliers to meet standards on ethics, labor and human rights
Community Engagement	Used in all major projects, to track satisfaction with remedies offered.

Source: Company Data

Table 3 – Shell Board of Directors

Shell Board of Directors	
Name	Function
Andrew Mackenzie	Chairman
Dick Boer	Deputy Chair and Senior Independent Director
Waew Sawan	CEO - Chief Executive Officer
Sinead Gorman	CFO - Chief Financial Officer
Neil Carson OBE	Independent Non-executive Director
Ann Godbehere	Independent Non-executive Director
Jane Holl Lute	Independent Non-executive Director
Catherine J. Hughes	Independent Non-executive Director
Charles Roxburgh	Independent Non-executive Director
Abraham Schot	Independent Non-executive Director
Leen Srivastava	Independent Non-executive Director
Cyrus Taraporevala	Independent Non-executive Director
Sean Ashley	Independent Non-executive Director

Source: Company Data

Figure 19 – Chairman of Board of Directors



Sir Andrew Mackenzie

Nationality: British
Age: 67
Chair: 18th May 2021
Board: 1st October 2020

Source: Company Data

Executive Management

The management of Shell (Table 4) is led by the CEO, Wael Sawan (Figure 20), who is **responsible for implementing decisions approved by the Board, overseeing the company's operations, and managing the business enterprise**. He is supported in his duties by an Executive Committee comprising **seven members**, including the **CEO and CFO** (Shell, 2023).

Remuneration Policy

According to Bloomberg, **Executive Compensation of Shell scores 8.72** and assumes a leading position when compared to its peers. The package is composed primarily by a i) **Fixed Pay**, ii) **Annual Bonus**, and iii) **Long-term Incentive Plan** and in FY2024, Shell's reported compensation to the **CEO amounted to \$11 million while CFO \$9.3 million**. This is in line with or slightly lower than other energy sector peers, where total compensation for CEOs typically ranges between \$8 million to \$15 million, depending on company size, performance, and individual achievements (Shell, 2024).

Sustainable Development Goals

An evaluation of Shell's alignment with the United Nations (UN) Sustainable Development Goals (SDGs), based on the ESG Everything (2025) platform (Appendix 7), indicates that the company shows strong positive alignment with i) **Decent Work and Economic Growth**, ii) **Climate Action**, iii) **Peace, Justice and Strong Institutions**, and iv) **Partnerships for the Goals**, reflecting its efforts related to energy transition and international collaboration. Conversely, and in line with broader trends across the oil and gas sector, Shell exhibits weak alignment with v) **Clean Water and Sanitation**, vi) **Affordable and Clean Energy**, vii) **Responsible Consumption and Production**, viii) **Life Below Water**, ix) **Life on Land**, primarily due to the environmental impacts associated with fossil fuel extraction and production. For the remaining SDGs, including those related to poverty, hunger, education, and gender equality, Shell's contributions are assessed as neutral to modestly positive, reflecting indirect or supporting roles rather than core operational impact.

Table 4 – Shell Executive Committee

Executive Committee	
Name	Function
Wael Sawan	CEO - Chief Executive Officer
Sinead Gorman	CFO - Chief Financial Officer
Philippa Bounds	Legal Director
Robin Mooldijk	Projects & Technology Director
Rachel Solway	Chief Human Resources and Corporate Officer
Huibert Vigevano	Downstream, Renewables and Energy Solutions Director
Zoë Yujnovich	Integrated Gas and Upstream Director

Source: Company Data

Figure 20 – Shell Chief Executive Officer

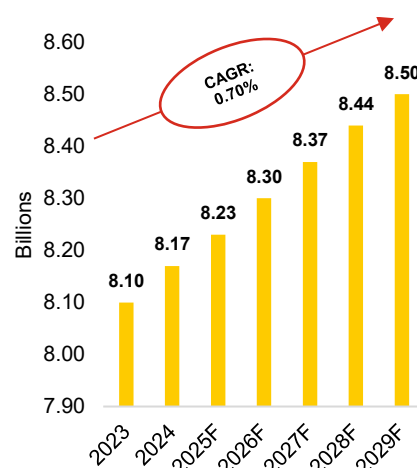


Wael Sawan

Nationality: Lebanese and Canadian
Age: 49
CEO: 1st January 2023

Source: Company Data

Figure 21 – World Population Growth



Source: United Nations

4. Industry Overview and Competitive Positioning

World Economic Outlook

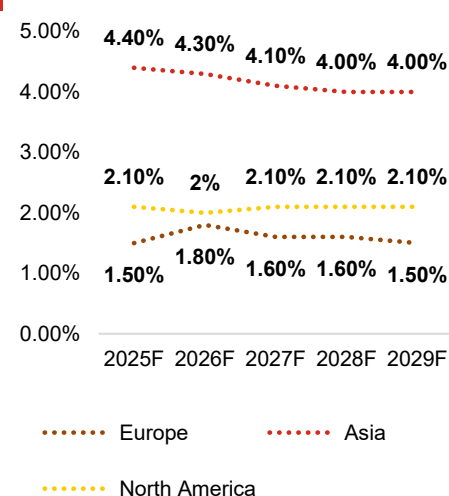
World Population

The world population has grown steadily over the past few years, increasing from approximately **7.8 billion in 2020** to an estimated **8.1 billion in 2025**. This trend is expected to continue, **with the global population projected to reach 8.5 billion by 2030** (Figure 21), reflecting ongoing demographic expansion. This growth will contribute to **increased demand for resources, infrastructure, and energy** (United Nations, 2024).

GDP Growth and Inflation

Economic growth will follow different trajectories across major regions (Figure 22). In **Europe**, GDP growth is expected to remain moderate, **averaging between 1.5% and 2.0%** per year, as structural challenges, demographic shifts, and regulatory policies influence economic activity (European Commission, 2024).

Figure 22 – Real GDP Growth Projections

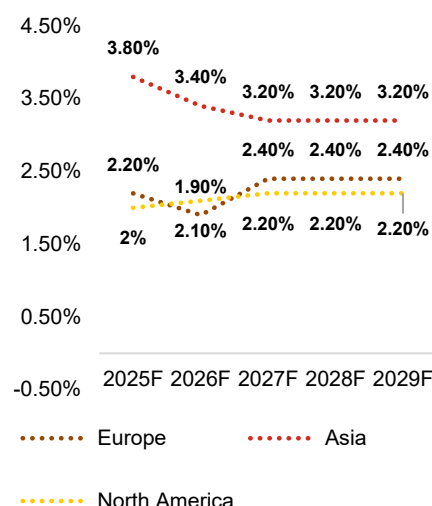


Source: European Commission and IMF

North America is projected to maintain a stable expansion of around 2.0% to 2.5% annually, supported by strong consumer spending, technological advancements, and business investment, though constrained by monetary policies and fiscal adjustments. In contrast, Asia will experience significantly higher growth, particularly in emerging economies such as China and India, where GDP is expected to expand at a rate of 4.5% to 5.5% per year, driven by industrialization, urbanization, and continued digital transformation (IMF, 2024b).

Inflation trends will also vary across regions (Figure 23). In Europe, inflation is projected to meet the medium-term target of 2.0% by 2025 onwards, as central bank maintains tight monetary policies to stabilize prices (ECB, 2024). In the North America region, inflation is expected to stabilize at 2.4%, aligning with the Federal Reserve's long-term targets while reflecting wage dynamics and supply chain adjustments. Asia, however, will experience more varied inflationary pressures. Advanced economies like Japan are likely to maintain low inflation, whereas emerging markets may face inflation rates ranging between 3.5% and 4%, influenced by strong domestic demand, fluctuating commodity prices, and evolving supply chain conditions (IMF, 2024a).

Figure 23 – Inflation Projections



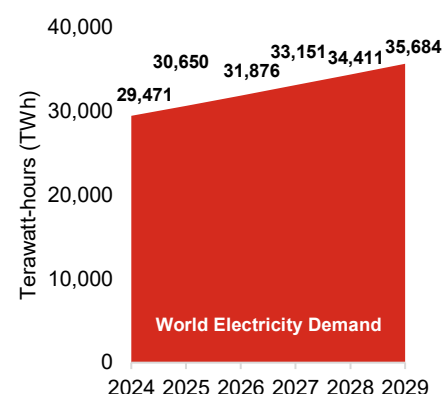
Source: ECB and IMF

World Electricity Demand

Electricity demand is projected to grow consistently (Figure 24), largely driven by increasing industrialization, electrification of transportation, and technological advancements. Annual global electricity demand is expected to increase by 4.0% per year from 2025 to 2027, followed by a slight decline to 3.8% in 2028 and 3.7% in 2029. This sustained demand growth highlights the expanding energy needs of emerging economies and the accelerating transition to renewable energy sources (IEA, 2024).

In what concerns global Oil and Gas demand (Figure 25), oil consumption is expected to grow between 2025 and 2029, with its growth rate slowing from 1.7% to 1.2%. Meanwhile, natural gas demand will maintain a steady 1.5% annual increase. This suggests that while fossil fuels remain essential, growth is moderating, possibly due to efficiency improvements and energy transition efforts (IEA, 2024; OPEC, 2024).

Figure 24 – Electricity Demand Projections



Source: IEA

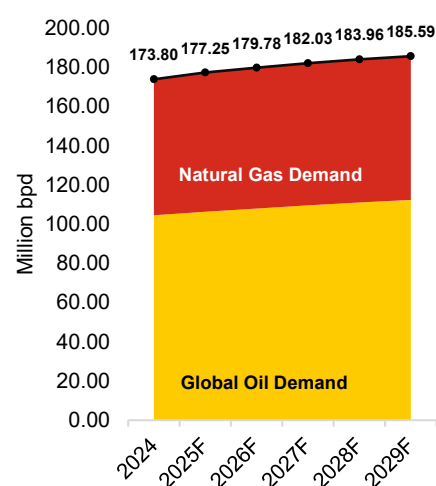
Market Overview

The oil and gas industry remains a critical pillar of the global economy, despite the increasing focus on renewable energy. The industry is highly cyclical, with crude oil and natural gas prices influenced by supply-demand dynamics, geopolitical events, and technological advancements. Companies are adapting to regulatory changes, sustainability goals, and shifting consumer demands while maintaining profitability (Deloitte, 2024a).

Industry Structure

The oil & gas industry is mainly divided into Upstream, Midstream and Downstream (Figure 26). The industry operates as an Oligopoly, dominated by National Oil Companies (NOCs) and private oil majors. IOCs control 55% of global production and 90% of proven reserves (Natural Resource Governance Institute, 2019).

Figure 25 – Oil & Gas Demand Projections



Source: IEA and OPEC

Mergers and Acquisitions activity in the industry

In FY2023, global **Mergers and Acquisitions (M&A)** activity in the oil and gas industry **exceeded \$200 billion**, driven by major U.S. shale consolidations like **ExxonMobil's \$59.5 billion acquisition of Pioneer** and **Chevron's \$53 billion deal for Hess** (Reuters, 2023). At the same time, Private Equity and NOCs remained active in upstream investments, particularly in the **Middle East and Latin America**. Future M&A trends will focus on energy transition, cost efficiency, and securing long-term reserves (Deloitte, 2024a). In recent months, discussions have reportedly taken place regarding the potential acquisition of BP by Shell, however, no agreement has been finalized, and no official confirmation has been yet provided.

Industry Trends

The **oil and gas industry** is currently navigating a complex landscape shaped by several key trends. Companies are **increasingly investing in renewable energy sources and carbon capture technologies to align with global sustainability goals**. Digitalization efforts, including the adoption of AI and automation, are enhancing operational efficiency and safety. The LNG market is expanding, offering new opportunities for growth. However, the industry faces **challenges** such as geopolitical tensions, market volatility, and the need for significant capital investment. Additionally, **there is a growing emphasis on meeting ESG standards, which influences investor decisions and regulatory policies**. To remain competitive, companies must balance traditional operations with innovation and sustainability initiatives (Deloitte, 2024a).

Demand Drivers

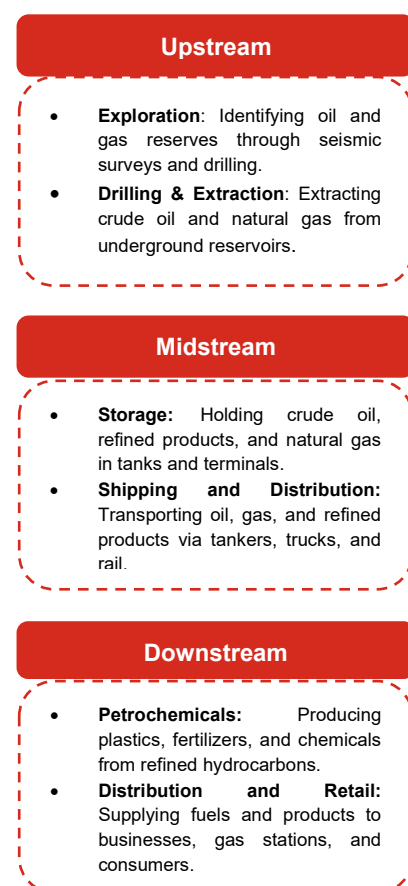
Industrial Expansion and Urbanization

As economies expand, particularly in developing regions, **the need for reliable energy sources to power industrial activities, infrastructure development, and transportation increases**. The projections point out that the **global electricity demand will double by 2050**, largely due to the rising energy needs of factories, commercial buildings, and digital services. Countries such as India and China are experiencing rapid industrialization, driving higher consumption of oil and natural gas (IEA, 2024).

Consumer Behavior and Lifestyle Changes

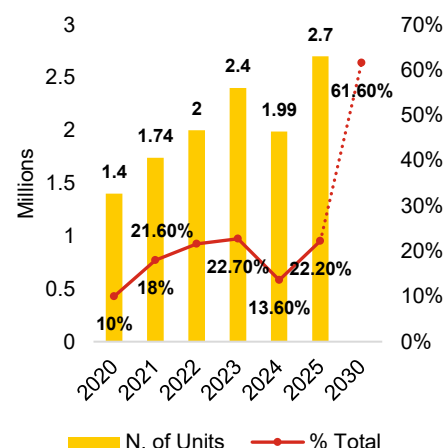
Shifts in consumer behavior and lifestyle play a crucial role in shaping electricity demand. The **increasing preference for EVs** (Figure 27) (EEA, 2024), **larger homes, increased reliance on electronic devices, and rising demand for air conditioning – especially in developing countries – are driving electricity consumption higher**. Conversely, greater awareness of environmental concerns and energy conservation is encouraging more mindful energy use and the adoption of energy-efficient practices (IEA, 2024).

Figure 26 – Oil & Gas Value Chain



Source: Deloitte

Figure 27 – Electric Vehicles Sales in Europe



Source: European Environment Agency

Supply Drivers

Regulatory Compliance & Policy Drive

The **oil and gas industry faces strict regulations** due to its environmental impact, safety concerns, and geopolitical implications, requiring compliance with government policies, international agreements, and industry standards to avoid fines, legal action, and reputational damage. These regulations influence key areas such as carbon emissions, drilling permits, fuel quality, supply chain transparency, and worker safety. (IEA, 2020)

Global policies like the **Paris Agreement**, the **EU Green Deal**, and the **U.S. Inflation Reduction Act** (Figure 28) push companies toward cleaner energy, shaping investment in sustainable supply chains. Compliance with environmental, safety, and trade regulations **increases operational costs and requires significant Capex to upgrade infrastructure, adopt cleaner technologies, and restructure supply chains**. These financial and strategic adjustments **impact long-term financial planning** as companies balance regulatory demands with profitability in an industry shifting toward sustainability. (Deloitte, 2024a).

Geopolitical Influences

Geopolitical trends have a profound impact on the **oil and gas supply chain, influencing supply availability, costs, and pricing volatility**. Trade sanctions, such as those recently imposed by the United States Government will lead to higher logistics costs. Additionally, **resource nationalism and government interventions** in countries like Mexico and parts of Africa create further uncertainty by restricting foreign access to energy reserves. **Political instability** and armed conflicts in key production regions – including the Israel-Iran conflict – could disrupt supply chains, while piracy in strategic shipping routes heightens transportation risks. Furthermore, **OPEC+ policies regulate oil production levels, directly affecting global prices**. These geopolitical challenges contribute to increased operational expenses, supply chain disruptions, and unpredictable price fluctuations. As a result, companies must **invest in risk management strategies, diversified sourcing, and geopolitical intelligence to ensure stability**. (ECB, 2023)

Technology

Technological advancements have **significantly enhanced the efficiency, precision, and reliability of the oil and gas industry**. Seismic imaging, AI, and remote sensing optimize reservoir identification, while horizontal drilling and hydraulic fracturing maximize resource extraction. Enhanced oil recovery (EOR) techniques, including CO₂ injection and thermal recovery, extend field productivity. Automation, robotics, and digital monitoring systems improve operational safety and cost efficiency. In refining, advanced cracking and hydro processing methods enhance output quality, while smart pipeline systems and LNG transport innovations optimize distribution. **These innovations collectively strengthen the industry's capacity to meet global energy demands with greater efficiency and sustainability**. (Shell, 2023)

Competitive Positioning

To conduct the competitive positioning, **Shell's six key peers (Table 5) were first identified using the Sum of Absolute Rank Differences (SARD) approach** (Knudsen et al., 2017).

Figure 28 – Global Policy Goals

Paris Agreement

- Global climate pact aiming to limit global warming to well below 2°C, preferably 1.5°C.
- Requires countries to submit Nationally Determined Contributions (NDCs) to reduce emissions.
- Focus on climate adaptation, mitigation, and financial support for developing nations.

EU Green Deal

- Ambitious plan to make the EU climate-neutral by 2050.
- Key policies: Carbon Border Adjustment Mechanism (CBAM), Fit for 55, Circular Economy Action Plan.
- Focus on renewable energy, emissions reduction, sustainable transport, and biodiversity protection.

US Inflation Reduction Act

- Largest US climate investment (~\$369 billion for clean energy & emissions reduction).
- Provides tax incentives for renewable energy, EVs, and domestic manufacturing.
- Focus on energy security, job creation, and reducing dependence on fossil fuels.

Source: UNFCC, European Commission and US Government

Table 5 – SARD Approach Peers

Selected Peers	
Rank	Company Name
1	PETROCHINA
2	British Petroleum
3	SINOPEC CORP
4	Eni S.p.A
5	Exxon Mobil Corporation
6	TotalEnergies SE

Source: Bloomberg and Author Analysis

Porter's Five Forces (Figure 29)

Rivalry Among Existing Competitors | High (5)

Shell faces intense competition from major industry players like ExxonMobil, BP, and TotalEnergies. The oil and gas sector is marked by price volatility, geopolitical factors, and the growing push for renewable energy. To stay competitive, companies must invest significantly in exploration, refining, and distribution (Shell, 2023).

Threat of Substitutes | Medium to High (4)

The growth of renewable energy and EVs challenges Shell's fossil fuel business, with government policies accelerating the transition to green energy. In response, Shell is investing in low-carbon technologies and alternative energy solutions (Forbes, 2021).

Bargaining Power of Suppliers | Moderate (3)

Suppliers are crucial to Shell's operations, providing equipment, technology, and services. However, Shell's vertical integration minimizes supplier influence while global oil producers, particularly OPEC, impact crude oil prices, affecting Shell's costs (Shell, 2023).

