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Oil and power: The legacy of Saudi Aramco

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## Abstract

This thesis provides an in-depth evaluation of Saudi Aramco within the context of the evolving oil and gas industry. It delivers a detailed analysis of the company's business performance, focusing on its operations across crude oil, natural gas, refined products, and chemical segments. Forecasts for these industries are presented, emphasizing Saudi Aramco's strategic positioning and anticipated future market trends.

The paper also assesses key industry and business risks associated with the company's operations, alongside a thorough examination of its Environmental, Social, and Governance (ESG) policies and their outcomes. A valuation of Saudi Aramco was conducted using the Multiples approach, selecting comparable global oil and gas majors as proxies to determine firm value. Additionally, a scenario analysis was performed to evaluate the company's valuation under varying market conditions, providing insights into its resilience amid shifting dynamics.

The objective of this thesis is to estimate the fair value of Saudi Aramco in a rapidly changing energy market characterized by volatility and the ongoing transition toward greener energy solutions.

Keywords: Oil, Energy, Refining, Chemicals

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This report is part of the report: The in-depths of Saudi Aramco – The unmatched oil and gas company (annexed), developed by João Martins and Pedro Mota and should be read as an integral part of it.

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# Introduction

This equity provides an extensive analysis on the oil and gas major placed in the Saudi Kingdom, Saudi Aramco, in a dynamic global market.

The joint report is based around a thorough analysis on the company's operations, financial performance, and industry trends. Furthermore, Saudi Aramco's financials were assessed, considering both past performance and the projected future performance. Comparisons with peer oil and gas majors were performed throughout the research, to understand the company's position.

This individual report consists in a comprehensive overview in the oil, natural gas and chemicals industries prospects, considering past market volatility and future trends. The forecasts performed were settled upon extensive research around each industry, considering geopolitical and macroeconomic risks, as well as an ongoing energy transition. These projections were aligned with the risks associated the firm's operations, namely ESG matters, which present a specific section associated with them. Considering several energetic and macroeconomic scenarios, key value drivers were varied, and their impact was gauged. A further Multiples valuation, taking other oil majors as references for valuation.

The joint report comprises an in-depth financial analysis of Saudi Aramco, including profitability metrics, capital structure, and operational efficiency ratios. The methodology used in our valuation was further explained, considering both exogenous and endogenous variables. A sensitivity analysis around these variables was performed and its results assessed.

With this report, the fair value for Saudi Aramco's operations was attained and an investment decision around its shares was given. The company's strategic vision into the future, particularly with regards to a transitioning energy market and unforeseen market volatility, was in line with the valuation's results.

# ESG

Saudi Aramco recognizes the growing importance of ESG considerations and has implemented various measures to mitigate environmental concerns, enhance societal value, and strengthen governance practices. These initiatives aim to address external criticisms and improve the company's standing in ESG rankings, but their ultimate impact on valuation remains nuanced and dependent on execution and market perception.

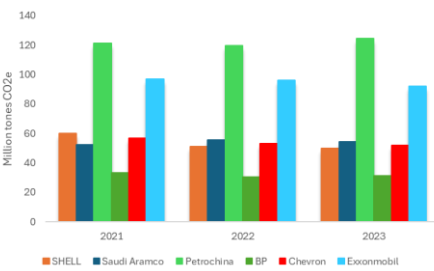
## Environmental Policies

As the world's largest integrated oil and gas producer, Aramco faces significant environmental scrutiny. Crude oil remains a leading source of global greenhouse gas (GHG) emissions, contributing 15% of total global emissions in 2023 (IEA). To address these concerns, Aramco has committed to achieving net-zero Scope 1<sup>1</sup> and Scope 2<sup>2</sup> emissions by 2050. The company plans to abate 52 million metric tons of CO<sub>2</sub> by 2035, utilizing technologies such as carbon capture, utilization, and storage (CCUS) and transitioning to low-carbon fuels. However, the effectiveness of these technologies and their impact on the company's operating costs and cash flows remain uncertain.

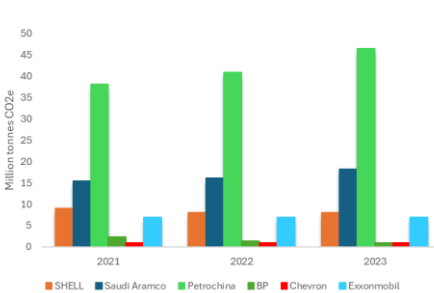
In 2023, Aramco reported Scope 1 emissions of 54.4 million metric tons of CO<sub>2</sub>, a 2,33% reduction from 2022, largely driven by lower hydrocarbon sales rather than structural improvements. Scope 2 emissions rose by 13,04% to 18.2 million metric tons due to the inclusion of the Jazan refinery in GHG reporting. Upstream carbon intensity, a critical efficiency metric, stood at 10.7 kg CO<sub>2</sub>e/boe in 2023, a slight increase from 2022 levels, attributed to reduced upstream production. While Aramco's carbon intensity remains among the lowest in industry, this metric alone does not sufficiently offset broader concerns about its environmental footprint.

The potential valuation impact of these initiatives includes a lower weighted average cost of capital (WACC) through improved investor confidence and access to green financing. For instance, a 0.1% reduction in WACC due to enhanced ESG ratings could increase enterprise value by approximately SAR 61 billion, according to our model. However, the capital expenditures required for CCUS, and other low-carbon projects may constrain free cash flows in the medium term, partially offsetting these benefits.