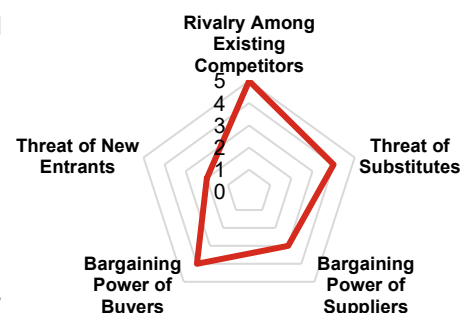
Bargaining Power of Buyers | Moderate to High (4)

Consumers and businesses have more power in the energy market due to renewable alternatives and EVs. Large buyers negotiate competitive contracts, while environmental awareness and regulations push Shell toward cleaner energy. To retain market share, Shell must adapt to shifting customer preferences (Forbes, 2021).

Threat of New Entrants | Low (2)

The oil and gas industry has high barriers to entry due to capital costs, regulations, and environmental constraints. Shell's economies of scale, infrastructure, and brand strength further limit new competition. Technical expertise in exploration and refining also deters potential entrants (Shell, 2023). Reinforcing this stability, credit rating agencies (Shell, 2025c) have maintained a stable outlook for Shell (Table 6).

Figure 29 – Porter's Five Forces



Source: Author Analysis

Table 6 – Shell's Ratings

Shell Ratings - Long Term Debt		
	Rating	Outlook
Standard & Poor's	A+	Stable
Moody's	Aa2/AA	Stable
Fitch	AA-	Stable
Basel II Criteria	AA	Stable

Source: Standard & Poor's, Moody's and Fitch Ratings

SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> Global Leader in Energy – Operates in over 70 countries with a well-established infrastructure. Diverse Energy Portfolio – Engaged in oil, gas, biofuels, hydrogen, and renewables. Strong Financials – High revenue, profitability, and consistent dividend payments. Technological Innovation – Heavy investment in research & development (R&D) for cleaner energy. Integrated Business Model – Covers exploration, production, refining, and retail, ensuring operational efficiency. 	<ul style="list-style-type: none"> High Dependence on Fossil Fuels – Still heavily reliant on oil and gas, slowing its green transition. Environmental & Legal Risks – Frequent lawsuits and criticism over pollution, oil spills, and emissions. High Capital Expenditure – Requires substantial investment for both fossil fuel projects and renewable expansion. Reputation & Public Perception – Past controversies, such as the Niger Delta oil spill, have damaged trust. Workforce Restructuring – Layoffs and internal changes create uncertainty among employees.
Opportunities	Threats
<ul style="list-style-type: none"> Renewable Energy Expansion – Increased investment in wind, solar, and hydrogen energy. Electric Vehicle (EV) Charging – Expanding its EV charging network to stay competitive. Carbon Capture & Biofuels – Growing focus on sustainable aviation fuels and carbon offset projects. Emerging Markets – Expanding operations in high growth economies like Africa and Asia. Strategic Acquisitions & Partnerships – Collaborations with green energy firms to accelerate sustainability efforts. 	<ul style="list-style-type: none"> Volatile Oil Prices – Dependence on fluctuating crude oil prices affects profitability. Regulatory & Policy Changes – Stricter environmental laws may limit fossil fuel projects. Geopolitical Uncertainty – Operations in politically unstable regions create risks. Competition from Renewables – Increasing competition from clean energy companies and tech giants. Investor & Public Pressure – ESG (Environmental, Social, Governance) concerns may lead to investor divestment.

Source: Author Analysis

5. Investment Summary

The base recommendation for Shell is to **HOLD**, with a FY2026 price target of **€32.88/share**, representing an **annualized upside potential of 8.15%** against the closing price of €29.88/share, as of 30th May 2025, with **Medium Risk**.

As part of the analytical framework, two distinct scenarios, Blue-Sky and Grey Sky (Figure 30), were defined to guide the analysis. The **Grey Sky** scenario assumes a more conservative outlook, characterized by a **slowdown in oil and gas demand growth, an increase in interest rates** impacting the risk-free rate, and **heightened ESG – related concerns**. These ESG considerations are reflected through the application of a 0.25 percentage point premium to the cost of equity (Gonçalves et al., 2022), representing a higher perceived risk from investors. In contrast, the **Blue-Sky** scenario assumes a more favorable environment, with **stronger oil and gas demand growth** and an **expansion in installed renewable energy capacity**, indicating positive momentum for both conventional and transitional energy investments.

Under the more pessimistic **Grey Sky** scenario, a price target (PT) of **€27.92 was determined, implying a downside potential of 4.49%**. In contrast, the more optimistic **Blue-Sky** scenario resulted in a **PT of €36.79, reflecting an upside potential of 25.85%**.

The recommendation is based on:

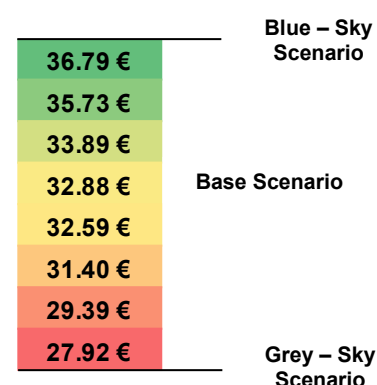
- **Conservative financial policy**, illustrated by the significant debt reduction – The company has significantly reduced debt, reflecting a disciplined and cautious financial strategy. This strengthens resilience and enhances flexibility during market fluctuations (Shell, 2024).
- **Global economic uncertainty coming from tariffs** – Tariffs and trade tensions add unpredictability to global markets and supply chains. They may increase costs and impact profitability across international operations (Moody's, 2024).
- **Navigating the energy transition remains a central challenge to the business profile** – Shifting to low-carbon energy is a long-term goal, but oil and gas will remain key cash generators this decade. Transitioning requires balancing sustainability with financial returns (Moody's, 2024).
- **Increased Shareholder Payouts** – Higher dividends and buybacks (Figure 31) reduce cash reserves available for downturn protection. This limits flexibility and could strain the balance sheet in weaker markets (Moody's, 2024)

Shell's stock is considered high risk due to its exposure to volatile oil and gas prices, regulatory and legal uncertainties, and growing environmental pressures. These factors heighten earnings volatility and increase the likelihood of downward valuation adjustments, supporting a cautious price recommendation (Moody's, 2024).

6. Valuation

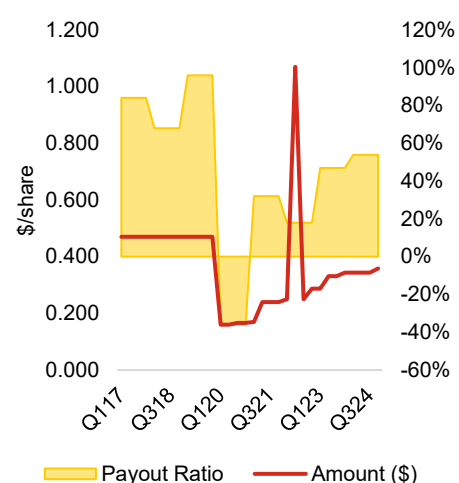
The valuation of Shell (Figure 32) was conducted using reasonable assumptions, and the main valuation drivers were: **i) Global Oil and Natural Gas Demand, ii) Marketing Sales Volumes, iii) Refining Output and Capacity, and iv) Renewable Power Generation Capacity**.

Figure 30 – Blue / Grey Scenarios



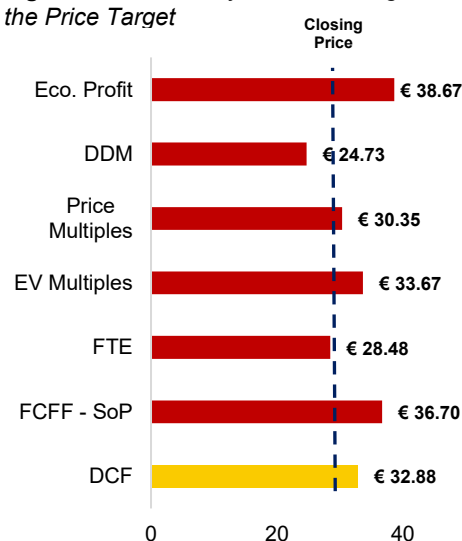
Source: Author Analysis

Figure 31 – Dividend Payout History



Source: Company data and Author Analysis

Figure 32 – Summary of methodologies for the Price Target



Source: Author Analysis

For the **Integrated Gas and Upstream** segments, projections were based on anticipated increases in global natural gas and oil demand, in line with estimates from the IEA and OPEC, respectively. In the **Marketing** segment, growth was driven by an expected evolution in sales volumes (Figure 33). These projections were informed by the historical evolution of volumes sold and average realized prices (Figure 34). Refining output projections were derived from Shell's historical performance and strategic outlook, assuming a refining capacity of **1.227 million barrels per day (bpd) by year-end 2029**. An average capacity utilization rate of **85%** was applied, with realized prices assumed to increase with global inflationary trends. In the **Renewables and Energy Solutions** segment, it is assumed that installed generation capacity will double to **6.4 gigawatts by 2029**. The realized price is projected to remain constant at **\$9.37 per GW** over the forecast period.

After the estimation of all the necessary items using reasonable assumptions (Appendix 7) of the financial statements (Appendix 8), a valuation of Shell was conducted using the following models: 1) **Free Cash Flow to the Firm (FCFF)**, both Integrated and Sum of Parts Approach 2) **Flow to Equity (FCFE)**, 3) **Relative Valuation**, 4) **Dividend Discount Model**, and 5) **Economic Profit**. As the company's reports and the estimates were prepared in US dollars (\$), they were converted to euros using the USD/EUR exchange rate of **0.88191 as of May 30th, 2025** (Banco de Portugal, 2025), to ensure comparability across valuation models and with Shell's share price.

Free Cash Flow to the Firm

The primary methodology used to estimate Shell's price target was the **Discounted Cash Flow** approach. The analysis was divided into two components: 1) **a detailed forecast for the period from 2025F to 2029F**, and 2) **a stable growth model applied to the perpetual period**. A year-specific **Weighted Average Cost of Capital (WACC)** rate (Appendix 9) was used throughout the analysis (Table 7).

The **FCFF (Integrated Approach)** model produced a FY2026 price target (PT) of **€32.88/share**, representing a **12.48% upside potential (8.15% annualized return)** compared to the closing price of **€29.23 on May 30th, 2025**. The **Enterprise Value** was estimated at approximately \$272 million and, after accounting for the necessary adjustments, the resulting **Equity Value** amounted to \$227 million.

Concurrently, an **FCFF sum-of-the-parts** (Appendix 10.1) was conducted, in which distinct WACC estimates were applied to each of Shell's segments (Figure 35), reaching a PT of **€36.70/share**, representing an upside of approximately **25.6%**.

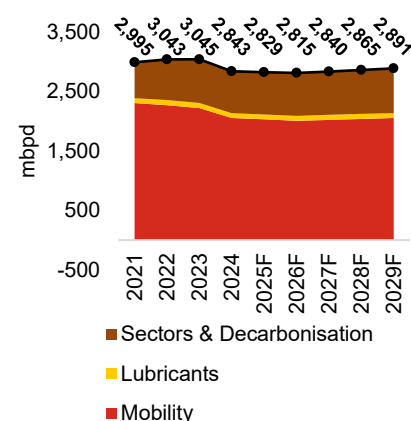
WACC Estimation

The Free Cash Flows were discounted using the **WACC**. The cost of capital was calculated using the **Capital Asset Pricing Model (CAPM)** for equity and the Default Risk Model for debt. The weights for debt and equity correspond to those applicable during the relevant period.

To determine the cost of equity using CAPM (Table 8), the following elements were considered:

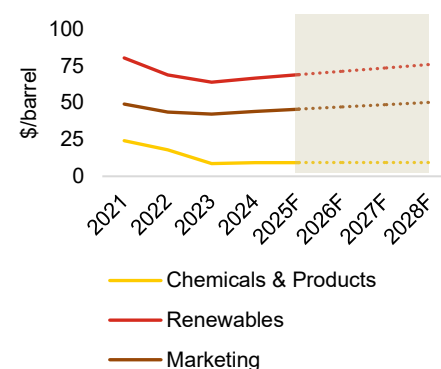
- **Risk-free rate:** A rate of 4.54%, derived from the 10-year yield to maturity of U.S. Treasury Bonds. Since the company operates across multiple regions, a country risk premium was assumed to be zero.
- **Market risk premium:** A premium of 5.50%, based on (Fernandez et al., 2025).
- **Levered beta:** A regression beta against the S&P 500 index, adjusted using the Blume methodology, resulting in a beta value of 0.724.

Figure 33 – Marketing Sales Volumes



Source: Company Data & Author analysis

Figure 34 – Average Realized Prices per sector



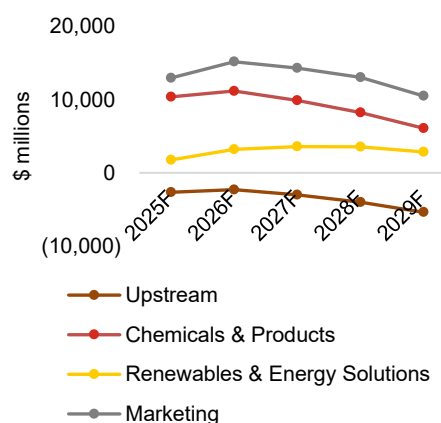
Source: Author Analysis

Table 7 – WACC Target Weights

Description	Year					
	2025F	2026F	2027F	2028F	2029F	Terminal
Equity Weight	71.05%	70.29%	69.46%	68.51%	67.52%	67.52%
Debt Weight	28.95%	29.71%	30.54%	31.49%	32.48%	32.48%
Debt-to-Equity	40.74%	42.27%	43.98%	45.96%	48.10%	48.10%

Source: Author Analysis

Figure 35 – FCF per business segment



Source: Author Analysis

The after-tax cost of debt was estimated by combining the risk-free rate with the Default Spread, as provided by on Damodaran, 2025. Based on these inputs, the WACC for the first year was calculated at **6.85%**.

A **2.66% long-run sustainable growth rate** was determined considering the firm Reinvestment Rate and Return on Investment Capital (Table 9).

Flow to Equity

In addition to the FCFF methodology, the valuation was complemented by applying the **Free Cash Flow to Equity** model (Appendix 10.2), using a cost of equity of **8.52%**. The FCFE resulted in a FY2026 PT of **€28.48/share**, indicating a **downside potential of 2.56%** compared to the closing price of **€29.84 on May 30th, 2025**.

Relative Valuation

To perform the relative valuation of Shell, a peer group was selected using the **Sum of Absolute Rank Differences (SARD)** approach (Table 5).

After determining the Price and Enterprise Value multiples, the valuation was conducted using the median of the Price-to-Earnings ratio and the Enterprise Value-to-EBIT ratio (Figure 36). Using the P/E ratio, a PT of **€30.35/share** was derived, representing an **upside potential of 3.82%** compared to the closing price on **May 30th, 2025**, while under the EV/EBIT ratio, it resulted in a PT of **€33.67/share** (Appendix 10.3), indicating a **potential upside of 15.18%**.

Dividend Discount Model

The Dividend Discount Model estimated a **PT of €24.73** (Appendix 10.4) per share for FY2026, indicating a **downside of 15.41%** compared to the closing price on **May 30th, 2025**. This valuation was derived using a two-stage approach. In the first stage, the model calculated the cash flows attributable to shareholders, while in the second stage, the H-Model was applied considering:

- A **short-term dividend growth rate of 4.00%**, aligned with the company strategy, announced as part of Capital Markets Days 2025.
- A **high-growth period with a half-life of 10 years**, reflecting the typical business cycles of the oil and gas industry.
- A **long-term dividend growth rate of 2.66%**, consistent with the terminal growth rate.

Economic Profit

The Economic Model estimated a **PT of €25.35/share** (Appendix 10.5) for FY2026, representing an **upside potential of 32.31%** relative to the closing price on **May 30th**. This valuation was derived following the calculation of **Economic Value Added** (EVA), which resulted in an equity value of **\$268 million** (Figure 37).

Consensus Estimates

The price target defined by the author is broadly aligned with current consensus estimates (Appendix 11). Over the past 25 analyst reports issued, **approximately 20% suggested a HOLD recommendation**, while recent estimates have indicated price targets that are consistent with the valuation derived in this analysis, suggesting a general convergence in market expectations (Bloomberg, 2024).

Table 8 – WACC Determination

Description	Year					
	2025F	2026F	2027F	2028F	2029F	Terminal
Cost of Equity						
Risk-Free Rate - Integrated	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%
Beta - Integrated	0.724	0.724	0.724	0.724	0.724	0.724
Upstream	0.940	0.940	0.940	0.940	0.940	0.940
Production and Exploration	0.880	0.880	0.880	0.880	0.880	0.880
Renewables & Energy Solutions	1.130	1.130	1.130	1.130	1.130	1.130
Marketing	0.750	0.750	0.750	0.750	0.750	0.750
Market Risk Premium	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Cost of Equity - Integrated	8.52%	8.52%	8.52%	8.52%	8.52%	8.52%
Upstream	9.71%	9.71%	9.71%	9.71%	9.71%	9.71%
Production and Exploration	9.38%	9.38%	9.38%	9.38%	9.38%	9.38%
Renewables & Energy Solutions	10.76%	10.76%	10.76%	10.76%	10.76%	10.76%
Marketing	8.67%	8.67%	8.67%	8.67%	8.67%	8.67%
Cost of Debt						
Cost of Debt	4.54%	5.24%	5.24%	5.46%	5.46%	5.46%
Tax Rate	39%	39%	39%	39%	39%	39%
After-tax Cost of Debt	2.75%	3.17%	3.17%	3.30%	3.30%	3.30%
WACC - Integrated						
WACC - Integrated	6.85%	6.94%	6.88%	6.87%	6.82%	6.82%
Upstream	7.70%	7.77%	7.71%	7.69%	7.62%	7.62%
Production and Exploration	7.46%	7.54%	7.48%	7.46%	7.40%	7.40%
Renewables & Energy Solutions	8.44%	8.51%	8.43%	8.40%	8.33%	8.33%
Marketing	6.96%	7.04%	6.98%	6.97%	6.92%	6.92%

Source: Author Analysis

Table 9 – Terminal Growth Rate

Caption	Year				
	2025F	2026F	2027F	2028F	2029F
Capex	19,754	19,909	20,064	20,221	20,379
D&A	27,448	27,842	28,267	28,728	28,728
Var. NWC	9,905	5,974	9,290	14,362	22,245
NOPAT	23,110	23,810	24,421	25,249	26,074
Reinvestment Rate	10%	-8%	4%	23%	53%
ROIC	13%	14%	14%	16%	17%
Terminal Growth Rate (g)	1.21%	-1.11%	0.64%	3.61%	8.97%
			2.66%		

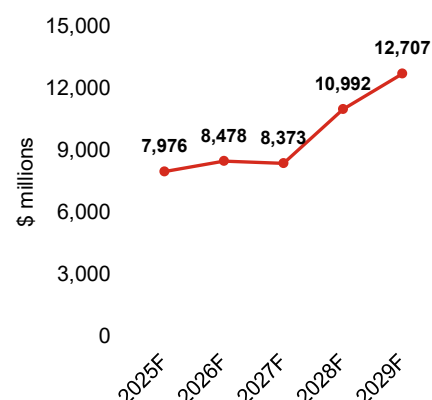
Source: Author Analysis

Figure 36 – Peers ratios median

Price Multiples	
Price Earnings Ratio (P/E)	9.67
Price to Book Ratio	0.95
Price to Sales Ratio	0.5
Enterprise Value Multiples	
EV / Sales	0.72
EV / EBIT	7.53
EV / EBITDA	4.11
EV/ Free Cash Flow	9.62

Source: Author Analysis

Figure 37 – Economic Value Added



Source: Author Analysis

7. Financial Analysis

Profitability Growth Driven by Margins and Efficiency

Shell plc's profitability demonstrates significant improvement over both the historical and forecast periods, as evidenced by key financial ratios (Appendix 12.1 and 12.2). The **Gross Profit Margin** increased from 18.05% in 2017 to a projected 25.53% by 2029F, reflecting enhanced cost management and pricing strategies. Although the **Net Profit Margin** has shown volatility, it rises from 4.40% in 2017 to 7,21% in 2029F.

Return on Assets (ROA) and **Return on Equity (ROE)** have experienced fluctuations, with both indicators showing a increase during the forecast period, falling slightly above the industry peers' average. Additionally, the **Return on Invested Capital (ROIC)** improved from 7,21% in 2017 to 16,84% in 2029F, signaling stronger returns on capital employed. Overall, **Shell's profitability has improved through effective cost management, and operational efficiency** as evidenced by the steadily increasing **ROIC - WACC** and **ROE - Cost of capital** spreads, from 2026 to 2029. This trend indicates Shell's ability to generate returns above its cost of capital, supporting long-term value creation. (Figure 38).

Steady Leverage to achieve long-term sustainability

Shell plc's **solvency position has shown significant improvement over time**. The Debt-to-Equity ratio (Figure 39), which peaked at 68.1% in FY2020, is projected to remain relatively steady throughout the forecasted period, reflecting the company's implementation of effective debt management strategies. The Debt to EBITDAX, a typical industry ratio, of 1.25x is conservative and well below the industry norm of 2 to 3 times, highlighting prudent financial management. Additionally, the **Interest Coverage ratio** is expected to remain at comfortable levels, reaching 9,78x by FY2029.

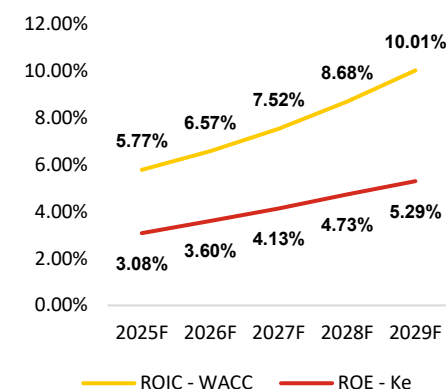
Although these highlights Shell's strategic focus on deleveraging, reducing financial risk, and enhancing creditworthiness while supporting the company's long-term sustainability, the company shows a possibility of financial distress as assessed by an **Altman Z-Score of 2.18** (Appendix 12.3).

Slower Inventory Turnover and Improved Cash Conversion Cycle

The company activity efficiency reveals mixed trends in operational performance. **Inventory Turnover** declines from 13.87x in 2018 to 9.37x by 2029F indicating slower inventory movement, which may tie up working capital. Both **Accounts Receivable Turnover** and **Accounts Payable Turnover** remain relatively stable during the forecast period, showing consistent and effective credit management (Appendix 4). The **Cash Conversion Cycle (CCC)** declines from -4.89 days in 2018 to -16.22 days by 2029F (Figure 40), reflecting longer extended payment terms and continued efficiency in receivables management.

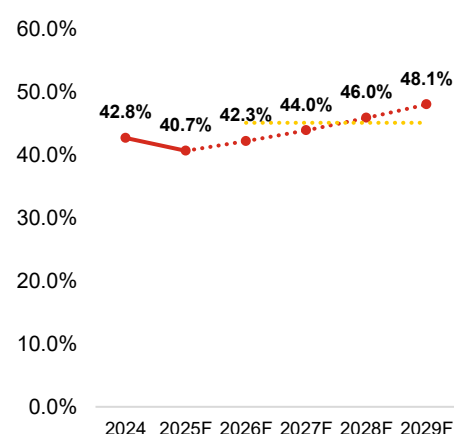
Shell's operational efficiency **remains strong**, but the decline **Inventory Turnover** trend suggests the company must **focus on inventory management** to optimize working capital. In comparison with other companies in the oil and gas sector, **Shell presents a stable position**, with a **Reserves Life Index of 3.75 years**, slightly below the industry average of 4 to 7 years, indicating a need to maintain reserve replacement and, a **PD to PUD ratio of 71%**, which is in line with typical standards, reflecting a balanced reserve profile.

Figure 38 – ROIC spread to WACC vs ROE spread to Cost of Equity



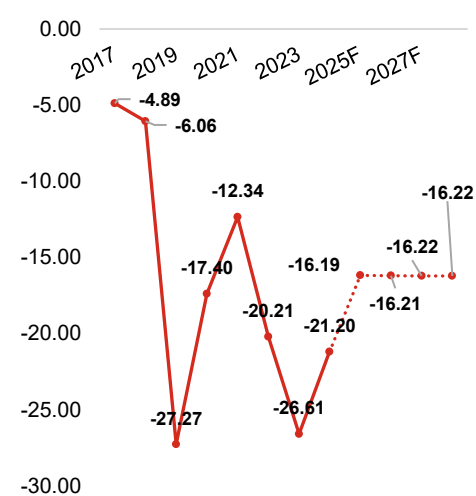
Source: Author Analysis

Figure 39 – Debt-to-Equity



Source: Author Analysis

Figure 40 – Cash Conversion Cycle (days)



Source: Author Analysis

8. Investment Risks

Shell faces several risks that may impact its business. These risks can be divided into the following groups: i) **Market Risks**, ii) **Political, Legal and Regulatory Risks**, iii) **Operational Risks**, iv) **Environment Risks** (Figure 41).

Market Risks

Commodity Price Risk (M1): The prices of oil, gas, and other energy commodities are subject to significant fluctuations driven by various global factors (Figure 42). **For example, changes in supply and demand – due to economic growth, weather conditions, or other factors – can lead to sharp price movements.** During periods of reduced demand, prices may drop, adversely affecting earnings and having a substantial impact on Upstream operations and proved reserves (Shell, 2024).

While the high volatility of oil and gas prices is strongly correlated with other risks (Figure 43), the company has **successfully mitigated these challenges through its integrated business model** (Shell, 2024).

Competition Risk (M2): Shell faces competition from other large energy firms, and increasingly, from renewable energy companies. This competition can limit Shell's market share, especially as **global energy markets shift toward cleaner sources** (Shell, 2024).

Exchange Rate Risk (M3): Shell operates in many countries, **generating revenue in multiple currencies**. Fluctuations in exchange rates can affect the company's earnings and financial stability, especially in emerging markets (Shell, 2024).

Political, Legal, and Regulatory Risks

Political Instability (P1): Shell faces political risks from instability, changes in government policies, and sanctions that can disrupt operations and reduce profitability. Nationalization, regulatory shifts, or trade restrictions can increase costs or limit market access. Additionally, **the removal of subsidies for renewable energy projects could make Shell's green investments less profitable**, slowing its transition to sustainable energy and affecting long-term growth (OPEC, 2024)

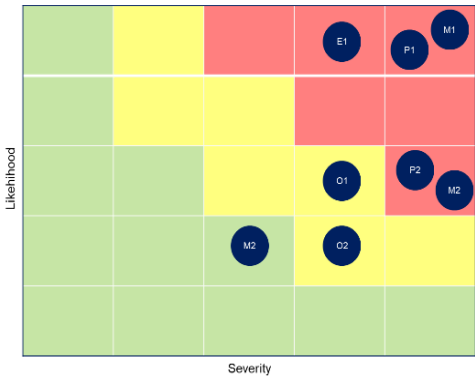
Legal Risk (P2): Shell is exposed to legal risks from lawsuits, especially related to **environmental damage, human rights issues, and worker safety**. These lawsuits can result in substantial financial settlements and reputational harm (OPEC, 2024).

Operational Risks

Production Disruptions (O1): Disruptions in the supply chain, such as shortages of equipment or labor strikes, can impact Shell's ability to maintain or expand production. These delays can **increase costs and hinder the company's ability to meet production targets** or completely new projects on time (Shell, 2023).

Reputation Risk (O2): Shell's operations, particularly in fossil fuels, face growing scrutiny from environmental groups and the public. Negative press or **failure to meet environmental targets can erode consumer and investor confidence** (Shell, 2023).

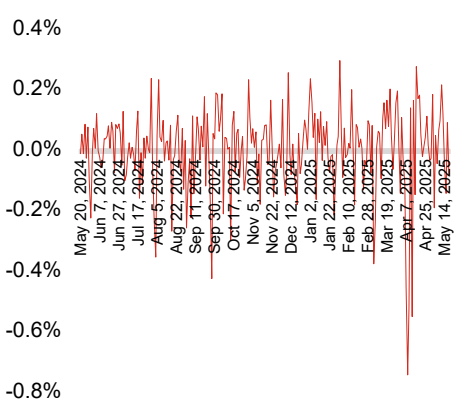
Figure 41 – Risk Matrix



Legend:
Likelihood: Identifying the probability of occurrence
Severity: Measuring the degree of the consequences

Source: Author Analysis

Figure 42 – Oil prices volatility (YTD)



Source: Author Analysis

Figure 43 – Oil and gas prices volatility and relation with other risks



Source: Bloomberg

Environment Risks

Natural Disasters and Accidents (E1): Shell's operations are vulnerable to disruptions from **hurricanes, earthquakes, or climate changes**. Such disruptions can damage infrastructure, delay production, and lead to costly repairs or legal liabilities (Shell, 2023).

Sensitivity Analysis

Shell's key value drivers have a significant impact on the price target derived from the valuation model. Accordingly, a sensitivity analysis (Appendix 13) was conducted to assess how variations in the WACC, as well as in the following assumptions: **(i) terminal sustainable growth rate, (ii) capital expenditure (Capex) growth, and (iii) the USD/EUR exchange rate** affect the PT.

The **base case** assumes a terminal growth rate (g) of 2.66%, which yields a price target of **€32.88**. As expected, an increase in the terminal growth rate leads to a higher PT, holding all other variables constant (*ceteris paribus*). Similarly, an **appreciation of the USD relative to the euro** also results in a higher PT, reflecting the positive impact of currency movements on Shell's predominantly dollar-denominated revenues. Conversely, **increases in the WACC – set at 6.85% in the base year – lead to a decline in the PT** (Figure 44), as higher discount rates reduce the present value of future cash flows.

Scenario Analysis

The analysis was guided by two scenarios – **Grey Sky and Blue Sky**. The pessimistic scenario yields a **PT of €28.59**, implying a **downside potential of 4.20%**, while the optimistic scenario projects a **PT of €35.57**, representing an upside potential of 19.21%.

Monte Carlo Simulation

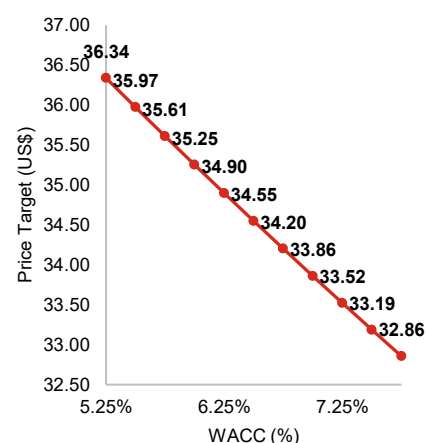
For better analysis of Shell's stock performance, a **Monte Carlo Simulation** (Appendix 14) was conducted. Monte Carlo methods are powerful tools able to account for uncertainty by simulating thousands of possible price paths based on historical data. By incorporating **randomness in returns and volatility**, these simulations provide a probabilistic view of future outcomes rather than relying on a single-point estimate. Using Shell's closing price as of **May 16th, along with year-to-date (YTD) volatility and return, 10,000 simulations** were run to model potential price movements. The outcome revealed a **31.79% probability of HOLD recommendation** (Figure 45).

9. Additional Analysis

Introduction

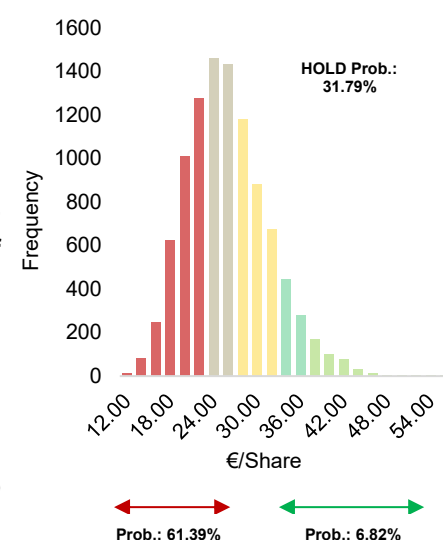
According to the **Efficient Market Hypothesis (Figure 46)**, as articulated by Fama (1970), market prices are expected to fully reflect all available information. However, empirical observations suggest that, despite the profound long-term implications of systemic risks, particularly those arising from **geopolitical instability and environmental challenges, the market often underestimates or inadequately incorporates these factors into asset valuations**, especially within the oil and gas industry (Riedl, 2021)

Figure 44 – PT sensitivity to WACC (\$/sh)



Source: Author Analysis

Figure 45 – Monte Carlo Simulation



Source: Author Analysis

Figure 46 – Efficient Market Hypothesis

Theory that financial markets are "informationally efficient," meaning asset prices fully reflect all available information, at any given time. As a result, it is impossible to consistently achieve returns that outperform the market through stock picking or market timing, since price changes only react to new, unpredictable information.

Source: Eugene Fama

The Task Force on Climate-related Financial Disclosures (TCFD, 2017) highlights that **environmental and transition risks, such as carbon regulation, renewable energy advancements, and shifting consumer preferences, are frequently underpriced**. This is largely due to limited corporate disclosure, the complexity of climate scenarios, and shortcomings in financial models.

Consequently, fossil fuel company valuations may be inflated, as many hydrocarbon reserves face the risk of becoming "stranded assets" (Van der Ploeg & Rezai, 2020). At the same time, geopolitical risks are **often under reflected in equity markets**. While geopolitical events can cause immediate oil price spikes (Caldara & Iacoviello, 2022), corresponding stock price adjustments are often delayed or muted. Bekaert et al. (2014) also finds that political risk is especially underpriced in emerging markets, where much of the industry's assets are concentrated, resulting in equity valuations that understate true risk exposure.

Regression Analysis

Based on these considerations, we developed two distinct valuation models (Appendix 15). **The first is a baseline model (1) that estimates Shell's share price using fundamental indicators such as earnings per share (EPS) and dividends per share (DPS). Building on this, a second model (2) – the "carbon model" – was constructed by incorporating additional variables: a carbon price and a geopolitical risk dummy variable (Table 10).** The objective of this dual-model approach is to assess whether Shell's current market valuation is misaligned – either underpriced or overpriced – in relation to these financial, environmental, and geopolitical factors.

Base Model:

$$Y_t = \beta_0 + \beta_1 * EPS_t + \beta_2 * DPS_t + \mu_t \quad (1)$$

Carbon Model:

$$Y_t = \beta_0 + \beta_1 * EPS_t + \beta_2 * DPS_t + \beta_4 * Carbon Price_t + \delta_1 * GeoRisk + \mu_t \quad (2)$$

Conclusion

Using quarterly data spanning from **Q1 2017 to Q4 2024**, the analysis indicates that the market persistently overvalues the share price when assessed under the carbon-adjusted valuation model (Figures 47 and 48). This trend **contrasts sharply with the outcomes observed under the base model**, where such overvaluation is not evident. The consistent divergence suggests that while investors may acknowledge environmental and geopolitical risks to some extent, these risks are not fully integrated into market pricing mechanisms.

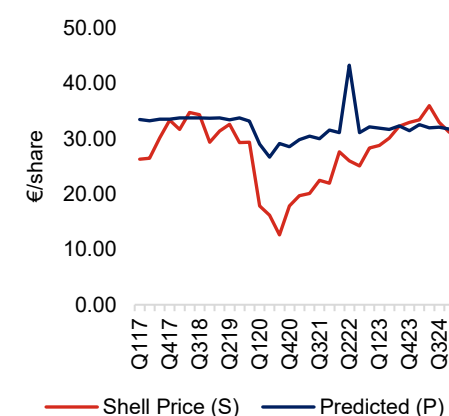
The **overvaluation observed in the carbon model implies that current market prices do not adequately reflect the long-term financial implications of climate-related and geopolitical exposures**. Moreover, the findings support the argument that incorporating environmental and geopolitical variables into traditional valuation frameworks can yield materially different assessments of firm value. This has important implications for both investors and policymakers: **investors may be systematically underestimating the risk-adjusted cost of capital for carbon-intensive firms, while regulators may need to consider the integration of sustainability metrics into financial reporting standards to enhance market efficiency**.