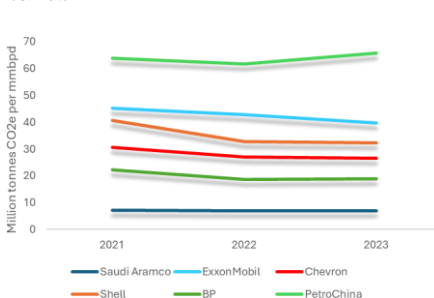
**Figure 1: Scope 1 GHG emissions**  
Source: Companies sustainability reports



**Figure 2: Scope 2 GHG emissions**  
Source: Companies sustainability reports



**Figure 3: Scope 1 and scope 2 GHG emissions per million barrels per day produced**  
Source: Companies sustainability, annual reports and own estimate

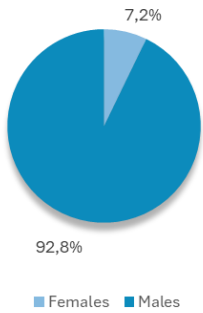


<sup>1</sup> Scope 1 emissions are direct greenhouse gas emissions from sources owned or controlled by a company, such as fuel combustion in facilities or vehicles.

<sup>2</sup> Scope 2 emissions are indirect emissions from the generation of purchased electricity, heat, or steam used by the company.

## Social Policies

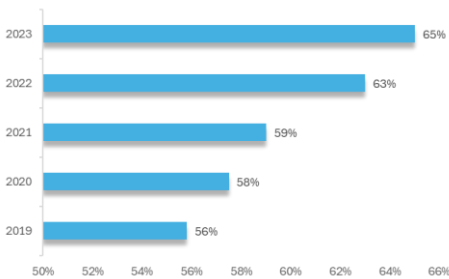
**Figure 4:** Saudi Aramco's workforce diversity  
**Source:** Annual report



Aramco has made measurable progress in social responsibility, particularly in workforce safety and diversity. In 2023, the company achieved its lowest recordable case rate of 0.042 cases per 200,000 hours worked, a significant improvement in operational safety. Fatalities decreased by 66.7%, underscoring the effectiveness of enhanced safety protocols.

Aramco has also increased workforce diversity, with female employees constituting 7.2% of the workforce in 2023, up from 6.4% in 2022. However, the financial implications of this progress remain ambiguous, as there is limited evidence directly linking workforce diversity to operational or financial performance in the oil and gas sector. Similarly, the company's board includes five independent directors, one of whom is female, enhancing governance diversity.

**Figure 5:** Saudi Aramco's iktva program  
**Source:** Annual report



The company's In-Kingdom Total Value Add<sup>3</sup> (iktva) program, aimed at increasing local procurement, reached 65% in 2023, up from 56% in 2019. While this supports Saudi Arabia's Vision 2030, it may impose additional costs if local suppliers are less competitive. A detailed cost-benefit analysis is necessary to determine whether these initiatives align with shareholder interests.

## Governance Policies

Aramco's governance framework is designed to balance government oversight with market expectations. The Saudi Government's 97.5% ownership provides strategic direction, while the company maintains international governance standards, including independent board representation and quarterly financial reporting. The alignment of executive compensation with stock performance ensures management accountability, but the heavy government influence raises questions about potential conflicts between shareholder value maximization and national economic objectives.

## Industry analysis

Throughout the period between 2020 and 2023, the outlook for the crude oil industry has suffered drastic changes. Due to the COVID-19 pandemic and consequent lack of economic activity, crude oil hit its lowest level in 30 years, at only \$37.83 per barrel. Not long after, due to the eruption of war in Ukraine and its consequent impacts on the energy sector, crude oil would surge to its highest level in more than a decade, at \$123.70 per barrel. Further, the ongoing Middle Eastern conflict has maintained crude oil prices at high levels throughout 2023, averaging

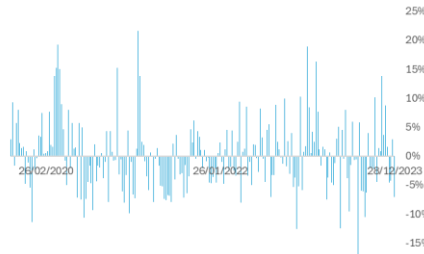
<sup>3</sup> Aramco's In-Kingdom Total Value Add program, launched in 2015, aims to localize 70% of its supply chain, increase energy-related exports, and create jobs for Saudi nationals. By promoting local procurement, developing workforce skills, and attracting investments.

\$77.64 per barrel. Alongside this increase in crude oil and gas prices, record high inflation was recorded across consumer goods, significantly hindering households and businesses' financial positions. These events, allied with strict energy transition targets determined by countries worldwide and a further election of Donald Trump as the president of the United States, are set to notably affect the economic environment for oil and gas companies, with oil majors needing to adapt to changing market conditions.

## Crude Oil

Crude oil remains the cornerstone of Saudi Aramco's operations and the global energy system. As of 2023, global crude oil demand stands at approximately 102 million barrels per day, driven by transportation and industrial applications, particularly in emerging markets such as China and India.

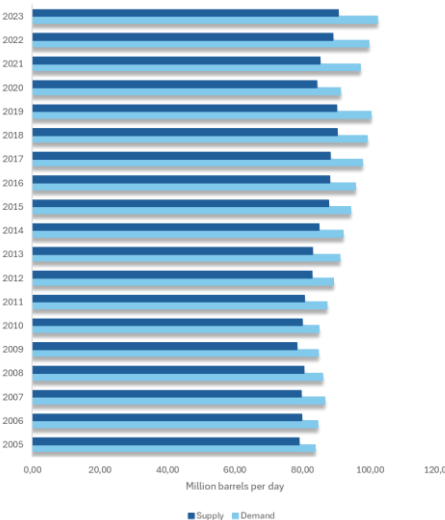
**Figure 6:** US % daily change of crude oil inventories  
Source: Investing.com



The levels of US crude oil inventories play a significant role in global oil markets, impacting prices and, by extension, Saudi Aramco's financial performance. The level of the inventories has been below average for the better part of the 4-year period between 2019 and 2023 resulting in tighter market conditions and therefore increasing oil prices.