Table 10 – Geographic Events

Geographic Events	
Q117	Trump inauguration (market-moving policy shift)
Q317	North Korea missile threats (brief market jitters)
Q118	US begins steel/aluminum tariffs (start of trade war)
Q218	US-China trade war escalates
Q418	US markets drop amid trade fears, Fed hikes
Q219	US-Iran tanker attacks escalate, oil risk up
Q419	US-China "Phase One" trade deal preview
Q120	COVID-19 outbreak starts, global panic
Q220	COVID global lockdowns + oil price crash
Q420	US election instability risk
Q121	Capitol riots, post-election instability
Q421	Russia begins troop buildup near Ukraine
Q122	Russia invades Ukraine – global commodity shock
Q222	War + sanctions hit global energy/food prices
Q423	Israel-Hamas war (Oct 2023) disrupts oil, Suez shipping risks
Q124	Red Sea shipping attacks raise global freight costs
Q224	Ongoing Middle East & Ukraine tensions (global exposure still present)
Q424	Trump inauguration (market-moving policy shift)

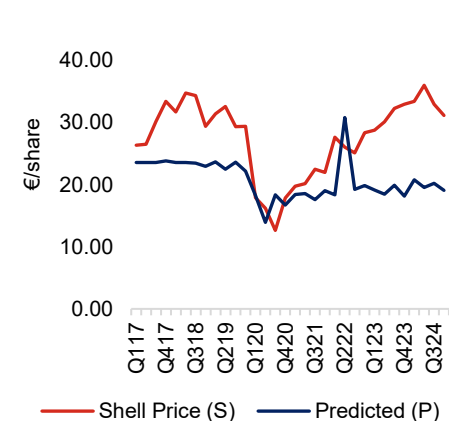
Source: Author Analysis

Figure 47 – Base Model, Share Price vs Predicted Price



Source: Author Analysis

Figure 48 – Carbon Model, Share Price vs Predicted Price



Source: Author Analysis

Legend:

EPS – Earning per Share (US\$)

DPS – Dividends per Share (US\$)

Carbon Price – Carbon emission allowance (US\$)

Geo Risk – Dummy variable which assumes 1 or 0 based on putative geopolitical risks

Appendices

Appendix 1 – Shell Global Operations as of FY2024



Source: Company Data

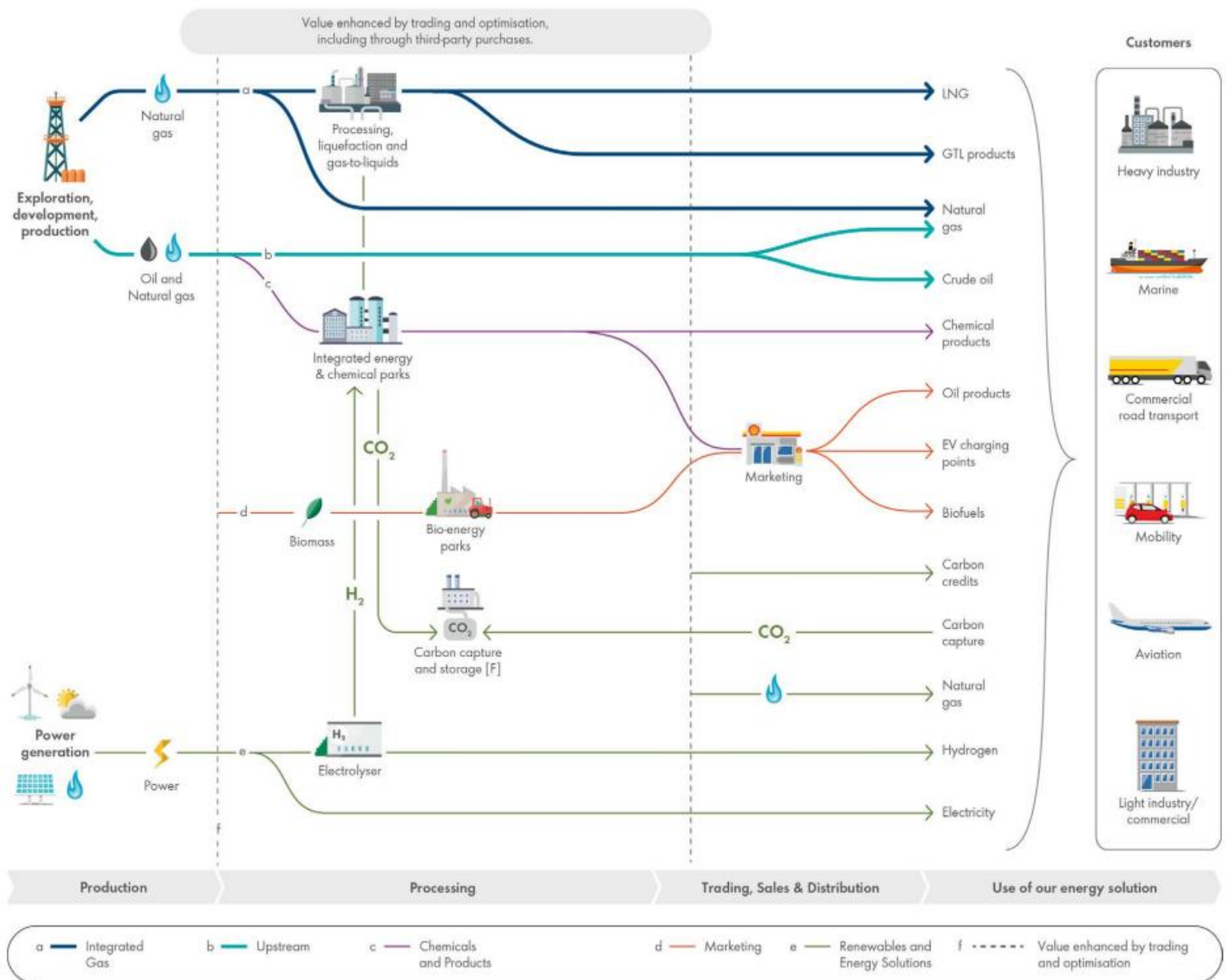
Appendix 2 – Business Strategies

Integrated Gas		Upstream
<ul style="list-style-type: none"> • Expanded global LNG portfolio on Manatee (Trinidad & Tobago) and Surat Gas Phase 2 (Australia); both to supply existing LNG assets. • Strengthened trading and market access via acquisition of Pavilion Energy and long-term LNG deals with BOTAS (Turkey) and others. • Progressed low-carbon LNG projects, including investment in Ruwais LNG (UAE) and continued development of LNG Canada. • Increased asset efficiency through Atlantic LNG restructuring (Phase 1 complete) and Pearl GTL's record turnaround with lowest GHG intensity to date. 		<ul style="list-style-type: none"> • Continue delivering consistent performance via improved operations, cost efficiency, portfolio optimization, and strategic investments. • Asset availability and reliability are expected to improve. • New production from Jerun (Malaysia), Mero-3 FPSO (Brazil), Whale FPSO (Gulf of Mexico), and Penguins FPSO (UK North Sea) will drive volume growth. • Create the region's largest independent producer by end-2025 through the planned merger of Shell's and Equinor's UK North Sea assets aims to
Marketing	Chemicals & Products	Renewables & Energy Solutions
<ul style="list-style-type: none"> • Mobility focus: Scaling high-return markets; exiting ~500 low-return sites per year through 2025. • EV charging growth: Prioritizing China, Europe, and the U.S. with a focus on profitability. • Low-carbon fuels: Expanding sustainable aviation and marine fuel offerings. • Digital services: Enhancing digital solutions across Aviation and Marine businesses. 	<ul style="list-style-type: none"> • Wesseling refinery transition: Converting Wesseling (Germany) into a base oil unit; ending crude processing there in 2025. • Low-carbon shift: Investing in carbon capture (Polaris, Quest) and circular feedstocks (pyrolysis oil). • Chemicals expansion: Scaling high-value products and global capacity, including in China and the U.S. • Portfolio focus: Divesting non-core assets like the Singapore site to streamline operations. 	<ul style="list-style-type: none"> • Refocused portfolio: Divested offshore wind assets and shifted investment to energy storage and flexible gas generation (e.g. RISEC acquisition). • Scaling low-carbon tech: Advanced key hydrogen and CCS projects, including REFHYNE II and the Atlas Carbon Storage Hub. • Targeted renewables growth: Delivered key solar and wind projects, while prioritizing value-driven, capital-light models and energy trading.

Source: Company Data

Appendix 3 – Shell Value of Chain

Business activities



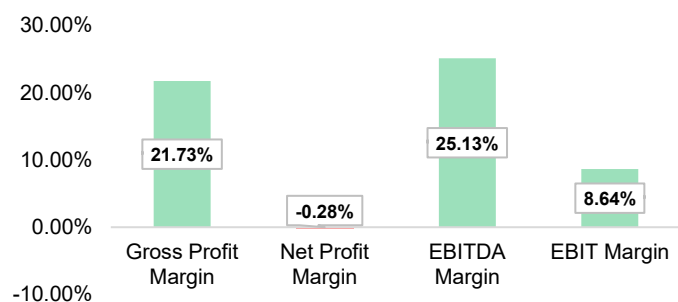
Source: Company Data

Appendix 4 – Portfolio Breakdown

Appendix 4.1 – Integrated Gas

LNG Liquefaction Plants in operation			
Description	Asset	Location	100% capacity (mtpa)
Asia			
Brunei	Brunei LNG	Lumut	7.6
Oman	Oman LNG	Sur	7.1
	Qalhat LNG	Sur	3.7
Qatar	QatarEnergy LNG N(4)	Ras Laffan	7.8
Oceania			
Australia	Australia North West Shelf	Karratha	16.9
	Gorgon LNG	Barrow Island	15.6
	Prelude	Browse Basin	3.6
	Queensland Curtis LNG T1	Curtis Island	4.3
	Queensland Curtis LNG T2	Curtis Island	4.3
Africa			
Egypt	Egyptian LNG T1	Idku	3.6
	Egyptian LNG T2	Idku	3.6
Nigeria	Nigeria LNG T1-T6	Bonny	24.1
South America			
Peru	Peru LNG	Pampa Melchorita	4.5
Trinidad and Tobago	Atlantic LNG T1/T2/T3	Point Fortin	9.3
	Atlantic LNG T4	Point Fortin	5.2

Segment Margins FY2024



LNG Liquefaction Plants under construction			
Description	Asset	Location	100% capacity (mtpa)
Africa			
Nigeria	Train 7	Bonny	7.6 %
North America			
Canada	LNG Canada T1-2	Kitimat	14.0 %
Asia			
Qatar	QatarEnergy LNG NFE(2)	Ras Laffan	8.0 %
	QatarEnergy LNG NFS(2)	Ras Laffan	6.0 %

Segment Income Statement FY2024

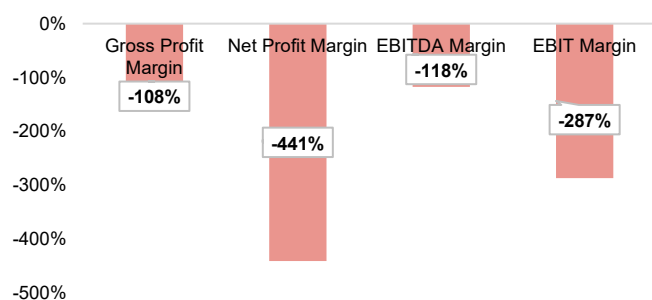
Revenue	37,290
Cost of Revenue	29,188
Gross Profit	8,102
Operating Expenses	703
Operating Income	1,971
EBITDA	9,370
Depreciation and Amortization	6,150
EBIT	3,220
Interest Income	8
Interest Expense	189
EBT	3,039
Taxes Paid	3,144
Net Income	-105

Source: Company Data and Author Analysis

Appendix 4.2 – Upstream

Total Proved Developed (PD) and Underdeveloped (PUD)				
Description	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Total (million boe)
Europe	159	2,596	0	606
Asia	1,723	14,791	0	4,273
Oceania	65	6,090	0	1,114
Africa	294	1,952	0	631
USA	437	498	0	523
Canada	0	0	741	741
South America	1,211	3,015	0	1,732
Total	3,889	28,942	741	9,620

Segment Margins FY2024



Segment Income Statement FY2024

Revenue	6,606
Cost of Revenue	13,712
Gross Profit	-7,106
Operating Expenses	2,436
Operating Income	1,780
EBITDA	-7,762
Depreciation and Amortization	11,223
EBIT	-18,985
Interest Income	18
Interest Expense	806
EBT	-19,773
Taxes Paid	9,387
Net Income	-29,160

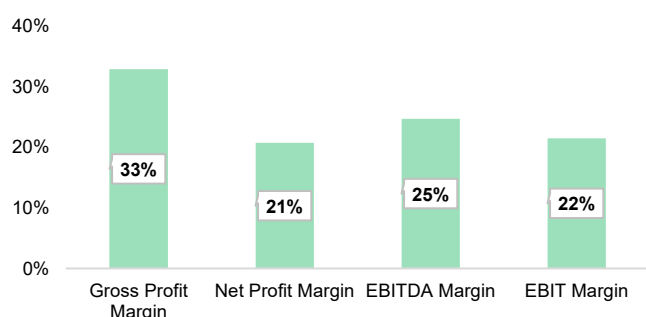
Source: Company Data and Author Analysis

Appendix 4.3 – Marketing

Marketing Retail Sites					
Description	2020	2021	2022	2023	2024
Europe	8,071	8,178	8,260	8,346	8,227
Asia	10,387	10,753	10,470	10,824	7,742
Oceania	1,071	1,060	1,083	1,087	1,047
Africa	2,622	2,724	2,815	2,917	2,994
Americas	23,461	23,305	23,597	23,830	24,099
Total	45,612	46,020	46,225	47,004	44,109

Marketing Sales Volumes (thousand bpd)					
Description	2020	2021	2022	2023	2024
Mobility	2,259	2,307	2,274	2,226	2,057
Lubricants	71	85	83	82	82
Sectors & Decarbonisation	564	602	686	737	704
Total	2,894	2,994	3,043	3,045	2,843

Segment Margins FY2024



Segment Income Statement FY2024

Revenue	120,089
Cost of Revenue	80,605
Gross Profit	39,484
Operating Expenses	9,359
Operating Income	-427
EBITDA	29,698
Depreciation and Amortization	3866
EBIT	25,832
Interest Income	1
Interest Expense	56
EBT	25,777
Taxes Paid	894
Net Income	24,883

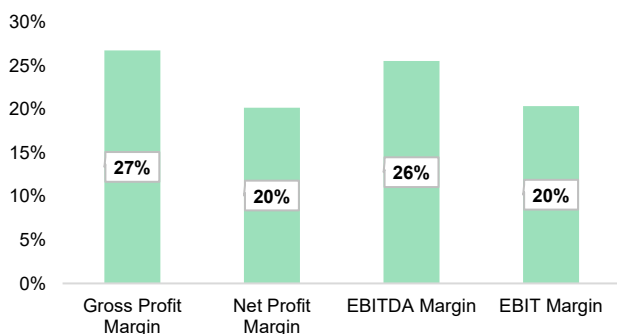
Source: Company Data and Author Analysis

Appendix 4.4 – Chemicals & Products

Crude Distillation Capacity (Thousand b/stream day)					
Description	2020	2021	2022	2023	2024
Europe	1,059	1,023	990	975	975
Asia	573	307	237	237	237
Africa	90	90	23	0	0
Americas	1,028	729	449	435	435
Total	2,750	2,149	1,699	1,647	1,647

Refineries (Thousand b/stream day)					
Description	Location	Crude distillation capacity	Thermal cracking	Catalytic cracking	Hydro-cracking
Europe					
Germany	Miro	313	40	96	—
	Rheinland	339	32	—	87
	Schwedt	234	46	57	—
Netherlands	Pernis	447	—	53	104
Asia					
Singapore	Pulau Bukom	237	—	—	61
Americas					
Argentina	Buenos Aires	112	14	22	—
Canada	Alberta	100	—	—	83
	Ontario	85	5	21	10
USA	Louisiana	250	29	119	44

Segment Margins FY2024



Refineries (Thousand b/stream day)						
Description	Location	Ethylene	Polyethylene	Styrene monomer	Ethylene glycol	Higher olefins
Europe						
Germany	Rheinland	324	—	—	—	—
Netherlands	Moerdijk	974	—	817	154	—
UK	Moss moran	415	—	—	—	—
Asia						
China	Nanhai	1,100	605	645	415	—
Singapore	Jurong Island	281	40	1,069	924	—
	Pulau Bukom	1,161	—	—	—	—
Americas						
Canada	Scottford	—	—	475	462	—
USA	Monaca	1,500	1,600	—	—	—
	Deer Park	889	—	—	—	—
	Geismar	—	—	—	400	1,390
	Norco	1,432	—	—	—	—

Segment Income Statement FY2024

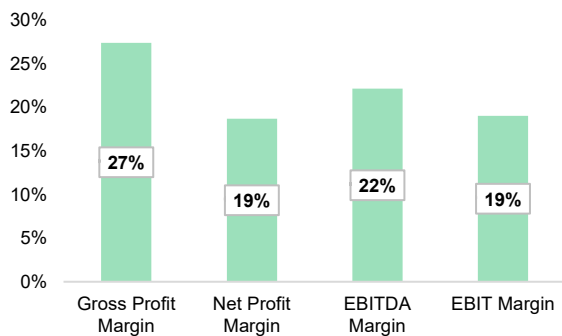
Revenue	90,918
Cost of Revenue	66,629
Gross Profit	24,289
Operating Expenses	1,787
Operating Income	690
EBITDA	23,192
Depreciation and Amortization	4700
EBIT	18,492
Interest Income	79
Interest Expense	70
EBT	18,501
Taxes Paid	177
Net Income	18,324

Source: Company Data and Author Analysis

Appendix 4.5 – Renewables & Energy Solutions

Renewable Power Generation Capacity (MW)		
Location	In Operation	In Development
Asia	2,394	2,220
Europe	1,858	965
Americas	465	1,920
Australia	0	120
Other	84	18
Total	4,801	5,243

Segment Margins FY2024

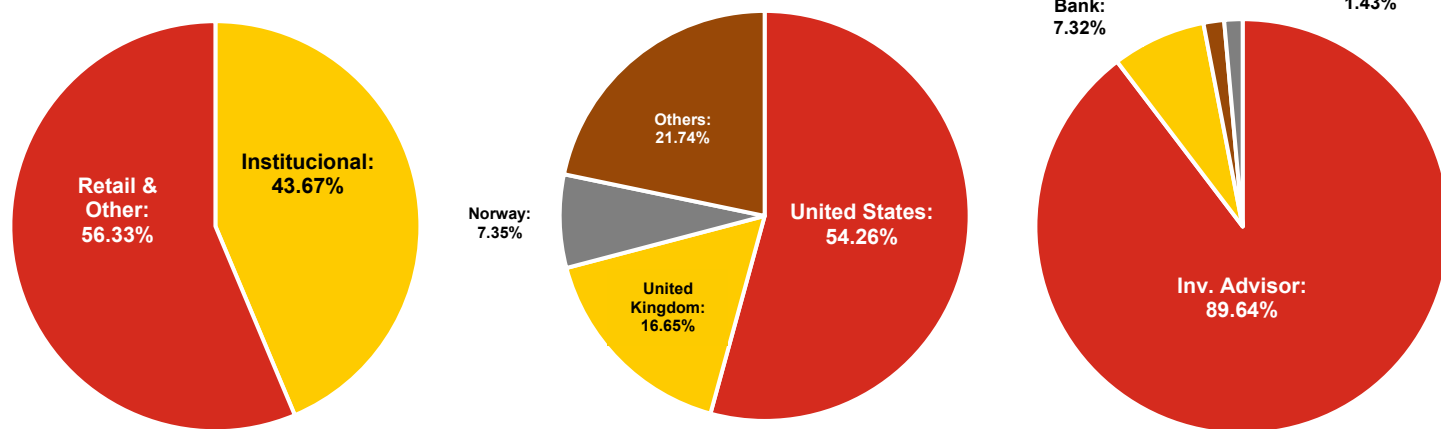


Segment Income Statement FY2024

Revenue	29,366
Cost of Revenue	21,322
Gross Profit	8,044
Operating Expenses	981
Operating Income	-567
EBITDA	6,496
Depreciation and Amortization	907
EBIT	5,589
Interest Income	2
Interest Expense	6
EBT	5,585
Taxes Paid	99
Net Income	5,486

Source: Company Data and Author Analysis

Appendix 5 – Shell Ownership Structure



Source: Bloomberg

Appendix 6 – Shell's Sustainable Development Goals (SDG)