With demand for crude oil projected to increase, the OPEC+ cartel is set to gradually end imposed production cuts, which are expected to boost its production by a total of 2.2 million barrels per day. Despite this projection, a persistent slowdown in the Chinese economy allied with a projected increase in the production of crude oil from the United States<sup>4</sup> may impact negatively Saudi Aramco's ability to boost its sales. Furthermore, according to EIA<sup>5</sup>, the IEA<sup>6</sup> and McKinsey<sup>7</sup> projections, the peak of crude oil demand is projected to occur between 2029 and 2030, with demand slowly decreasing afterwards. Demand projections may fluctuate heavily, given the exponential adoption of electric vehicles around the world and countries' willingness to combat climate change. Nonetheless, the aviation industry's rebound allied with the chemical industry's projected boost, are set to represent steady sources of demand for crude oil.

**Figure 7:** Global crude oil supply and demand  
Source: Statista



Accordingly, we expect the price of crude oil to remain between [\$70 - \$76] per barrel from 2024-2034. As shown by past trends, global demand for crude oil has surpassed crude oil supply impacting countries' crude oil inventories and driving market prices higher. This price upswing, attributed to an optimistic scenario will imply prices hovering around [\$80 - \$92] per barrel. On the contrary, a faster

<sup>4</sup> Rapier, Robert. "Why US Oil Production Is 6.5% Ahead of Last Year's Record Pace." *Forbes*, September 26, 2024.

<sup>5</sup> U.S. Energy Information Administration. "Short-Term Energy Outlook: Global Oil." *U.S. Energy Information Administration*

<sup>6</sup> International Energy Agency. 2024. *Oil 2024: Analysis and Forecasts to 2024*. International Energy Agency.

<sup>7</sup> McKinsey & Company. 2024. *Global Oil Supply and Demand Outlook to 2040*. McKinsey & Company.

adoption of EV vehicles, alongside stricter climate change policies, may lead to lower demand for crude oil, thus affecting market prices. Hence, prices would vary between [\$60 - \$67] per barrel. In the optimistic and pessimistic scenarios, growth in crude oil prices would fluctuate 2% upwards or downwards.

## Natural Gas and NGLs

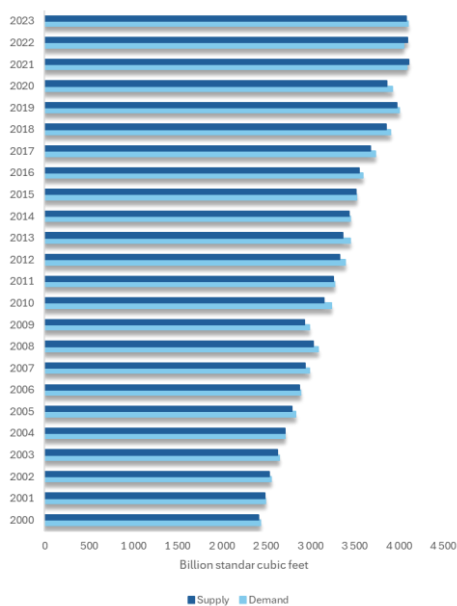
The global market for natural gas is expanding, driven by its role as a cleaner-burning bridge fuel in the energy transition. Saudi Aramco's natural gas operations are vital for meeting domestic energy needs and supporting its industrial base. Additionally, liquefied natural gas is becoming an important export opportunity as demand grows in Asia and Europe. Natural gas liquids, such as propane and butane, are critical feedstocks for the petrochemical industry, further integrating Aramco's operations.

However, similarly to the crude oil industry, natural gas spot prices have fluctuated heavily throughout the past 3 years, from \$5.617/MBTU<sup>8</sup> in June 2020 to \$36.136/MBTU in August 2022 due to the Russia-Ukraine conflict, stabilizing afterwards in 2023. According to McKinsey<sup>9</sup>, at the current pace, the natural gas industry is set increase by [10% - 15%] until 2050, boosted by an energy transition from coal to gas in Asia. Prices for natural gas are expected to hover around [\$16,000/mmscf<sup>10</sup> – \$27,000/mmscf] in this case. Nevertheless, gas prices are highly volatile and potential economic shocks can affect market prices either positively or negatively. The NGL market is seeing large improvements in recent years, with Saudi Arabia<sup>11</sup> and the United States having committed to boosting their LNG supply by a CAGR (2023-2030) of 6.94%. Further, the demand for this commodity will continue past 2030 with market demand potentially overcoming market supply and boosting prices.

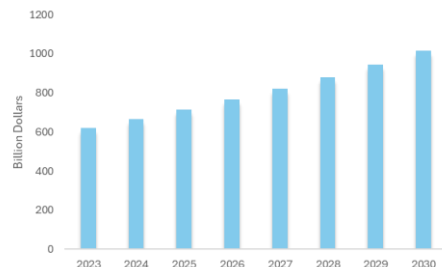
## Petrochemicals

Petrochemicals represent a key growth area for Saudi Aramco, aligned with its strategic goal of transitioning toward a fully integrated energy and chemicals company. The petrochemical sector is critical for producing plastics, synthetic materials, and fertilizers, with demand largely driven by industrial and consumer markets. While petrochemical demand has historically been resilient, it is increasingly influenced by global sustainability efforts and the push to reduce plastic waste. Demand for petrochemicals stagnated in 2023 due to a previous stockpile in propylene and ethylene inventories by companies in 2022 allied with

**Figure 8:** Global natural gas supply and demand  
Source: Statista



**Figure 9:** Petrochemical industry value  
Source: Grandview research



<sup>8</sup> Million British thermal units

<sup>9</sup> McKinsey & Company. "Global Energy Perspective 2023: Natural Gas Outlook." *McKinsey & Company*

<sup>10</sup> Million Standard Cubic Feet

<sup>11</sup> Aramco. *Saudi Aramco Annual Report 2023*. Aramco

an economic slowdown in the Chinese economy during the country's post-Covid recovery<sup>12</sup>. Nonetheless, an expected rebound in the Chinese economy in 2024 will significantly increase demand for petrochemical products in the short-term, with forecasts for global demand growth for these products ranging between [3% - 5%] this year.