Source: ESG Everything

Appendix 7 – Assumptions

Appendix 7.1 – Assumptions

Assumptions							
Caption	Unit		Forecasted				
		2024	2025F	2026F	2027F	2028F	2029F
Macroeconomic Data							
Number of Days	Days	366	365	365	365	366	365
World Population	Billions	8.17	8.23	8.30	8.37	8.44	8.50
Global Real GDP Growth	%	3.20%	3.20%	3.30%	3.20%	3.10%	3.10%
Europe	%	0.90%	1.50%	1.80%	1.60%	1.60%	1.50%
Asia Pacific	%	3.90%	4.40%	4.30%	4.10%	4.00%	4.00%
Africa	%	3%	3.90%	4.10%	4.30%	4.40%	4.50%
North America	%	2.50%	2.10%	2%	2.10%	2.10%	2.10%
Inflation	%	5.70%	4.30%	3.60%	3.30%	3.20%	3.20%
Europe	%	3.60%	2.20%	2.10%	2.40%	2.40%	2.40%
Asia Pacific	%	4.30%	3.80%	3.40%	3.20%	3.20%	3.20%
Africa	%	20.10%	13.80%	11.80%	8%	7.40%	6.40%
North America	%	3.10%	2%	2.10%	2.20%	2.20%	2.20%
Dollar/Euro Exchange Rate	€	-	0.88191	-	-	-	-
Oil and Gas Industry							
Demand							
Global Oil Demand	Million bpd	104.50	106.30	108.00	109.60	111.00	112.30
YoY	%	-	1.7%	1.6%	1.5%	1.3%	1.2%
Global Natural Gas Demand	bcm	4,200	4,300	4,350	4,390	4,420	4,440
YoY	%	-	2.4%	1.16%	0.92%	0.68%	0.45%
Commodity Prices							
Brent Average (Oil Price)	\$/barrel	73.86	76.50	73.85	75.35	76.85	78.40
YoY	%	-	3.6%	-3.5%	2.0%	2.0%	2.0%
Henry Hub (Natural Gas)	\$/MMBtu	3.00	3.55	4.15	4.25	4.35	4.40
YoY	%	-	18.33%	16.90%	2.41%	2.35%	1.15%

Operational Data								
Caption	Source	Unit	Forecasted					
			2024	2025F	2026F	2027F	2028F	2029F
Marketing								
Sales Volumes (mbpd)	Shell Annual Report	mbpd	2,843.0	2,828.8	2,814.8	2,839.9	2,865.2	2,890.8
Mobility		mbpd	2,057.0	2,033.7	2,010.4	2,026.1	2,041.9	2,057.9
Lubricants		mbpd	82.0	82.0	82.0	82.0	82.0	82.0
Sectors and Decarbonisation		mbpd	704	713	722	732	741	751
Retail Sites	Shell Annual Report	Unit	44,109	43,609	43,109	43,109	43,109	43,109
YoY		%	-	-1.13%	-1.15%	0.78%	0.78%	0.78%
Averaged Realized Price	Shell Annual Report	\$/barrel	42.2	44.1	45.6	47.1	48.7	50.2
Average Realized Cost	Shell Annual Report	\$/barrel	0.43	0.45	0.47	0.48	0.50	0.52
Chemicals & Products								
Refining Capacity	Shell Annual Report	Million bpd	1,699.0	1,592.0	1,491.7	1,397.7	1,309.6	1,227.1
Total Refining Utilization	Shell Annual Report	%	86%	86%	86%	86%	86%	86%
Average Realized Price	Shell Annual Report	\$/barrel	63.89	66.64	69.04	71.32	73.60	75.95
Average Realized Cost	Shell Annual Report	\$/barrel	4.64	4.84	5.02	5.18	5.35	5.52
Renewables & Energy Solutions								
Renewable Power Generation Capacity	Shell Annual Report	GW	3.4	4.08	4.76	5.44	6.12	6.80
Average Realized Price	Shell Annual Report	€/MW	8.64	9.37	9.37	9.37	9.37	9.37
Average Realized Cost	Shell Annual Report	€/MW	0.57	0.59	0.61	0.63	0.66	0.68
Depreciation & Amortization								
Renewables & Energy Solutions	Shell Annual Report	% Growth	-	15.62%	15.62%	15.62%	15.62%	15.62%
Corporate	Shell Annual Report	\$	26	26	26	26	26	26
Operational Data								
Days Inventory Outstanding		Days	42.67	39.57	39.57	39.57	39.57	39.57
Accounts Receivable Turnover Days		Days	63.63	59.61	59.61	59.61	59.61	59.61
Accounts Payable Turnover Days		Days	132.91	115.57	115.57	115.57	115.57	115.57
Implied Interest Rate	Shell Annual Report	%	6.21%	5.24%	5.24%	5.24%	5.24%	5.24%
Effective Tax Rate	Shell Annual Report	%	44.79%	39.48%	39.48%	39.48%	39.48%	39.48%
Debt to EBITDA	Shell Annual Report	Unit	1.30	1.17	1.17	1.17	1.17	1.17
Capex	Shell Annual Report	% Growth	-	0.78%	0.78%	0.78%	0.78%	0.78%

Source: Author Analysis

Appendix 7.2 – Assumptions Rationale

Rationale of Author's Assumptions	
Variable	Rationale
Macroeconomic Data	
Real GDP Growth	Projections of Real GDP Growth were based on European Commission and IMF provided Forecasts
Inflation Rate	Projections were based on ECB and IMF provided Forecasts
Dollar/Euro Exchange Rate	Projections were based on Banco de Portugal provided Forecasts
Shell's Financial Assumptions	
Income Statement	
Integrated Gas	Assumed that revenue will increase YoY at the the pace of natural gas demand. Cost of Sales were determined using % Revenues
Upstream	Assumed that revenue will increase YoY at the the pace of oil demand. Cost of Sales were determined using % Revenues
Marketing	Estimated using the increase in Marketing Retail Volumes per sector. Cost of Sales calculated through the Average Realised Cost
Chemicals and Products	Estimated using the Refining Capacity and Utilization. Cost of Sales calculated through the Average Realised Cost
Renewables and Energy Solutions	Revenue computed using the Average Realized Price and Renewable Generation Capacity. Assumed that Shell is going to double its capacity by 2029, based on 2023 and the price will remain constant at the 2024 levels do to PPAs (Power Purchase Agreements). Cost of Sales calculated through the Average Realised Cost
Corporate	Revenue and Cost of Sales computed as %Revenues
Selling, Distribution and Administrative Expenses	%Revenues
Exploration Expenses	%Revenues
R&D Expenses	Calculated using the historical CAGR (Constant Annual Growth Rate) 2017-2024
Share of profit of joint ventures and associates	Historical CAGR 2017-24
Other Income	Author analysis, estimated using historical and CAGR averages
Depreciation, Depletion and Amortization	Computed using 3 years historical average of %Capex/D&A per sector
Interest Expense	Assumed an implied interest rate of 5.24%, derived from Damodaran (2025)
Income Tax	Assumed an effective tax-rate of 39%, based on historical data

Source: Author Analysis

Statement of Financial Position	
Property, plant & equipment	Author analysis, estimated using PPE of previous year plus Net Capex
Intangible Assets	Historical CAGR 2017-24
Investments	Historical Average 2017-2024
Long-term Receivables	Historical CAGR 2017-24
Other Long-term assets	Historical CAGR 2017-24
Inventories, Acc. Receivables, Acc. Payables	Author analysis, based on historical DIO, DSO, DPO
Other Current assets	Estimated using historical and CAGR averages
Equity Items	Remain constant at 2024 values
Retained Earnings	Author analysis, based on the previous year's Net Income, adjusted for the difference between Net Income and Dividends paid to shareholders
Debt & Debt Equivalents	Computed based on Shell guidance of EBITDA / Debt will remain at 1x-1.20x for the 2024-2030 period
Trade and Other Payables	Historical CAGR 2017-24
Other Long-term Liabilities	Historical CAGR 2017-24
Other Current Liabilities	Historical CAGR 2017-24
Cash Flow Statement	
Dividends received from joint ventures and associates	Historical Average 2017-2024
Derivative Financial Instruments	Estimated as the difference between the instrument's assets and liabilities
Exploration well write-offs	Assumed to be 0 (zero)
Capital Expenditures	Computed using Shell's guidance and historical growth rate
Investments in joint ventures and associates	Estimated as the difference between N and N-1 Investments
Proceeds from sale of property, plant and equipment and businesses	Historical CAGR 2017-24
Proceeds from joint ventures and associates from sale, capital reduction and repayment of long-term loans	Historical CAGR 2017-24
Proceeds from sale of equity securities	Remain constant at 2024 values
Net decrease/(increase) in Debt with maturity period within 3 months	Remain constant at 2024 values
Other Debt	Estimated based on the difference between New Borrowing and Repayments, assuming a constant repayment rate of 15% (average 2017-24)
Change in non-controlling interest	Assumed to be 0 (zero)
Repurchase of Shares	Author analysis, based on Shell's Capital Markets Day 2025
Shares held in trust: net purchases and dividends received	Historical CAGR 2017-24
Market Data	
Discount Factor Model	Capital Asset Pricing Model (CAPM)
Cost of Equity	Determined using CAPM
Risk-free Rate	Based on 10 Year US Treasury Bond
Beta	Top Down Approach, based on a regression over S&P500. Adjusted with Blume's methodology
Market Risk Premium	Based on Fernandez (2025)
Cost of Debt	Based on Default Risk Model/CreditSpread, Damodaran (2025)
Long-run sustainable growth rate (g)	Computed using Reinvestment Rate and ROIC

Source: Author Analysis

Appendix 8 – Financial Statements

Appendix 8.1 – Income Statement

Income Statement - Shell plc														
Caption	Historical								Forecasted					CAGR
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2024-29F
Revenues	305,179	388,379	344,877	180,543	261,504	381,314	316,620	284,312	300,304	308,428	316,020	325,390	334,984	2.77%
Cost of Revenue	250,099	321,369	279,421	141,094	198,734	284,006	238,123	211,499	223,317	229,429	235,172	242,225	249,476	2.79%
Purchases	223,447	294,399	252,983	117,093	174,912	258,488	212,883	188,120	198,701	204,077	209,100	215,300	221,648	2.77%
Production and Manufacturing Expenses	26,652	26,970	26,438	24,001	23,822	25,518	25,240	23,379	24,615	25,352	26,072	26,924	27,828	2.95%
Gross Margin	55,080	67,010	65,456	39,449	62,770	97,308	78,497	72,813	76,987	78,999	80,848	83,166	85,507	2.71%
Operating Expenses														
Selling, Distribution and Administrative Expenses	10,509	11,360	10,493	9,881	11,328	12,883	13,433	12,439	13,139	13,494	13,826	14,236	14,656	2.77%
Exploration Expenses	1,945	1,340	2,354	1,747	1,423	1,712	1,750	2,411	2,547	2,616	2,680	2,759	2,841	2.77%
R&D Expenses	922	986	962	907	815	1,075	1,287	1,099	1,123	1,148	1,174	1,200	1,226	1.85%
Operating Expenses	13,376	13,686	13,809	12,535	13,566	15,670	16,470	15,949	16,809	17,258	17,680	18,195	18,723	2.71%
Other Income														
Share of profit of joint ventures and associates	4,225	4,106	3,604	1,783	4,097	3,972	3,725	2,993	2,867	2,746	2,630	2,519	2,413	-4.22%
Other Income	1,789	3,299	2,726	190	6,545	-131	525	-648	2,225	2,307	2,399	2,502	2,618	-232.22%
Other Income	6,014	7,405	6,330	1,973	10,642	3,841	4,250	2,345	5,092	5,052	5,029	5,021	5,031	13.57%
EBITDA	47,718	60,729	57,977	28,887	59,846	85,479	66,277	59,209	65,270	66,793	68,196	69,991	71,816	3.27%
Depreciation, Depletion and Amortization	26,223	22,135	28,701	52,444	26,921	18,529	31,290	26,872	27,081	27,448	27,842	28,267	28,728	1.12%
EBIT	21,495	38,594	29,276	-23,557	32,925	66,950	34,987	32,337	38,190	39,346	40,354	41,724	43,087	4.90%
Interest Expense, net	3,365	2,973	3,791	3,410	3,096	2,135	2,360	2,415	2,229	2,297	2,388	2,687	3,179	4.69%
Interest Expense	4,042	3,745	4,690	4,089	3,607	3,181	4,673	4,787	4,004	4,098	4,184	4,294	4,406	-1.37%
Interest Income	677	772	899	679	511	1,046	2,313	2,372	1,776	1,800	1,796	1,607	1,227	-10.41%
EBT (Earnings Before Taxes)	18,130	35,621	25,485	-26,967	29,829	64,815	32,627	29,922	35,961	37,048	37,967	39,037	39,908	4.92%
Income Taxes	4,695	11,715	9,053	-5,433	9,199	21,941	12,991	13,401	14,199	14,628	14,991	15,414	15,758	2.74%
Net Income	13,435	23,906	16,432	-21,534	20,630	42,874	19,636	16,521	21,762	22,420	22,976	23,623	24,150	6.53%
N.I attributable to noncontrolling interests	458	554	590	146	529	565	277	427	427	427	427	427	427	0.00%
Net Income attributable to Shell plc	12,977	23,352	15,842	-21,680	20,101	42,309	19,359	16,094	21,335	21,993	22,549	23,196	23,723	6.68%

Source: Author Analysis

Appendix 8.2 – Statement of Financial Position

Statement of Financial Position - Shell plc														
Caption	Historical								Forecasted					CAGR
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2024-29F
Assets														
Non-current Assets														
Net Property, plant & equipment	226,380	223,175	238,349	210,847	194,932	198,642	194,835	185,219	177,892	170,353	162,576	154,529	146,180	-3.87%
Net Intangible Assets	24,180	23,586	23,486	22,822	24,693	25,701	26,913	25,512	25,900	26,294	26,696	27,105	27,521	1.27%
Goodwill	13,662	13,716	14,205	14,151	14,920	16,039	16,660	16,032	16,356	16,686	17,023	17,367	17,718	1.68%
Other Intangible Assets	10,518	9,870	9,281	8,671	9,773	9,662	10,253	9,480	9,544	9,608	9,673	9,738	9,803	0.56%
Investments	35,149	28,403	25,797	25,673	27,212	27,226	27,703	25,700	27,858	27,858	27,858	27,858	27,858	1.35%
Joint ventures and associates	27,927	25,329	22,808	22,451	23,415	23,864	24,457	23,445	24,212	24,212	24,212	24,212	24,212	0.54%
Investments in securities	7,222	3,074	2,989	3,222	3,797	3,362	3,246	2,255	3,646	3,646	3,646	3,646	3,646	8.34%
Long-term Receivables	9,394	7,826	8,085	7,641	7,065	6,920	6,298	6,018	5,692	5,384	5,092	4,817	4,556	-4.53%
Other Long-term assets	16,590	18,722	15,930	21,590	21,712	18,597	16,406	17,234	17,755	17,672	17,652	17,691	17,788	0.53%
Deferred Taxes	13,791	12,097	10,524	16,311	12,426	7,815	6,454	6,857	6,283	5,758	5,276	4,835	4,431	-7.02%
Retirement Benefits	2,799	6,051	4,717	2,474	8,471	10,200	9,151	10,003	10,427	10,870	11,331	11,812	12,313	3.52%
Derivative Financial Instruments (Long-term)	-	574	689	2,805	815	582	801	374	1,044	1,044	1,044	1,044	1,044	18.67%
Non-current assets	311,693	301,712	311,647	288,573	275,614	277,086	272,155	259,683	255,097	247,562	239,874	232,000	223,903	-2.44%
Current Assets														
Inventories	25,223	21,117	24,071	19,457	25,258	31,894	26,019	23,426	24,208	24,871	25,493	26,186	27,044	2.42%
Accounts Receivables	49,869	42,431	43,414	33,625	53,208	66,510	53,273	45,860	49,041	50,368	51,608	53,138	54,705	2.98%
Other Current Assets	0	7,193	7,149	5,783	13,329	27,288	16,049	19,530	24,852	32,632	44,085	61,029	86,187	28.07%
Derivative Financial Instruments (Short-term)	-	7,193	7,149	5,783	11,369	24,437	15,098	9,673	10,091	10,527	10,982	11,457	11,952	3.59%
Assets held for sale	-	-	-	-	1,960	2,851	951	9,857	14,761	22,105	33,103	49,572	74,234	40.00%
Cash and Cash Equivalents	20,312	26,741	18,055	31,830	36,970	40,246	38,774	39,110	39,654	39,566	35,389	27,018	10,849	-19.24%
Current Assets	95,404	97,482	92,689	90,695	128,765	165,938	134,115	127,926	137,756	147,437	156,575	167,371	178,785	5.74%
Total Assets	407,097	399,194	404,336	379,268	404,379	443,024	406,270	387,609	392,854	394,998	396,449	399,371	402,688	0.64%
Equity														
Share Capital	696	685	657	651	641	584	544	510	510	510	510	510	510	0.00%
Shares held in trust	-917	-1,260	-1,063	-709	-610	-726	-997	-803	-803	-803	-803	-803	-803	0.00%
Other Reserves	16,932	16,615	14,451	12,752	18,909	21,132	21,145	19,766	19,766	19,766	19,766	19,766	19,766	0.00%
Retained Earnings	177,645	182,606	172,431	142,616	153,026	169,482	165,915	158,834	166,260	163,665	160,225	156,960	153,468	-0.57%
Equity attributable to Shell plc	194,356	198,646	186,476	155,310	171,966	190,472	186,607	178,307	185,733	183,138	179,698	176,433	172,941	-0.51%
Non-controlling interests	3,456	3,888	3,987	3,227	3,360	2,125	1,755	1,861	1,861	1,861	1,861	1,861	1,861	0.00%
Total Equity	197,812	202,534	190,463	158,537	175,326	192,597	188,362	180,168	187,594	184,999	181,559	178,294	174,802	-0.50%
Liabilities														
Non-current Liabilities														
Long-term Debt	73,870	66,690	81,360	91,115	80,868	74,794	71,610	65,448	66,736	68,294	69,728	71,564	73,429	1.94%
Long-term Debt	73,870	66,690	81,360	91,115	57,499	51,532	48,544	41,456	44,530	45,570	46,527	47,751	48,996	2.82%
Total Capital Leases	-	-	-	-	23,369	23,262	23,066	23,992	22,206	22,724	23,201	23,812	24,433	0.30%
Trade and other payables (Long-term)	4,428	2,735	2,342	2,304	2,075	3,432	3,103	3,290	3,170	3,055	2,943	2,836	2,733	-3.05%
Other Long-term Liabilities	51,220	49,422	50,547	53,361	50,563	50,890	47,728	43,669	42,886	42,163	41,497	40,885	40,324	-1.32%
Deferred Tax Liabilities	13,007	14,837	14,522	10,463	12,547	16,186	15,347	13,505	13,569	13,632	13,697	13,761	13,826	0.39%
Retirement Benefits	13,247	11,653	13,017	15,168	11,325	7,296	7,549	6,752	6,207	5,705	5,244	4,820	4,431	-6.78%
Derivative Financial Instruments (Long-term)	-	1,399	1,209	420	887	3,563	2,301	2,185	2,310	2,443	2,583	2,731	2,887	4.75%
Decommissioning and other provisions	24,966	21,533	21,799	27,310	25,804	23,845	22,531	21,227	20,801	20,383	19,974	19,573	19,180	-1.68%
Non-current Liabilities	129,518	118,847	134,249	146,780	133,506	129,116	122,441	112,407	112,793	113,512	114,169	115,285	116,485	0.60%
Current Liabilities														
Short-term Debt	11,795	10,134	15,064	16,899	8,218	9,001	9,931	11,630	9,682	9,908	10,116	10,382	10,653	-1.45%
Trade and other payables (Short-term)	56,663	48,888	49,208	41,677	63,173	79,357	68,237	60,693	57,270	58,819	60,267	62,054	63,884	0.86%
Income taxes payable	7,250	7,497	6,693	6,006	3,254	4,869	3,422	4,648	5,645	5,797	5,940	6,116	6,297	5.19%
Other Current Liabilities	4,059	11,294	8,659	9,369	20,902	28,084	13,877	18,063	19,870	21,963	24,398	27,239	30,567	9.16%
Retirement Benefits	594	451	419	437	-	-	-	-	0	0	0	0	0	0
Derivative Financial Instruments (Short-term)	-	7,184	5,429	5,308	16,311	23,779	9,529	7,391	7,781	8,192	8,624	9,079	9,558	4.38%
Short-term provisions	3,465	3,659	2,811	3,624	3,338	2,910	4,041	4,469	4,613	4,763	4,916	5,075	5,239	2.69%
Liabilities associated with assets held for sale	-	-	-	-	1,253	1,395	307	6,203	7,476	9,009	10,858	13,085	15,770	16.83%
Current Liabilities	79,767	77,813	79,624	73,951	95,547	121,311	95,467	95,034	92,467	96,488	100,722	105,792	111,401	2.68%
Total Liabilities	209,285	196,660	213,873	220,731	229,053	250,427	217,908	207,441	205,260	210,000	214,890	221,077	227,886	1.58%
Total Liabilities and Equity	407,097	399,194	404,336	379,268	404,379	443,024	406,270	387,609	392,854	394,998	396,449	399,371	402,688	0.64%