Furthermore, global demand for petrochemicals is expected to rise at a 7.30% CAGR (2024-2030)<sup>13</sup> driven by the lack of substitutes for these products. Margins are expected to maintain current levels mainly due to significant barriers to entry in the industry and notable economies of scale from big players.

## Refined

Refined products, including gasoline, diesel, and jet fuel, are central to Saudi Aramco's downstream operations. These products cater primarily to the transportation and industrial sectors, with demand closely tied to economic activity and mobility trends. The refining segment is under pressure from tightening emissions regulations, fuel efficiency improvements, and the growing penetration of electric vehicles. To address these challenges, Saudi Aramco has invested heavily in advanced refining technologies and integrated downstream assets to enhance operational efficiency and capture higher margins. The company's focus on refining capacity expansion in key markets, including Asia, further supports its strategic goal of securing diversified revenue streams.

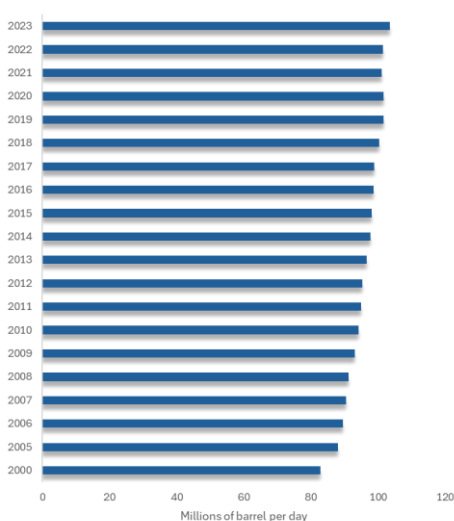
## Risks

Considering the current macroeconomic and geopolitical conditions, several heterogeneous variables may impose risks to Saudi Aramco's financial performance. As such, these are, in our opinion, the four biggest risks to the firm's operations.

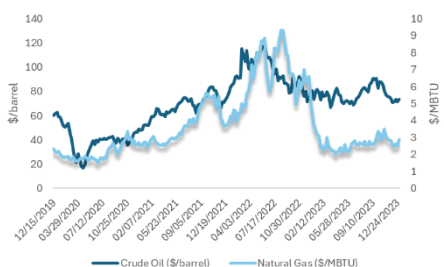
## Commodity prices

As a global leader in crude oil and natural gas production, Saudi Aramco faces significant exposure to commodity price volatility. Weekly price data from December 15, 2019, to December 31, 2023, shows standard deviations of 52% for natural gas and 31.5% for crude oil, underscoring the inherent risks tied to market fluctuations. These swings, driven by supply-demand imbalances, OPEC+ production policies, geopolitical tensions, and regulatory changes, directly impact revenue stability and operational planning.

**Figure 10:** Global oil refinery capacity  
Source: Statista



**Figure 11:** Crude oil & natural gas prices  
Source: Investing.com



<sup>12</sup> S&P Global Commodity Insights. "Oversupply Weighs on Global Petrochemicals." *S&P Global Commodity Insights Blog*, January 3, 2024.

<sup>13</sup> Grand View Research. "Petrochemical Market Size, Share & Trends Analysis Report." *Grand View Research*

Price volatility complicates production adjustments and capital allocation, especially for long-term projects requiring low break-even costs. Hedging strategies, including derivatives, are critical to managing financial exposure but add complexity. Despite its low-cost production advantage, Aramco's reliance on hydrocarbons amplifies its vulnerability to prolonged market disruptions, affecting profitability and investor sentiment.

The high volatility of these commodities highlights the importance of operational flexibility, strategic hedging, and diversification into petrochemicals, renewables, and hydrogen to reduce dependency on crude oil and natural gas. Such measures are essential for enhancing resilience in an unpredictable energy market.

## Energy transition

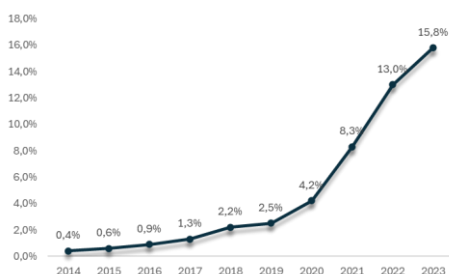
The global energy transition represents a profound long-term challenge for Saudi Aramco, as demand for hydrocarbons is threatened by the rapid adoption of cleaner energy technologies. Global market share of Electric vehicle (EV) increased by over 15% from 2014 to 2023, with projections indicating exponential growth fuelled by government incentives, technological advancements, and shifting consumer preferences. This trend directly undermines the demand for combustion fuels, which remain central to Aramco's operations.

Transitioning to clean energy sources presents both opportunities and challenges for Aramco. While diversification into renewables, hydrogen, and carbon capture could secure its role in a decarbonized future, the company faces fierce

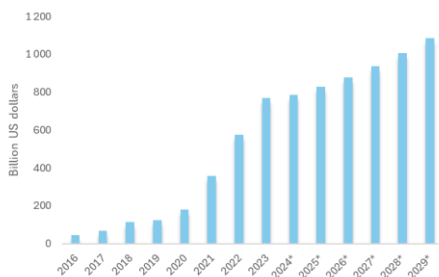
competition from established players with advanced expertise and infrastructure. Additionally, the transition requires significant capital investment, strategic realignment, and overcoming the inertia of its hydrocarbon-focused business model.

Failure to adapt to this shift could erode Aramco's long-term profitability and valuation as investors increasingly favour environmentally sustainable companies. However, Aramco's financial strength and ability to leverage its technological and operational scale provide a potential competitive advantage in building a foothold in the clean energy market. The pace and strategic effectiveness of this transition will determine its ability to thrive in a decarbonized global economy

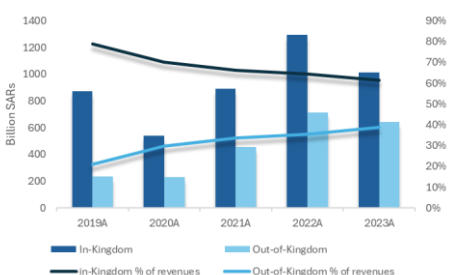
**Figure 12:** Global market share of electric vehicles  
Source: Statista



**Figure 13:** Global electric vehicle revenue forecast  
Source: Statista



**Figure 14:** Saudi Aramco's geographical distribution of revenue  
Source: Annual report



## Dominant portion of in-Kingdom Revenues

Saudi Aramco remains heavily reliant on its domestic market, with in-Kingdom revenues accounting for 61% of total revenues. This dependency exposes the company to significant risks tied to Saudi Arabia's economic health and energy policies. Any economic slowdown, fiscal tightening, or shifts in domestic energy

consumption could substantially reduce demand for Aramco's crude oil, directly impacting its financial stability.

## Asian economic slowdown

Asian countries remain Saudi Aramco's largest importers of crude oil and natural gas, with China playing a pivotal role in driving demand. While China has achieved its GDP growth target of 5% for 2023, this is below its pre-pandemic<sup>14</sup> growth rates and reflects broader structural challenges in its economy, including weaker industrial output and a slowdown in imports. If this moderation persists, it could temper demand for Aramco's products, including crude oil and petrochemicals.

This potential reduction in demand poses a dual challenge for Saudi Aramco. It risks not only constraining near-term revenues but also affecting long-term strategic initiatives, such as its transition toward an integrated liquids-to-chemicals business. Additionally, as other Asian markets, like India, show signs of slower-than-expected growth, the overall demand outlook for Aramco's products in the region could face increasing pressure.

## Balance Sheet and Income Statement Forecasts

This segment of the equity research aims at forecasting on an appropriate basis the key value drivers in Saudi Aramco's operations, i.e., the variables that will mostly define the firm's value. This methodology was based on a set of assumptions derived through deep research among market specialists, a thorough analysis of the company's report and future project, and our own personal judgement of firm dynamics. The approach was applied to the company's Balance Sheet, Income Statement and Cash Flow Statement.

### Revenue Forecast

- Upstream

When forecasting Saudi Aramco's upstream segment revenues, key value drivers considered were the quantities and prices of crude oil and natural gas, while revenues from NGLs were projected directly based on market trends.

To estimate crude oil revenues, a regression analysis was conducted using quarterly crude oil prices and total crude oil revenues from 2018 to 2023. The analysis revealed that for every \$1 increase in crude oil prices, Saudi Aramco's crude oil revenues would increase by SAR 2,475.92. this regression yielded a R<sup>2</sup>

Figure 15: Asian countries GDP growth rate  
Source: Statista

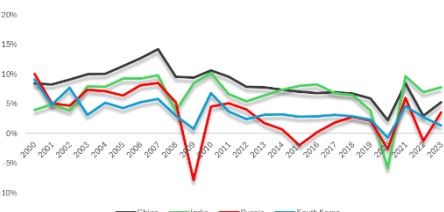


Figure 16: Saudi Aramco crude oil revenue & quantity sold forecast  
Source: Own estimate



<sup>14</sup> BBC News. "Saudi Aramco: Inside the World's Most Profitable Company." *BBC News*

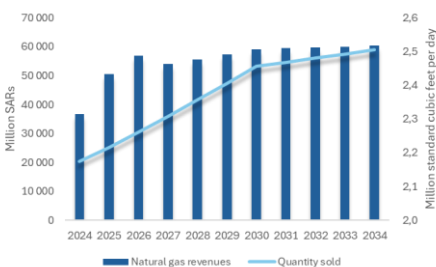
of 0.87 a p-value of 3.15E-11 and t-stat of 12.15, which then implies the relationship between these values is fit. This relationship served as the basis for projecting future crude oil revenues, with future crude oil prices being the primary driver. Demand for crude oil is assumed to peak between 2029 and 2030, after which both prices and quantities sold are expected to decline. Crude oil prices are projected to remain volatile, ranging from \$84/barrel in 2023 to \$73/barrel in 2026, eventually declining to \$72/barrel by 2034 due to diminishing demand.

Considering the firm's position as a market leader, allied with a growing presence in the Asian market and the firm's vast reserves, we assumed the growth of number of barrels sold in the future to be higher than the projected market average. However, a Donald Trump re-election is set to increase crude oil production for the US, which in turn may decrease Saudi Aramco's pricing power and ability to export crude oil. Hence, barrels sold will reach 6.8 mmbpd in 2026 and a period high of 7.1 mmbpd in 2030. After the demand peak, quantities sold are expected to decrease at a 0.5% rate.