Source: Author Analysis

Appendix 8.3 – Cash Flow Statement

Cash Flow Statement - Shell plc														
Caption	Historical								Forecasted					CAGR
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2024-29F
Cash Flow from Operating Activities														
Income before taxation for the period	18,130	35,621	25,485	-26,967	29,829	64,815	32,627	29,922	35,961	37,048	37,967	39,037	39,908	4.92%
Adjustment for:														
Interest Expense	3,365	2,878	3,705	3,316	3,096	2,135	2,360	2,415	4,004	4,098	4,184	4,294	4,406	10.54%
Depreciation, Depletion and Amortization	26,223	22,135	28,701	52,444	26,921	18,529	31,290	26,872	27,081	27,448	27,842	28,267	28,728	1.12%
Exploration well write-offs	897	449	1,218	815	639	881	868	1,622	0	0	0	0	0	-100.00%
Net (gains)/losses on sale and revaluation of non-current assets and businesses	-1,640	-3,265	-2,519	-286	-5,995	-642	-246	288	-1,790	-1,790	-1,790	-1,790	-1,790	-
Share of profit of joint ventures and associates	-4,225	-4,106	-3,604	-1,783	-4,097	-3,972	-3,725	-2,993	-2,867	-2,746	-2,630	-2,519	-2,413	-3.53%
Dividends received from joint ventures and associates	4,998	4,903	4,139	2,591	3,929	4,398	3,674	3,632	4,033	4,033	4,033	4,033	4,033	1.76%
Decrease/(Increase) in Working Capital:														
Decrease/(Increase) in Current Receivables	-2,079	2,823	-2,635	4,477	-7,319	-8,360	6,325	1,273	782	663	623	693	858	-6.37%
Decrease/(Increase) in Inventories	-2,577	1,955	-921	9,625	-20,567	-8,989	12,401	6,578	3,181	1,327	1,240	1,530	1,567	-21.27%
Decrease/(Increase) in Current Payables	2,406	-1,336	-812	-10,116	17,730	12,329	-11,581	-5,789	-2,426	1,702	1,591	1,963	2,010	-
Derivative Financial Instruments	-1,039	799	-1,484	977	5,882	-2,619	-5,723	2,484	1,044	938	820	692	552	-22.18%
Retirement Benefits	-654	390	-365	568	16	417	-37	-326	-545	-501	-461	-424	-389	3.01%
Decommissioning and Other Provisions	-1,706	-1,754	-1,097	1,727	-287	-379	220	-828	-426	-418	-409	-401	-393	-11.68%
Other	-142	1,264	-28	8	803	2,991	-550	1,539	0	0	0	0	0	-100.00%
Tax Paid	-6,307	-9,671	-7,605	-3,290	-5,476	-13,120	-13,712	-12,002	-14,199	-14,628	-14,991	-15,414	-15,758	4.64%
Cash Flow from Operating Activities	35,650	53,085	42,178	34,106	45,104	68,414	54,191	54,687	53,834	57,173	58,018	59,962	61,319	1.93%
Cash Flow from Investing Activities														
Capital Expenditure	-20,845	-23,011	-22,971	-16,585	-19,000	-22,600	-22,993	-19,601	-19,754	-19,909	-20,064	-20,221	-20,379	0.65%
Investments in joint ventures and associates	-595	-880	-743	-1,024	-479	-1,973	-1,202	-1,404	-197	-195	-194	-192	-191	-28.29%
Investments in Equity Securities			-205	-218	-218	-260	-197	-80	0	0	0	0	0	-100.00%
Proceeds from sale of property, plant and equipment and businesses	8,808	4,366	4,803	2,489	14,233	1,431	2,565	1,621	1312	1062	859	695	563	-16.16%
Proceeds from joint ventures and associates from sale, capital reduction and repayment of long-term loans	2,177	1,594	2,599	1,240	584	511	474	590	501	426	362	307	261	-12.72%
Proceeds from sale of equity securities			469	281	296	117	51	582	225	225	225	225	225	-14.68%
Interest Received	724	823	911	532	423	906	2,124	2,399	1,776	1,800	1,796	1,607	1,227	-10.58%
Other Investing Activities	1,702	3,449	-642	7	-600	-580	1,444	738	0	0	0	0	0	-100.00%
Cash Flow from Investing Activities	-8,029	-13,659	-15,779	-13,278	-4,761	-22,448	-17,734	-15,155	-16,138	-16,592	-17,016	-17,580	-18,295	3.19%
Cash Flow from Financing Activities														
Net decrease/(increase) in Debt with maturity period within 3 months	-869	-396	-308	-63	14	318	-211	-310	-228	-228	-228	-228	-228	-4.98%
Other Debt:														
New Borrowings	760	3,977	11,185	23,033	1,791	269	1,029	363	10,801	13,512	13,617	14,392	14,746	85.41%
Repayments	-11,720	-11,912	-14,292	-17,385	-21,534	-8,459	-10,650	-9,672	-11,461	-11,728	-11,975	-12,290	-12,610	4.52%
Interest Paid	-3,550	-3,574	-4,649	-4,105	-4,014	-3,677	-4,441	-4,557	-4,004	-4,098	-4,184	-4,294	-4,406	-0.56%
Derivative Financial Instruments			-48	1,157	-1,165	-1,799	723	-594	-515	-543	-572	-603	-636	1.13%
Change in non-controlling interest	293	678		-42	19	-1,965	-22	-15	0	0	0	0	0	-100.00%
Dividends Paid:														
Shell plc Shareholders	-10,877	-15,675	-15,198	-7,424	-6,253	-7,405	-8,393	-8,668	-5,088	-5,422	-5,507	-5,701	-5,837	-6.38%
Non-controlling Interest	-406	-584	-537	-311	-348	-206	-764	-295	-295	-295	-295	-295	-295	0.00%
Repurchase of Shares		-3,947	-10,188	-1,702	-2,889	-18,437	-14,617	-13,898	-18,842	-20,010	-20,306	-20,987	-21,462	7.51%
Shares held in trust: net purchases and dividends received	-717	-1,115	-1,174	-382	-285	-593	-889	-789	-798	-808	-818	-828	-838	1.00%
Cash Flow from Financing Activities	-27,086	-32,548	-35,209	-7,224	-34,664	-41,954	-38,235	-38,435	-30,431	-29,621	-30,268	-30,834	-31,565	-3.23%
Effects of exchange rate changes on cash and cash equivalents	647	-449	124	172	-539	-736	306	-761	-6,720	-11,048	-14,911	-19,919	-27,627	81.97%
(Decrease)/Increase in Cash and Cash Equivalents	1,182	6,429	-8,686	13,776	5,140	3,276	-1,472	336	544	-89	-4,177	-8,371	-16,169	-
Cash and Cash equivalents at Beginning of Year	19,130	20,312	26,741	18,055	31,830	36,970	40,246	38,774	39,110	39,654	39,566	35,389	27,018	-5.84%
Cash and Cash equivalents at End of Year	20,312	26,741	18,055	31,831	36,970	40,246	38,774	39,110	39,654	39,566	35,389	27,018	10,849	-19.24%

Source: Author Analysis

Appendix 8.4 – Common Size Financial Statements

Income Statement (%Revenues)													
Caption	Historical								Forecasted				
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Revenues	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Cost of Revenue	82%	83%	81%	78%	76%	74%	75%	74%	74%	74%	74%	74%	74%
Purchases	73%	76%	73%	65%	67%	68%	67%	66%	66%	66%	66%	66%	66%
Production and Manufacturing Expenses	9%	7%	8%	13%	9%	7%	8%	8%	8%	8%	8%	8%	8%
Gross Margin	18%	17%	19%	22%	24%	26%	25%	26%	26%	26%	26%	26%	26%
Operating Expenses													
Selling, Distribution and Administrative Expenses	3%	3%	3%	5%	4%	3%	4%	4%	4%	4%	4%	4%	4%
Exploration Expenses	1%	0%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%
R&D Expenses	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operating Expenses	4%	4%	4%	7%	5%	4%	5%	6%	6%	6%	6%	6%	6%
Other Income													
Share of profit of joint ventures and associates	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%
Other Income	1%	1%	1%	0%	3%	0%	0%	0%	1%	1%	1%	1%	1%
Other Income	2%	2%	2%	1%	4%	1%	1%	1%	2%	2%	2%	2%	2%
EBITDA	16%	16%	17%	16%	23%	22%	21%	21%	22%	22%	22%	22%	21%
Depreciation, Depletion and Amortization	9%	6%	8%	29%	10%	5%	10%	9%	9%	9%	9%	9%	9%
EBIT	7%	10%	8%	-13%	13%	18%	11%	11%	13%	13%	13%	13%	13%
Interest Expense, net	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Interest Expense	1%	1%	1%	2%	1%	1%	1%	2%	1%	1%	1%	1%	1%
Interest Income	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	0%	0%	0%
EBT (Earnings Before Taxes)	6%	9%	7%	-15%	11%	17%	10%	11%	12%	12%	12%	12%	12%
Income Taxes	2%	3%	3%	-3%	4%	6%	4%	5%	5%	5%	5%	5%	5%
Net Income	4%	6%	5%	-12%	8%	11%	6%	6%	7%	7%	7%	7%	7%
N.I attributable to noncontrolling interests	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net Income attributable to Shell plc	4%	6%	5%	-12%	8%	11%	6%	6%	7%	7%	7%	7%	7%

Source: Author Analysis

Statement of Financial Position (%Total Assets)													
Caption	Historical								Forecasted				
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Assets													
Non-current Assets													
Net Property, plant & equipment	56%	56%	59%	56%	48%	45%	48%	48%	45%	43%	41%	39%	36%
Net Intangible Assets	6%	6%	6%	6%	6%	6%	7%	7%	7%	7%	7%	7%	7%
Investments	9%	7%	6%	7%	7%	6%	7%	7%	7%	7%	7%	7%	7%
Long-term Receivables	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%
Other Long-term assets	4%	5%	4%	6%	5%	4%	4%	4%	5%	4%	4%	4%	4%
Non-current assets	77%	76%	77%	76%	68%	63%	67%	67%	65%	63%	61%	58%	56%
Current Assets													
Inventories	6%	5%	6%	5%	6%	7%	6%	6%	6%	6%	6%	7%	7%
Accounts Receivables	12%	11%	11%	9%	13%	15%	13%	12%	12%	13%	13%	13%	14%
Other Current Assets	0%	2%	2%	2%	3%	6%	4%	5%	6%	8%	11%	15%	21%
Cash and Cash Equivalents	5%	7%	4%	8%	9%	9%	10%	10%	10%	10%	9%	7%	3%
Current Assets	23%	24%	23%	24%	32%	37%	33%	33%	35%	37%	39%	42%	44%
Total Assets	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Equity													
Share Capital	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shares held in trust	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Reserves	4%	4%	4%	3%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Retained Earnings	44%	46%	43%	38%	38%	38%	41%	41%	42%	41%	40%	39%	38%
Equity attributable to Shell plc	48%	50%	46%	41%	43%	43%	46%	46%	47%	46%	45%	44%	43%
Non-controlling interests	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Total Equity	49%	51%	47%	42%	43%	43%	46%	46%	48%	47%	46%	45%	43%
Liabilities													
Non-current Liabilities													
Long-term Debt	18%	17%	20%	24%	20%	17%	18%	17%	17%	17%	18%	18%	18%
Long-term Debt	18%	17%	20%	24%	14%	12%	12%	11%	11%	12%	12%	12%	12%
Total Capital Leases					6%	5%	6%	6%	6%	6%	6%	6%	6%
Trade and other payables (Long-term)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other Long-term Liabilities	13%	12%	13%	14%	13%	11%	12%	11%	11%	11%	10%	10%	10%
Non-current Liabilities	32%	30%	33%	39%	33%	29%	30%	29%	29%	29%	29%	29%	29%
Current Liabilities													
Short-term Debt	3%	3%	4%	4%	2%	2%	2%	3%	2%	3%	3%	3%	3%
Trade and other payables (Short-term)	14%	12%	12%	11%	16%	18%	17%	16%	15%	15%	15%	16%	16%
Income taxes payable	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	2%	2%
Other Current Liabilities	1%	3%	2%	2%	5%	6%	3%	5%	5%	6%	6%	7%	8%
Current Liabilities	20%	19%	20%	19%	24%	27%	23%	25%	24%	24%	25%	26%	28%
Total Liabilities	51%	49%	53%	58%	57%	57%	54%	54%	52%	53%	54%	55%	57%
Total Liabilities and Equity	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Author Analysis

Cash Flow Statement (%Revenue)													
Caption	Historical								Forecasted				
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Cash Flow from Operating Activities													
Income before taxation for the period	5.94%	9.17%	7.39%	-14.94%	11.41%	17.00%	10.30%	10.52%	11.97%	12.01%	12.01%	12.00%	11.91%
Adjustment for:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Interest Expense	1.10%	0.74%	1.07%	1.84%	1.18%	0.56%	0.75%	0.85%	1.33%	1.33%	1.32%	1.32%	1.32%
Depreciation,Depletion and Amortization	8.59%	5.70%	8.32%	29.05%	10.29%	4.86%	9.88%	9.45%	9.02%	8.90%	8.81%	8.69%	8.58%
Exploration well write-offs	0.29%	0.12%	0.35%	0.45%	0.24%	0.23%	0.27%	0.57%	0.00%	0.00%	0.00%	0.00%	0.00%
Net (gains)/losses on sale and revaluation of non-current assets and businesses	-0.54%	-0.84%	-0.73%	-0.16%	-2.29%	-0.17%	-0.08%	0.10%	-0.60%	-0.58%	-0.57%	-0.55%	-0.53%
Share of profit of joint ventures and associates	-1.38%	-1.06%	-1.05%	-0.99%	-1.57%	-1.04%	-1.18%	-1.05%	-0.95%	-0.89%	-0.83%	-0.77%	-0.72%
Dividends received from joint ventures and associates	1.64%	1.26%	1.20%	1.44%	1.50%	1.15%	1.16%	1.28%	1.34%	1.31%	1.28%	1.24%	1.20%
Decrease/(Increase) in Working Capital:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Decrease/(Increase) in Inventories	-0.68%	0.73%	-0.76%	2.48%	-2.80%	-2.19%	2.00%	0.45%	0.26%	0.21%	0.20%	0.21%	0.26%
Decrease/(Increase) in Current Receivables	-0.84%	0.50%	-0.27%	5.33%	-7.86%	-2.36%	3.92%	2.31%	1.06%	0.43%	0.39%	0.47%	0.47%
Decrease/(Increase) in Current Payables	0.79%	-0.34%	-0.24%	-5.60%	6.78%	3.23%	-3.66%	-2.04%	-0.81%	0.55%	0.50%	0.60%	0.60%
Derivative Financial Instruments	-0.34%	0.21%	-0.43%	0.54%	2.25%	-0.69%	-1.81%	0.87%	0.35%	0.30%	0.26%	0.21%	0.16%
Retirement Benefits	-0.21%	0.10%	-0.11%	0.31%	0.01%	0.11%	-0.01%	-0.11%	-0.18%	-0.16%	-0.15%	-0.13%	-0.12%
Decommissioning and Other Provisions	-0.56%	-0.45%	-0.32%	0.96%	-0.11%	-0.10%	0.07%	-0.29%	-0.14%	-0.14%	-0.13%	-0.12%	-0.12%
Other	-0.05%	0.33%	-0.01%	0.00%	0.31%	0.78%	-0.17%	0.54%	0.00%	0.00%	0.00%	0.00%	0.00%
Tax Paid	-2.07%	-2.49%	-2.21%	-1.82%	-2.09%	-3.44%	-4.33%	-4.22%	-4.73%	-4.74%	-4.74%	-4.74%	-4.70%
Cash Flow from Operating Activities	11.68%	13.67%	12.23%	18.89%	17.25%	17.94%	17.12%	19.23%	17.93%	18.54%	18.36%	18.43%	18.31%
Cash Flow from Investing Activities													
Capital Expenditure	-6.83%	-5.92%	-6.66%	-9.19%	-7.27%	-5.93%	-7.26%	-6.89%	-6.58%	-6.45%	-6.35%	-6.21%	-6.08%
Investments in joint ventures and associates	-0.19%	-0.23%	-0.22%	-0.57%	-0.18%	-0.52%	-0.38%	-0.49%	-0.07%	-0.06%	-0.06%	-0.06%	-0.06%
Investments in Equity Securities	0.00%	0.00%	-0.06%	-0.12%	-0.08%	-0.07%	-0.06%	-0.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Proceeds from sale of property, plant and equipment and businesses	2.89%	1.12%	1.39%	1.38%	5.44%	0.38%	0.81%	0.57%	0.44%	0.34%	0.27%	0.21%	0.17%
Proceeds from joint ventures and associates from sale, capital reduction and repayment of long-term loans	0.71%	0.41%	0.75%	0.69%	0.22%	0.13%	0.15%	0.21%	0.17%	0.14%	0.11%	0.09%	0.08%
Proceeds from sale of equity securities	0.00%	0.00%	0.14%	0.16%	0.11%	0.03%	0.02%	0.20%	0.07%	0.07%	0.07%	0.07%	0.07%
Interest Received	0.24%	0.21%	0.26%	0.29%	0.16%	0.24%	0.67%	0.84%	0.59%	0.58%	0.57%	0.49%	0.37%
Other Investing Activities	0.56%	0.89%	-0.19%	0.00%	-0.23%	-0.15%	0.46%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%
Cash Flow from Investing Activities	-2.63%	-3.52%	-4.58%	-7.35%	-1.82%	-5.89%	-5.60%	-5.33%	-5.37%	-5.38%	-5.38%	-5.40%	-5.46%
Cash Flow from Financing Activities													
Net (decrease)/(increase) in Debt with maturity period within 3 months	-0.28%	-0.10%	-0.09%	-0.03%	0.01%	0.08%	-0.07%	-0.11%	-0.08%	-0.07%	-0.07%	-0.07%	-0.07%
Other Debt:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
New Borrowings	0.25%	1.02%	3.24%	12.76%	0.68%	0.07%	0.32%	0.13%	3.60%	4.38%	4.31%	4.42%	4.40%
Repayments	-3.84%	-3.07%	-4.14%	-9.63%	-8.23%	-2.22%	-3.36%	-3.40%	-3.82%	-3.80%	-3.79%	-3.78%	-3.76%
Interest Paid	-1.16%	-0.92%	-1.35%	-2.27%	-1.53%	-0.96%	-1.40%	-1.60%	-1.33%	-1.33%	-1.32%	-1.32%	-1.32%
Derivative Financial Instruments	0.00%	0.00%	-0.01%	0.64%	-0.45%	-0.47%	0.23%	-0.21%	-0.17%	-0.18%	-0.18%	-0.19%	-0.19%
Change in non-controlling interest	0.10%	0.17%	0.00%	-0.02%	0.01%	-0.52%	-0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Dividends Paid:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Shell plc Shareholders	-3.56%	-4.04%	-4.41%	-4.11%	-2.39%	-1.94%	-2.65%	-3.05%	-1.69%	-1.76%	-1.74%	-1.75%	-1.74%
Non-controlling Interest	-0.13%	-0.15%	-0.16%	-0.17%	-0.13%	-0.05%	-0.24%	-0.10%	-0.10%	-0.10%	-0.09%	-0.09%	-0.09%
Repurchase of Shares	0.00%	-1.02%	-2.95%	-0.94%	-1.10%	-4.84%	-4.62%	-4.89%	-6.27%	-6.49%	-6.43%	-6.45%	-6.41%
Shares held in trust: net purchases and dividends received	-0.23%	-0.29%	-0.34%	-0.21%	-0.11%	-0.16%	-0.28%	-0.28%	-0.27%	-0.26%	-0.26%	-0.25%	-0.25%
Cash Flow from Financing Activities	-8.88%	-8.38%	-10.21%	-4.00%	-13.26%	-11.00%	-12.08%	-13.52%	-10.13%	-9.60%	-9.58%	-9.48%	-9.42%
Effects of exchange rate changes on cash and cash equivalents	0.21%	-0.12%	0.04%	0.10%	-0.21%	-0.19%	0.10%	-0.27%	-2.24%	-3.58%	-4.72%	-6.12%	-8.25%
(Decrease)/Increase in Cash and Cash Equivalents	0.39%	1.66%	-2.52%	7.63%	1.97%	0.86%	-0.46%	0.12%	0.18%	-0.03%	-1.32%	-2.57%	-4.83%
Cash and Cash equivalents at Beginning of Year	6.27%	5.23%	7.75%	10.00%	12.17%	9.70%	12.71%	13.64%	13.02%	12.86%	12.52%	10.88%	8.07%
Cash and Cash equivalents at End of Year	6.66%	6.89%	5.24%	17.63%	14.14%	10.55%	12.25%	13.76%	13.20%	12.83%	11.20%	8.30%	3.24%

Source: Author Analysis

Appendix 9 – WACC Determination

WACC Determination						
Description	Year					
	2025F	2026F	2027F	2028F	2029F	Terminal
Cost of Equity						
Risk-Free Rate - Integrated	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%
Beta - Integrated	0.724	0.724	0.724	0.724	0.724	0.724
Upstream	0.940	0.940	0.940	0.940	0.940	0.940
Production and Exploration	0.880	0.880	0.880	0.880	0.880	0.880
Renewables & Energy Solutions	1.130	1.130	1.130	1.130	1.130	1.130
Marketing	0.750	0.750	0.750	0.750	0.750	0.750
Market Risk Premium	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Cost of Equity - Integrated	8.52%	8.52%	8.52%	8.52%	8.52%	8.52%
Upstream	9.71%	9.71%	9.71%	9.71%	9.71%	9.71%
Production and Exploration	9.38%	9.38%	9.38%	9.38%	9.38%	9.38%
Renewables & Energy Solutions	10.76%	10.76%	10.76%	10.76%	10.76%	10.76%
Marketing	8.67%	8.67%	8.67%	8.67%	8.67%	8.67%
Cost of Debt						
Cost of Debt	4.54%	5.24%	5.24%	5.46%	5.46%	5.46%
Tax Rate	39%	39%	39%	39%	39%	39%
After-tax Cost of Debt	2.75%	3.17%	3.17%	3.30%	3.30%	3.30%
WACC - Integrated	6.85%	6.93%	6.89%	6.88%	6.83%	6.83%
Upstream	7.69%	7.77%	7.71%	7.69%	7.63%	7.63%
Production and Exploration	7.46%	7.54%	7.48%	7.47%	7.41%	7.41%
Renewables & Energy Solutions	8.44%	8.50%	8.44%	8.41%	8.34%	8.34%
Marketing	6.95%	7.03%	6.99%	6.98%	6.92%	6.92%

Source: Author Analysis

Beta (Integrated) - Regression

Regression Statistics	
Multiple R	0.345
R Square	0.119
Adjusted R Square	0.116
Standard Error	0.038
Observations	261

Regression	
Regression Beta	0.586
Blume Adjustment	0.724

Source: Author Analysis

Cost of Debt

Shell Ratings - Long Term Debt		
	Rating	Outlook
Standard & Poor's	A+	Stable
Moody's	Aa2/AA	Stable
Fitch	AA-	Stable
Basel II Criteria	AA	Stable

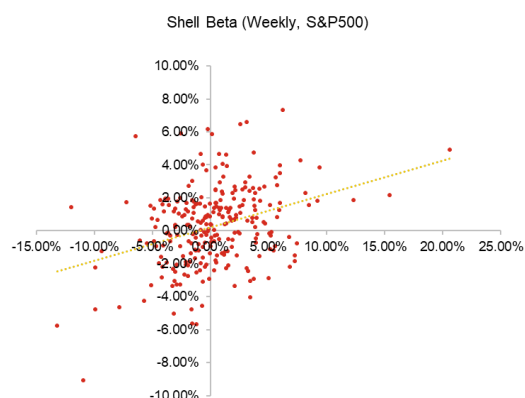
Cost of Debt Estimation				
Year	Rating	Default Spread	Risk Free Rate	Cost of Debt
2026F	AA	0.70%	4.54%	5.24%
2027F	AA	0.70%	4.54%	5.24%
2028F	AA	0.92%	4.54%	5.46%
2029F	AA	0.92%	4.54%	5.46%
Terminal	AA	0.92%	4.54%	5.46%

Source: Author Analysis

Target Weights						
Description	Year					
	2025F	2026F	2027F	2028F	2029F	Terminal
Equity Weight	71.05%	70.29%	69.46%	68.51%	67.52%	67.52%
Debt Weight	28.95%	29.71%	30.54%	31.49%	32.48%	32.48%
Debt-to-Equity	40.74%	42.27%	43.98%	45.96%	48.10%	48.10%

Risk-Free Rate	
Description	Value
US Treasury Bond 10Y YTM	4.54%
Excess CDS Spread	-
Country Default Spread	-

Market Risk Premium	
Description	Value
Market Return	10.04%
Risk-Free	4.54%
Market Risk Premium - Fernandez (2025)	5.50%



Default Spread Table			
Interest Coverage Ratio		Rating	Default Spread
Greater than	Less than		
-100,000	0.20	D2/D	20%
0.20	0.65	C2/C	17%
0.65	0.80	Ca2/CC	11.78%
0.80	1.25	Caa/CCC	8.51%
1.25	1.50	B3/B-	5.24%
1.50	1.75	B2/B	3.61%
1.75	2.00	B1/B+	3.14%
2.00	2.25	Ba2/BB	2.21%
2.25	2.50	Ba1/BB+	1.74%
2.50	3.00	Baa2/BBB	1.47%
3.00	4.25	A3/A-	1.21%
4.25	5.50	A2/A	1.07%
5.50	6.50	A1/A+	0.92%
6.50	8.50	Aa2/AA	0.70%
8.50	100,000	Aaa/AAA	0.59%

Source: Damodaran (2025)

Appendix 10 – Valuation

Appendix 10.1 – Discounted Cash Flow

Integrated Approach

FCFF (WACC) - Price Target Determination				
Forecast Year	Free Cash Flow	WACC	Discount Factor	PV FCFF
(+) Enterprise Value				
2027F	22,908	6.89%	0.936	21,432
2028F	18,933	6.88%	0.875	16,573
2029F	12,179	6.83%	0.819	9,979
Terminal Value	292,465	6.83%	0.767	224,324
Enterprise Value				272,308
(+) Non Operating Assets				
Cash and Cash Equivalents				39,654
Total Non Operating Assets				39,654
(-) Debt and Debt Equivalents				
Long-term Debt				66,736
Short-term Debt				9,682
Retirement Benefits				5,705
Total Debt and Debt Equivalents				82,124
(-) Non-controlling Interests				
Non-controlling Interests				1,861
Equity Value				227,978
Outstanding Shares				6,115
Price Target (\$)				37.28
Price Target (€)				32.88
Upside Potential				12.48%
Annualized Upside Potential				8.15%

Terminal Value	
Item	Amount
FCFF	12,179
WACC (%)	6.83%
g (%)	2.66%
T. Value	292,465

Source: Author Analysis

Sum-of-Parts Approach

FCFF (SoP - Sum of Parts) - Price Target Determination					
Description	Year				
	2027F	2028F	2029F	Terminal	Total
(+) Enterprise Value					
Upstream	-3,009	-4,014	-5,389	-108,532	
Chemicals & Products	9,883	8,245	6,098	128,581	
Renewables & Energy Solutions	3,581	3,566	2,874	50,683	
Marketing	14,340	13,035	10,511	246,735	
Total	23,108	18,100	11,444	241,025	293,678
(+) Non Operating Assets					
Cash and Cash Equivalents					39,566
Total Non Operating Assets					39,566
(-) Debt and Debt Equivalents					
Long-term Debt					68,294
Short-term Debt					9,908
Total Debt and Debt Equivalents					78,202
(-) Non-controlling Interests					
Non-controlling Interests					1,861
Equity Value					253,181
Outstanding Shares					6,084
Price Target (\$)					41.61
Price Target (€)					36.70
Upside Potential					25.6%
Annualized Upside Potential					16.38%

Terminal Value				
	Upstream	Chemicals	R&ES	Marketing
FCFF	-5,389	6,098	2,874	10,511
WACC	7.63%	7.41%	8.34%	6.92%
g	2.66%	2.66%	2.66%	2.66%
Terminal Value	-108,532	128,581	50,683	246,735

Source: Author Analysis

Appendix 10.2 – Free Cash Flow to Equity

FCFE (Cost of Equity) - Price Target Determination				
Forecast Year	Free Cash Flow	Cost of Equity	Discount Factor	PV FCFF
2027F	22,679	8.52%	0.921	20,898
2028F	18,982	8.52%	0.849	16,117
2029F	11,963	8.52%	0.782	9,360
Terminal Value	209,620	8.52%	0.721	151,127
Equity Value				197,503
Outstanding Shares				6,115
Price Target (\$)				32.30
Price Target (€)				28.48
Upside Potential				-2.56%
Annualized Upside Potential				-1.71%

Terminal Value	
Item	Amount
FCFF	11,963
Re (%)	8.52%
g (%)	2.66%
T. Value	209,620

Source: Author Analysis

Appendix 10.3 – Relative Valuation

Relative Valuation	
Price Multiples	
Price Earnings Ratio (P/E)	9.67
Net Income	21,762
Market Cap	210,419
Shares Outstanding	6,115
Price Target (\$)	34.41
Price Target (€)	30.35
Upside Potential	3.82%
Annualized Upside Potential	2.53%

Enterprise Value Multiples	
EV / EBIT	7.53
EBIT	38,190
Enterprise Value	287,673
(+) Cash	39,654
(-) Debt	76,418
(-) Non-controlling interests	1,861
Equity Value	249,048
Shares Outstanding	6,524
Price Target (\$)	38.17
Price Target (€)	33.67
Upside Potential	15.18%
Annualized Upside Potential	9.88%

SARD Approach

SARD Approach		Results	
Identifier	Company Name	SARD Result	SARD Peers
SHEL LN	Shell plc		
BP/ LN	British Petroleum	28	2
IMO CN	Imperial Oil Ltd.	66	17
MOL HB	Mol Group	38	7
XOM US	Exxon Mobil Corporation	34	5
CVX US	Chevron Corporation	46	11
386 HK	SINOPEC CORP	31	3
857 HK	PETROCHINA	26	1
PETR4 BZ	Petroleo Brasileiro S.A.	50	12
ARAMCO AB	Saudi Arabian Oil Company	61	15
EQNR NO	Equinor ASA	54	13
ENI IM	Eni S.p.A	32	4
GALP PL	GALP Energia S.A.	57	14
REP SM	Repsol S.A.	41	8
OMV AV	Österreichische Mineralölverwaltung AG	42	9
TTE FP	TotalEnergies SE	34	5
SU CN	Suncor Energy Inc	62	16
CVE CN	Cenovus Energy Inc	44	10

Source: Author Analysis

Variables selected to conduct the peers selection:

- ROE
- Total Assets
- Total Liabilities
- Sales
- EBIT Margin
- Debt/EBITDA
- Market Cap
- EV/Sales

Appendix 10.4 – Dividend Discount Model

Dividend Discount Model - Price Target Determination				
Forecast Year	Shareholders Dividends	Cost of Equity	Discount Factor	PV of Dividends
(+) Enterprise Value				
2027F	5,802	8.52%	0.921	5,346
2028F	5,996	8.52%	0.849	5,091
2029F	6,132	8.52%	0.782	4,798
Terminal Value	216,676	8.52%	0.721	156,214
Equity Value - PV of Dividends				171,449
Terminal Value				
Terminal Period Dividend				10,942
Short Period Growth (gs)				4.00%
Long Period Growth (gL)				2.66%
High Groth Period (H)				10
Terminal Period Cost of Equity				8.52%
Terminal Value				216,676
Equity Value				171,449
Shares Outstanding				6,115
Price Target (\$)				28.04
Price Target (€)				24.73
Upside Potential				-15.41%
Anualized Upside Potential				-10.56%

Source: Author Analysis

Appendix 10.5 – Economic Profit Model

Economic Profit - Price Target Determination				
Forecast Year	EVA	WACC	Discount Factor	PV FCFF
2027F	8,373	6.89%	0.936	7,834
2028F	10,992	6.88%	0.875	9,622
2029F	12,707	6.83%	0.819	10,412
Terminal Value	313,290	6.83%	0.767	240,297
Equity Value				268,165
Outstanding Shares				6,115
Price Target (\$)				43.85
Price Target (€)				38.67
Upside Potential				32.31%
Anualized Upside Potential				20.52%

Terminal Value	
Item	Amount
EVA	12,707
WACC	6.83%
g (%)	2.66%
T. Value	313,290

Source: Author Analysis

Appendix 11 – Consensus Estimates

Latest Estimates				
Date	Firm	Price Target	Recommendation	
20/06/2025	BNP Paribas	30.60 €	Buy	●
18/06/2025	Goldman Sachs	38.00 €	Buy	●
16/06/2025	Santander	35.24 €	Buy	●
16/06/2025	JP Morgan	35.24 €	Buy	●
16/06/2025	Oddo BHF	28.00 €	Hold	●
05/06/2025	Intesa Sanpaolo	38.94 €	Buy	●
11/05/2025	Morgan Stanley	32.23 €	Buy	●
06/05/2025	Morningstar	32.49 €	Hold	●
02/05/2025	ING Bank	35.00 €	Buy	●

Consensus Estimates		
Recommendation	#	%
Buy	19	76%
Hold	5	20%
Sell	1	4%
Total	25	100%

Source: Bloomberg

Appendix 12 – Financial Analysis

Appendix 12.1 – Shell Financial Ratios

Financial Ratios - Shell plc													
Caption	Historical								Forecasted				
	2017	2018	2019	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Liquidity Ratios													
Current Ratio	1.1960	1.2528	1.1641	1.2264	1.3477	1.3679	1.4048	1.3461	1.4898	1.5280	1.5545	1.5821	1.6049
Quick Ratio	0.8798	0.9814	0.8618	0.9633	1.0833	1.1050	1.1323	1.0996	1.2280	1.2703	1.3014	1.3345	1.3621
Cash Ratio	0.2546	0.4361	0.3165	0.5086	0.5264	0.5567	0.5743	0.6170	0.6976	0.7483	0.7890	0.8323	0.8711
Activity Ratios													
Total Asset Turnover	0.750	0.973	0.853	0.476	0.647	0.861	0.779	0.734	0.764	0.781	0.797	0.815	0.832
Fixed Asset Turnover	1.348	1.740	1.447	0.856	1.342	1.920	1.625	1.535	1.688	1.811	1.944	2.106	2.292
Inventory Turnover	-	13.87	12.37	6.48	8.89	9.94	8.22	8.55	9.38	9.35	9.34	9.37	9.37
Days Inventory Outstanding	-	26.32	29.51	56.30	41.06	36.73	44.39	42.67	38.93	39.04	39.08	38.94	38.94
Accounts Receivable Turnover	-	8.42	8.03	4.69	6.02	6.37	5.29	5.74	6.33	6.21	6.20	6.21	6.21
Days Sales Outstanding	-	43.37	45.43	77.87	60.60	57.30	69.04	63.63	57.67	58.82	58.89	58.75	58.75
Accounts Payable Turnover	-	4.89	4.51	2.26	3.07	3.43	2.73	2.75	3.10	3.20	3.20	3.20	3.20
Accounts Payable Turnover Days	-	74.57	81.00	161.45	119.06	106.37	133.64	132.91	117.80	114.05	114.18	113.91	113.92
Cash Conversion Cycle	-	-4.89	-6.06	-27.27	-17.40	-12.34	-20.21	-26.61	-21.20	-16.19	-16.21	-16.22	-16.22
Profitability Ratios													
Gross Profit Margin	18.05%	17.25%	18.98%	21.85%	24.00%	25.52%	24.79%	25.61%	25.64%	25.61%	25.58%	25.56%	25.53%
EBITDA Margin	15.64%	15.64%	16.81%	16.00%	22.89%	22.42%	20.93%	20.83%	21.73%	21.66%	21.58%	21.51%	21.44%
EBIT Margin	7.04%	9.94%	8.49%	-13.05%	12.59%	17.56%	11.05%	11.37%	12.72%	12.76%	12.77%	12.82%	12.86%
Net Profit Margin	4.40%	6.16%	4.76%	-11.93%	7.89%	11.24%	6.20%	5.81%	7.25%	7.27%	7.27%	7.26%	7.21%
Return on Assets (ROA)	3.30%	5.99%	4.06%	-5.68%	5.10%	9.68%	4.83%	4.26%	5.54%	5.68%	5.80%	5.92%	6.00%
Total Asset Turnover	0.750	0.973	0.853	0.476	0.647	0.861	0.779	0.734	0.764	0.781	0.797	0.815	0.832
Net Profit Margin	4.40%	6.16%	4.76%	-11.93%	7.89%	11.24%	6.20%	5.81%	7.25%	7.27%	7.27%	7.26%	7.21%
Return on Equity (ROE)	6.79%	11.80%	8.63%	-13.58%	11.77%	22.26%	10.42%	9.17%	11.60%	12.12%	12.65%	13.25%	13.82%
Net Profit Margin	4.40%	6.16%	4.76%	-11.93%	7.89%	11.24%	6.20%	5.81%	7.25%	7.27%	7.27%	7.26%	7.21%
Asset Turnover	0.750	0.973	0.853	0.476	0.647	0.861	0.779	0.734	0.764	0.781	0.797	0.815	0.832
Equity Multiplier	2.058	1.971	2.123	2.392	2.306	2.300	2.157	2.151	2.094	2.135	2.184	2.240	2.304
Return on Invested Capital (ROIC)	7.21%	11.71%	8.10%	-9.08%	11.63%	22.65%	10.88%	9.55%	12.63%	13.50%	14.41%	15.56%	16.84%
Solvency Ratios													
Debt to Equity	43.3%	37.9%	50.6%	68.1%	50.8%	43.5%	43.3%	42.8%	40.7%	42.3%	44.0%	46.0%	48.1%
Long-term Debt to Equity	37.3%	32.9%	42.7%	57.5%	46.1%	38.8%	38.0%	36.3%	35.6%	36.9%	38.4%	40.1%	42.0%
Debt to Assets	21.0%	19.2%	23.8%	28.5%	22.0%	18.9%	20.1%	19.9%	19.5%	19.8%	20.1%	20.5%	20.9%
Debt to Capital	30.2%	27.5%	33.6%	40.5%	33.7%	30.3%	30.2%	30.0%	28.9%	29.7%	30.5%	31.5%	32.5%
Financial Leverage (Assets / Equity)	2.06	1.97	2.12	2.39	2.31	2.30	2.16	2.15	2.09	2.14	2.18	2.24	2.30
Interest Coverage (Int. Expense / EBIT)	5.32	10.31	6.24	-5.76	9.13	21.05	7.49	6.76	9.54	9.60	9.65	9.72	9.78
Cash Flow Ratios													
Cash Flow to Revenue	0.117	0.137	0.122	0.189	0.172	0.179	0.171	0.192	0.179	0.185	0.184	0.184	0.183
Cash to Income	1.565	1.145	1.140	-1.468	1.839	0.951	2.003	2.430	1.859	1.799	1.569	1.165	0.457
Free Operating Cash Flow to Debt	0.416	0.691	0.437	0.316	0.506	0.816	0.665	0.710	0.704	0.731	0.727	0.732	0.729
Sustainable Growth Rate													
ROE (Return on Equity)	6.79%	11.80%	8.63%	-13.58%	11.77%	22.26%	10.42%	9.17%	11.60%	12.12%	12.65%	13.25%	13.82%
Divident Payout (%)	84%	68%	96%	-36%	32%	18%	47%	54%	25%	26%	25%	25%	25%
Sustainable Growth rate	1.09%	3.78%	0.37%	-18.46%	8.00%	18.31%	5.56%	4.19%	8.73%	9.03%	9.46%	9.89%	10.31%
Spreads													
ROIC - WACC Spread									5.77%	6.57%	7.52%	8.68%	10.01%
ROE - Cost of Capital Spread									3.08%	3.60%	4.13%	4.73%	5.29%