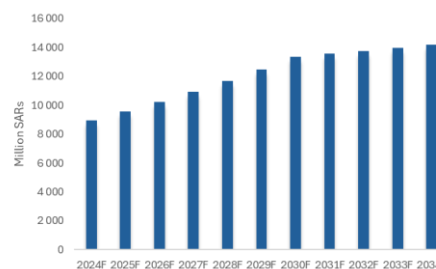
The forecasting method for natural gas closely mirrors that of crude oil. The Hubble spot rated was extracted for each year between the period [2018-2023], which was further utilized to calculate the quantity of natural gas sold per year. A regression analysis between natural gas prices and revenues was also conducted. Contrary to the prior regression, this one was neither significant nor a good model, with a p-value of 0.53 and an R<sup>2</sup> of 0.11. This is in accordance with the rationale that gas prices are notably volatile and highly difficult to predict. Considering this information, we forecasted that prices are set to recover from recent trends, namely considering market adaptation to the Russian conflict, which significantly impacted market volatility, growing 35% in 2025 and 10% in 2026, with growth stagnating at 1% until 2030 and 0% from then on. As for quantities sold, they were derived from future demand estimates, particularly considering to the company's strategic market positioning as the sole provider of natural gas to the Saudi Kingdom, as well as its significant position in the Asian market, which is transitioning from coal to gas as an energy source. As such, gas quantities sold were assumed to be above market projections, projected to grow 1% higher than industry trends, increasing by 2.1% until 2030 and achieving a period high of 2.51 mmscf in 2034.

NGL forecasts are grounded in global market projections and expected growth in demand. Forecasts for NGL demand are highly positive, as projected demand is set to overcome projected supply. According to Saudi Aramco's projections, total production will increase at a 6.94% CAGR from 2023 until 2030. Given a US commitment to boost NGL sales<sup>15</sup> as well, more modest projections were assumed

**Figure 17:** Saudi Aramco natural gas revenue & quantity sold forecast  
**Source:** Own estimate



**Figure 18:** Saudi Aramco NGL revenue forecast  
**Source:** Own estimate



<sup>15</sup> S&P Global Commodity Insights. "Latest News." *S&P Global Commodity Insights*

as market players adjust to a potential supply drought<sup>16</sup>.

Despite unfavourable long-term crude oil industry projections, Saudi Aramco is positioned to achieve above-average returns due to its vast reserves, low production costs, and the OPEC+ cartel's influence on global market trends. Additionally, the company's integration into downstream operations ensures continued internal demand for crude oil, supporting sales to its refining and petrochemical facilities, even if at reduced market prices. These factors collectively reinforce Saudi Aramco's resilience in the upstream segment, enabling sustained profitability despite the challenges of a transitioning global energy landscape.

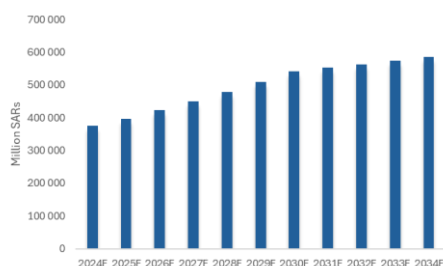
- Downstream

Considering the Downstream segment, the chemical product's sales were forecasted on a total basis, as these comprise a plethora of products and derivatives with different market trends. As for the refined products, the percentage of crude oil, the main raw material, transferred from the Upstream to the Downstream operations was the main value driver.

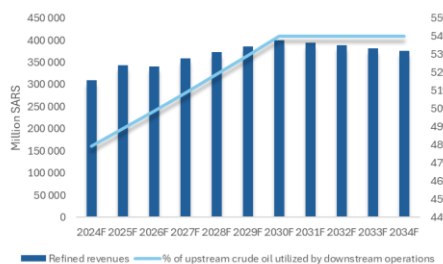
When conducting a regression between refining products' revenues and the % of crude oil used in Downstream operations, despite a limited number of observations (n =5), a p-value of 0.075 and an R<sup>2</sup> of 0.84 were attained, implying some correlation and potential causality between these two variables. We expect this integration process to maintain past levels of growth until 2030, growing at a 2% annual rate. Afterwards, the firm will allocate more resources towards its chemicals business, and an increase in fuel substitutes in the market, with its total crude oil used in refining operations stagnating at a 54% rate. Demand for chemicals is set to increase notably, due to a lack of substitute products and increasing demand in emerging economies for these products. Further, Saudi Aramco possesses the necessary infrastructures to accompany this demand trend and benefit from significant margins, as it can provide crude oil to downstream operations at more favourable deals. Hence, we project sales to grow between the [5%-7%] threshold until 2030. Afterwards, a market forces will likely adjust, implying a lower revenue growth rate of 3%. With this, by 2034, this product line will represent the firm's second biggest source of revenue, only behind its main driver of income, which is its crude oil business, expected to provide 28.31% more revenues for the firm in 2034 that in it did in 2023, in real terms.

Considering the aspects, such as the company's market leader position and scale, a sales premium was associated with the projections. As such, we not only expect Downstream sales to increase in the future, but also the company's margins in this sector as it will be explained further in the Operating costs section.

**Figure 19:** Saudi Aramco chemical revenue forecast  
Source: Own estimate



**Figure 20:** Saudi Aramco refined revenue forecast  
Source: Own estimate



<sup>16</sup> McKinsey & Company. "Global Energy Perspective 2023: Natural Gas Outlook." *McKinsey & Company*

- Corporate

The Corporate segment, as previously mentioned, represents solely a supporting segment to the firm's main sources of income. As such, we defined future revenues of this operating segment as a percentage of the other two segments revenues. This reasoning implies that, if the other segments are expanding, the corporate segment, which provides support to the other two also has to expand itself.

## Operating costs forecast

With regards to the operating costs, these were mainly derived on a % of revenues basis. We used this rationale as these costs are mainly attributed to the business of the company on a regular basis and highly correlate with the firm's revenues. Furthermore, the main method used when forecasting operating costs was using a period average between 2019 and 2023. Nonetheless, certain costs were derived through a different method. As is the case of Purchases, which are only attributed to the Downstream segment and are mainly related with the Saudi Aramco's Downstream businesses purchasing crude oil and natural gas from its Upstream business to use as raw materials. Purchases were thus divided by type of product that would derive from them, but also following the previously mentioned average method to be forecasted. Finally, the D&A per segment was derived as a percentage of each segment's total PPE and forecasted accordingly.

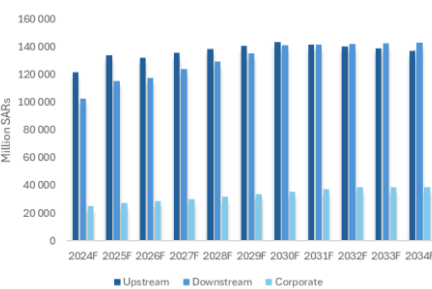
## Net Working Capital (NWC)

As for the NWC, the main driver utilized were the sales revenues. Since the NWC components are related with the company's day-to-day operations, they will correlate with the firm's sales. Nonetheless, certain captions were forecasted on a different basis. Firstly, operating cash was set at 5% of revenues. This allows for financial flexibility in case the company needs cash to finance machine malfunctions or oil related short-term expenses. Secondly, when forecasting inventory levels, trade receivables and trade payables, the average holding period, average collection period and average payable period were used as drivers, respectively. Furthermore, other NWC components were derived from different drivers, such as the number of employees from the cost of sales.

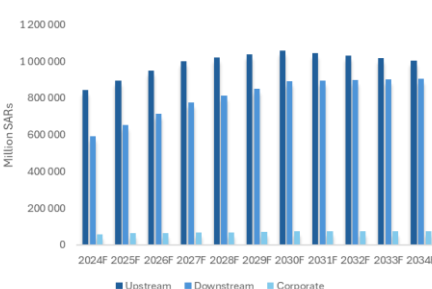
## Property, Plant and Equipment forecast

When it comes to Saudi Aramco's PP&E, the projections were made on a separate basis according to the firm's segments. Regardless, for both the Upstream and Downstream businesses, future projects were used as the main PP&E driver for projections until 2027, utilizing each segment's revenues as the main driver for PP&E growth afterwards. Firstly, since the company is on an expansion projected, capital expenditures are expected to cover for D&A expenses, as the company

**Figure 21:** Saudi Aramco net working capital forecast  
Source: Own estimate



**Figure 22:** Saudi Aramco property, plant and equipment forecast  
Source: Own estimate



needs to maintain its current infrastructures. For the Upstream segment, improvements on current crude oil facilities and its Master Gas Plant<sup>17</sup> project are set to represent the biggest CAPEX for the firm, at SAR 33 825 and SAR 11 719 per year until 2027, respectively. For the Downstream segment, its HAPCO<sup>18</sup> refinery and petrochemical complex allied with the completion of the firm's S-OIL<sup>19</sup> project will constitute its biggest expenditures, at SAR 33 300 and SAR 19 725 per year until 2027, respectively. From 2027 onwards, PP&E will assume the same growth pathway as each segment's revenues, with Upstreams' PP&E projected to decrease in the long term at a 1.3% annual rate, while Downstream's PP&E will increase at a 0.6% annual rate, as Saudi Aramco assures its liquids-to-chemicals transition and countries worldwide utilize clean energy sources at a higher rate than fossil fuels. The Corporate segment's PP&E, considering that this segment's main purpose is to provide support to the other operating segment's, was forecasted on a revenue basis.

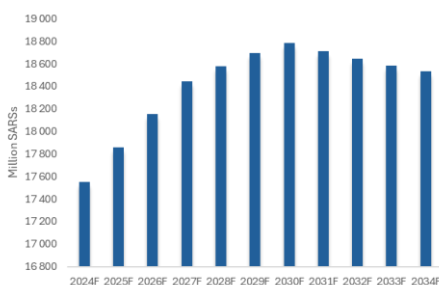
### Intangibles forecast

Considering the Intangible Assets, they were divided into different components which were, in turn, forecasted in different terms. As for the Goodwill, correspondent to the acquisition of SABIC, we forecasted that it would stay stable in the future at a period average between 2020-2023. With Saudi Aramco projected to focus on minority interest led acquisitions, no further Goodwill increases are expected. Regarding Exploration and evaluation, with these assets relating to the firms' Upstream activities, we forecasted as a percentage of PPE attributed to this segment. The remaining Intangible components were either forecasted as a % of revenues or held constant.