Source: Author Analysis

Appendix 12.2 – Peers Ratios

Financial Analysis: Peers							
Company Name	Shell plc	British Petroleum	Exxon Mobil Corporation	SINOPEC CORP	PETROCHINA	Eni S.p.A	TotalEnergies SE
Income Statement							
Sales	316,620	210,130	334,697	3,146,873	3,011,012	93,717	218,945
EBITDA	66,277	42,419	64,388	200,578	482,900	15,736	47,249
EBIT	34,987	25,745	43,747	86,828	235,448	8,257	33,431
Net Income	19,359	15,239	36,010	58,310	161,146	4,771	21,384
Balance Sheet							
Cash	38,774	33,030	31,539	163,537	249,001	10,193	27,263
Current Assets	134,115	86,078	65,316	647,076	689,007	37,921	88,785
Total Assets	406,270	280,294	376,317	2,024,696	2,752,448	142,606	283,654
Equity	188,362	85,493	212,538	955,809	1,630,373	53,644	119,453
Total Current Liabilities	95,467	104,146	96,609	534,435	658,520	49,314	99,529
Debt (ST + LT)	81,541	63,075	47,588	440,231	413,189	34,065	47,870
Total Liabilities	217,908	194,801	163,779	1,068,887	1,122,075	88,962	164,201

Financial Analysis: Peers								
Company Name	Shell plc	British Petroleum	Exxon Mobil Corporation	SINOPEC CORP	PETROCHINA	Eni S.p.A	TotalEnergies SE	Average
Profitability Ratios								
EBITDA Margin	20.83%	20.19%	19.24%	6.37%	16.04%	16.79%	21.58%	16.70%
EBIT Margin	11.37%	12.25%	13.07%	2.76%	7.82%	8.81%	15.27%	10.00%
Net Profit Margin	5.81%	7.25%	10.76%	1.85%	5.35%	5.09%	9.77%	6.68%
Leverage (Assets/Equity)	1.40	3.28	1.77	2.12	1.69	2.66	2.37	231.48%
Return on Assets (ROA)	4.26%	5.44%	9.57%	2.88%	5.85%	3.35%	7.54%	5.77%
Return on Equity (ROE)	9.17%	17.82%	16.94%	6.10%	9.88%	8.89%	17.90%	12.92%
Liquidity Ratios								
Cash Ratio	0.617	0.170	0.193	0.153	0.222	0.115	0.166	16.96%
Solvency Ratios								
Debt to Assets	19.89%	22.50%	12.65%	21.74%	15.01%	23.89%	16.88%	18.78%
Debt to Equity	42.78%	73.78%	22.39%	46.06%	25.34%	63.50%	40.07%	45.19%
Activity Ratios								
Total Asset Turnover	0.734	0.750	0.889	1.554	1.094	0.657	0.772	95.27%

Source: Bloomberg and Author Analysis

Appendix 12.3 – Altman Z-Score

Altman Z-Score				
#	Ratio	Value	Weight	Altman Z-Score
A	Working Capital / Assets	0.01	1.2	0.02
B	Retained Earnings / Assets	0.41	1.4	0.57
C	EBIT / Assets	0.08	3.3	0.28
D	Market Value / Liabilities	0.86	0.6	0.52
E	Revenues / Assets	0.73	1	0.73
Total				2.12

Source: Author Analysis

Appendix 13 – Sensitivity Analysis

Sensitivity Analysis - WACC vs Capex Growth											
WACC (%)	Terminal Growth Rate										
	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	2.67%	3.00%	3.25%	3.50%	3.75%
	5.25%	21.68	23.33	25.27	27.58	30.36	33.79	35.13	38.10	40.72	43.72
	5.50%	21.45	23.09	25.01	27.30	30.05	33.44	34.78	37.72	40.31	43.29
	5.75%	21.23	22.85	24.75	27.02	29.74	33.11	34.43	37.34	39.91	42.85
	6.00%	21.00	22.61	24.50	26.74	29.44	32.77	34.08	36.97	39.51	42.43
	6.25%	20.78	22.38	24.25	26.46	29.14	32.44	33.74	36.60	39.11	42.01
	6.50%	20.56	22.14	24.00	26.19	28.85	32.11	33.40	36.23	38.73	41.59
	6.75%	20.35	21.91	23.75	25.93	28.55	31.79	33.06	35.87	38.34	41.18
	7.00%	20.14	21.69	23.50	25.66	28.26	31.47	32.73	35.51	37.96	40.77
	7.25%	19.93	21.46	23.26	25.40	27.98	31.15	32.40	35.16	37.58	40.37
	7.50%	19.72	21.24	23.02	25.14	27.70	30.84	32.08	34.81	37.21	39.97
	7.75%	19.51	21.02	22.79	24.88	27.42	30.53	31.76	34.47	36.84	39.58

Sensitivity Analysis - WACC vs Capex Growth											
WACC (%)	Capex Growth (%)										
	32.84	-1.50%	-1.00%	-0.50%	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	3.00%
	5.25%	42.00	40.53	39.04	37.52	35.97	34.39	32.78	31.14	29.46	27.76
	5.50%	41.58	40.13	38.65	37.15	35.61	34.05	32.45	30.82	29.16	27.47
	5.75%	41.17	39.73	38.27	36.78	35.25	33.70	32.12	30.51	28.86	27.18
	6.00%	40.76	39.34	37.89	36.41	34.90	33.36	31.79	30.19	28.56	26.90
	6.25%	40.36	38.95	37.51	36.04	34.55	33.02	31.47	29.89	28.27	26.62
	6.50%	39.96	38.56	37.14	35.68	34.20	32.69	31.15	29.58	27.98	26.35
	6.75%	39.57	38.18	36.77	35.33	33.86	32.36	30.84	29.28	27.69	26.08
	7.00%	39.18	37.80	36.41	34.98	33.52	32.04	30.52	28.98	27.41	25.81
	7.25%	38.79	37.43	36.04	34.63	33.19	31.72	30.22	28.69	27.13	25.54
	7.50%	38.41	37.06	35.69	34.29	32.86	31.40	29.91	28.40	26.85	25.28
	7.75%	38.04	36.70	35.34	33.95	32.53	31.08	29.61	28.11	26.58	25.02

Sensitivity Analysis - WACC vs USD/EUR											
WACC (%)	USD/EUR										
	32.84	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
	5.25%	21.88	23.87	25.86	27.85	29.84	31.83	33.82	35.81	37.80	39.79
	5.50%	21.66	23.63	25.60	27.57	29.54	31.51	33.48	35.45	37.42	39.38
	5.75%	21.44	23.39	25.34	27.29	29.24	31.19	33.14	35.09	37.04	38.99
	6.00%	21.23	23.16	25.09	27.02	28.95	30.88	32.81	34.73	36.66	38.59
	6.25%	21.01	22.92	24.83	26.74	28.65	30.56	32.48	34.39	36.30	38.21
	6.50%	20.80	22.69	24.58	26.48	28.37	30.26	32.15	34.04	35.93	37.82
	6.75%	20.59	22.47	24.34	26.21	28.08	29.95	31.83	33.70	35.57	37.44
	7.00%	20.39	22.24	24.09	25.95	27.80	29.65	31.51	33.36	35.21	37.07
	7.25%	20.18	22.02	23.85	25.69	27.52	29.36	31.19	33.03	34.86	36.70
	7.50%	19.98	21.80	23.61	25.43	27.25	29.06	30.88	32.70	34.51	36.33
	7.75%	19.78	21.58	23.38	25.18	26.97	28.77	30.57	32.37	34.17	35.97

Source: Author Analysis

Appendix 14 – Monte Carlo Simulation

Monte Carlo Simulation			
Price Range	Frequency	Recommendation	Probability
€ 12.00	11	Sell	32.46%
€ 14.00	81	Sell	
€ 16.00	247	Sell	
€ 18.00	622	Sell	
€ 20.00	1010	Sell	
€ 22.00	1275	Sell	
€ 24.00	1459	Reduce	28.93%
€ 26.00	1434	Reduce	
€ 28.00	1180	Hold	31.79%
€ 30.00	881	Hold	
€ 32.00	672	Hold	
€ 34.00	446	Hold	
€ 36.00	278	Buy	5.49%
€ 38.00	169	Buy	
€ 40.00	102	Buy	
€ 42.00	78	Strong Buy	1.33%
€ 44.00	29	Strong Buy	
€ 46.00	13	Strong Buy	
€ 48.00	3	Strong Buy	
€ 50.00	5	Strong Buy	
€ 52.00	1	Strong Buy	
€ 54.00	3	Strong Buy	
€ 56.00	1	Strong Buy	

Source: Author Analysis

Appendix 15 – Regression Analysis

Regression Analysis						Geographic Events
Quarter	Shell Price	EPS	DPS	Carbon Price	Dummy	Geographic Events
Q117	26.33	0.43	0.47	5.69	1	Trump inauguration (market-moving policy shift)
Q217	26.52	0.19	0.47	6.51	0	-
Q317	30.18	0.5	0.47	9.29	1	North Korea missile threats (brief market jitters)
Q417	33.40	0.46	0.47	10.68	0	-
Q118	31.69	0.7	0.47	17.93	1	US begins steel/aluminum tariffs (start of trade war)
Q218	34.76	0.72	0.47	19.99	1	US–China trade war escalates
Q318	34.35	0.7	0.47	31.39	0	-
Q418	29.38	0.68	0.47	33.57	1	US markets drop amid trade fears, Fed hikes
Q119	31.40	0.73	0.47	27.66	0	-
Q219	32.61	0.37	0.47	32.67	1	US–Iran tanker attacks escalate, oil risk up
Q319	29.33	0.73	0.47	29.46	0	-
Q419	29.38	0.12	0.47	29.49	1	US–China "Phase One" trade deal preview
Q120	17.88	0	0.16	21.60	1	COVID-19 outbreak starts, global panic
Q220	16.19	-2.33	0.16	32.65	1	COVID global lockdowns + oil price crash
Q320	12.63	0.06	0.1665	34.11	0	-
Q420	17.87	-0.52	0.1665	41.97	1	US election instability risk
Q121	19.74	0.72	0.17	52.84	1	Capitol riots, post-election instability
Q221	20.15	0.44	0.24	70.96	0	-
Q321	22.48	-0.06	0.24	75.13	0	Afghanistan withdrawal chaos (limited economic impact globally)
Q421	21.99	1.49	0.24	96.03	1	Russia begins troop buildup near Ukraine
Q122	27.66	0.93	0.25	91.93	1	Russia invades Ukraine – global commodity shock
Q222	26.05	2.42	1.07	111.85	1	War + sanctions hit global energy/food prices
Q322	25.10	0.93	0.25	78.61	0	-
Q422	28.36	1.47	0.2875	99.24	0	-
Q123	28.79	1.25	0.2875	108.93	0	-
Q223	30.13	0.46	0.331	106.53	0	-
Q323	32.27	1.06	0.331	94.88	0	-
Q423	32.97	0.07	0.344	91.69	1	Israel–Hamas war (Oct 2023) disrupts oil, Suez shipping risks
Q124	33.42	1.13	0.344	69.30	1	Red Sea shipping attacks raise global freight costs
Q224	36.00	0.55	0.344	75.22	1	Ongoing Middle East & Ukraine tensions (global exposure still present)
Q324	32.96	0.69	0.344	75.36	0	-
Q424	31.17	0.15	0.358	75.55	1	Trump inauguration (market-moving policy shift)

Base Model				
Quarter	Shell Price (\$)	Predicted (P)	Difference (S-P)	
Q117	26.33	33.500	-7.169	Undervalued
Q217	26.52	33.260	-6.742	Undervalued
Q317	30.18	33.570	-3.390	Undervalued
Q417	33.40	33.530	-0.127	Undervalued
Q118	31.69	33.770	-2.078	Undervalued
Q218	34.76	33.790	0.972	Overvalued
Q318	34.35	33.770	0.578	Overvalued
Q418	29.38	33.750	-4.370	Undervalued
Q119	31.40	33.800	-2.404	Undervalued
Q219	32.61	33.440	-0.828	Undervalued
Q319	29.33	33.800	-4.471	Undervalued
Q419	29.38	33.190	-3.809	Undervalued
Q120	17.88	29.026	-11.145	Undervalued
Q220	16.19	26.696	-10.508	Undervalued
Q320	12.63	29.170	-16.536	Undervalued
Q420	17.87	28.590	-10.725	Undervalued
Q121	19.74	29.876	-10.136	Undervalued
Q221	20.15	30.509	-10.361	Undervalued
Q321	22.48	30.009	-7.524	Undervalued
Q421	21.99	31.559	-9.573	Undervalued
Q122	27.66	31.130	-3.475	Undervalued
Q222	26.05	43.318	-17.273	Undervalued
Q322	25.10	31.130	-6.033	Undervalued
Q422	28.36	32.159	-3.796	Undervalued
Q123	28.79	31.939	-3.147	Undervalued
Q223	30.13	31.716	-1.588	Undervalued
Q323	32.27	32.316	-0.048	Undervalued
Q423	32.97	31.496	1.475	Overvalued
Q124	33.42	32.556	0.863	Overvalued
Q224	36.00	31.976	4.024	Overvalued
Q324	32.96	32.116	0.843	Overvalued
Q424	31.17	31.759	-0.593	Undervalued

Carbon Model					
Quarter	Shell Price (\$)	Predicted (P)	Difference (S-P)		
Q117	26.33	23.586	2.744	Overvalued	
Q217	26.52	23.549	2.969	Overvalued	
Q317	30.18	23.570	6.610	Overvalued	
Q417	33.40	23.847	9.556	Overvalued	
Q118	31.69	23.585	8.108	Overvalued	
Q218	34.76	23.542	11.220	Overvalued	
Q318	34.35	23.481	10.867	Overvalued	
Q418	29.38	22.972	6.408	Overvalued	
Q119	31.40	23.669	7.727	Overvalued	
Q219	32.61	22.487	10.125	Overvalued	
Q319	29.33	23.603	5.726	Overvalued	
Q419	29.38	22.186	7.194	Overvalued	
Q120	17.88	18.237	-0.357	Undervalued	
Q220	16.19	13.929	2.259	Overvalued	
Q320	12.63	18.354	-5.720	Undervalued	
Q420	17.87	16.697	1.168	Overvalued	
Q121	19.74	18.415	1.325	Overvalued	
Q221	20.15	18.583	1.565	Overvalued	
Q321	22.48	17.592	4.893	Overvalued	
Q421	21.99	19.017	2.969	Overvalued	
Q122	27.66	18.362	9.293	Overvalued	
Q222	26.05	30.805	-4.760	Undervalued	
Q322	25.10	19.250	5.847	Overvalued	
Q422	28.36	19.878	8.484	Overvalued	
Q123	28.79	19.151	9.641	Overvalued	
Q223	30.13	18.485	11.643	Overvalued	
Q323	32.27	19.921	12.348	Overvalued	
Q423	32.97	18.157	14.814	Overvalued	
Q124	33.42	20.760	12.659	Overvalued	
Q224	36.00	19.570	16.430	Overvalued	
Q324	32.96	20.194	12.765	Overvalued	
Q424	31.17	19.071	12.095	Overvalued	

Source: Author Analysis

Base Model

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.505000442
R Square	0.255025446
Adjusted R Square	0.203647891
Standard Error	5.405844539
Observations	32

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	290.1129931	145.0564966	4.963752055	0.013997512
Residual	29	847.4715001	29.22315518		
Total	31	1137.584493			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	26.93802699	2.308359538	9.503730521	2.06752E-10	17.21690164	26.65915235	17.21690164	26.65915235
EPS	1.632643978	1.469569734	1.11096734	0.275708915	-1.372963602	4.638251559	-1.372963602	4.638251559
DPS	13.04671733	6.490606368	2.010092215	0.053804802	-0.228063207	26.32149787	-0.228063207	26.32149787

Carbon Model

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.506276194
R Square	0.256315585
Adjusted R Square	0.146140116
Standard Error	5.597631306
Observations	32

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	291.5806349	72.89515872	2.326430626	0.081866721
Residual	27	846.0038584	31.33347624		
Total	31	1137.584493			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	17.34650017	3.487751983	6.40713568	7.28996E-07	15.19022422	29.50277612	15.19022422	29.50277612
EPS	1.673368584	1.848534303	0.905240753	0.373345239	-2.11951051	5.466247678	-2.11951051	5.466247678
DPS	13.03346199	7.367191352	1.76912223	0.08816982	-2.082766043	28.14969003	-2.082766043	28.14969003
Carbon Price	-0.03703273	0.03512763	-0.105423366	0.916819199	-0.075779216	0.06837267	-0.075779216	0.06837267
Dummy	-0.394716911	2.057257412	-0.191865592	0.849283181	-4.615860449	3.826426628	-4.615860449	3.826426628

Source: Author Analysis

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