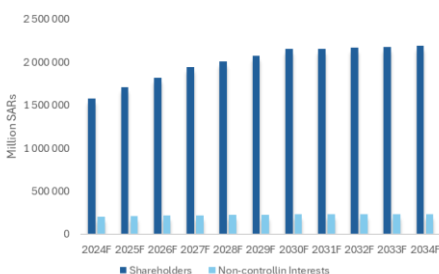
### Debt and Equity forecast

The last element that was not forecasted as a % of revenues, was the company's leverage ratio, i.e., its Debt-to-Equity ratio. Saudi Aramco has, for its past, maintained a notably low D/E ratio. When comparing with its peers, independently of their scale, their financial position is significantly different than Saudi Aramco's leverage position, with only ExxonMobil being remotely close at a D/E ratio of 3.81% in 2023. Saudi Aramco does not specifically disclose its D/E target for the future, only allowing for leverage flexibility according to the company's policies. Accordingly, we defined the company's D/E ratio at 0.25% for the foreseeable future. This allows the company to maintain a healthy financial situation, while also

**Figure 23:** Saudi Aramco net debt forecast  
Source: Own estimate



**Figure 24:** Saudi Aramco shareholder equity and non-controlling interest forecast  
Source: Own estimate

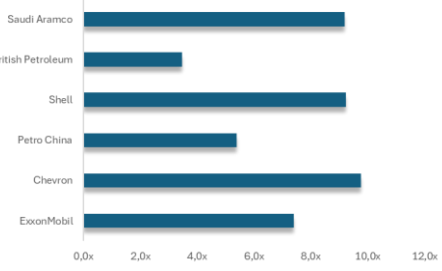


<sup>17</sup> Aramco. "Master Gas System: Fueling a Nation." *Aramco Elements Magazine*

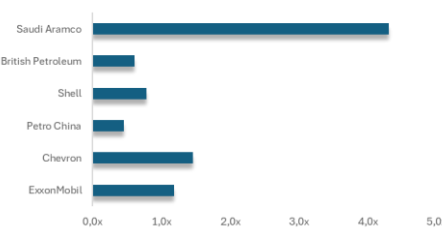
<sup>18</sup> Aramco. "Aramco JV HAPCO to Commence Construction of Petrochemical Complex in China." *Aramco Newsroom*, 2023

<sup>19</sup> Aramco. "Aramco Affiliate S-Oil to Build One of the World's Largest Petrochemical Crackers in South Korea." *Aramco Newsroom*, 2022.

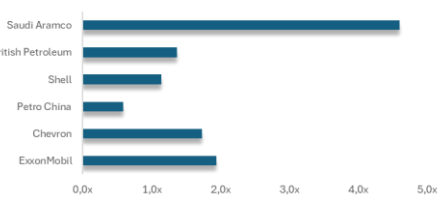
**Figure 25: EV/EBIT**  
Source: Bloomberg



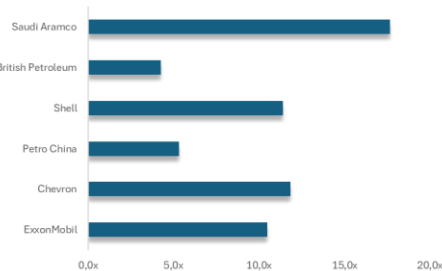
**Figure 26: EV/Revenues**  
Source: Bloomberg



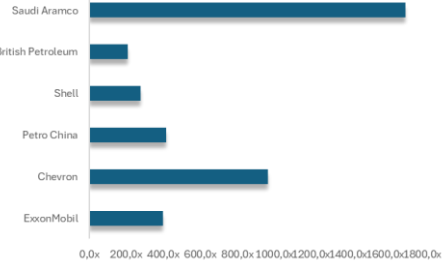
**Figure 27: Price to Book value**  
Source: Bloomberg



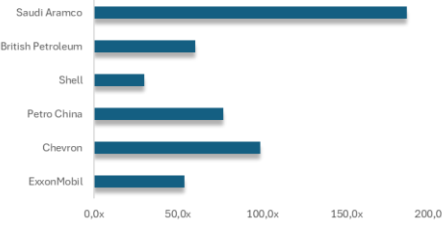
**Figure 28: Price earnings**  
Source: Bloomberg



**Figure 29: EV/million barrels of oil equivalent produced**  
Source: own estimate



**Figure 30: Field Netback**  
Source: own estimate



giving it some margin for potential adjustments in its debt position. As a further note, this capital structure is in line with the company's quarterly dividend policy to its shareholders, namely is \$124 billion extraordinary dividend in the 2Q2024, representing a 30% increase to the dividend distribution in the prior year, which goes to show the firm's commitment to deliver value to shareholders.

## Multiples Analysis

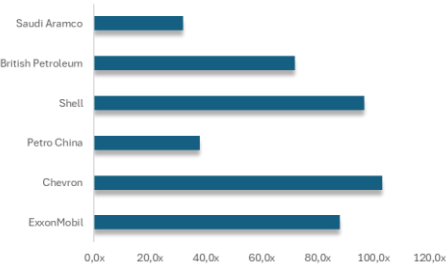
A Multiples valuation was conducted to better assess the financing decision about Saudi Aramco as an investment. As such, traditional Multiples ratios, such as Price-to-Earnings and EV/EBIT were used a proxy for valuation, considering the previously mentioned peer companies. Furthermore, industry specific ratios (EV/mmboc, Field Netback, EV/Reserves) were also considered. Saudi Aramco registered an EV/EBIT ratio of 9.20, positioning it at the higher end of the spectrum and demonstrates the firm's significant operating leverage, associated with its below industry average operating costs.

In terms of EV/Revenue, Saudi Aramco stands out with a ratio of 4.30x, a figure substantially higher than any of its competitors. Despite having the highest revenues in the sector, investors associate a premium to Saudi's revenue generation capacities and pricing power. Other oil majors, such as ExxonMobil (1.19x) and Chevron (1.46x) lag far behind, demonstrating Saudi Aramco's greater ability to generate profits from revenue. This case also applies to the Saudi Aramco's significantly higher P/E ratio, 17.65x. Hence, investors are confident that the firm will be able to better sustain its earnings potential into the future compared to its peers. Considering the firm's P/B ratio, at 4.60x, reflects the market's perception about Saudi's asset base and its ability to generate earnings from it. In contrast, PetroChina's lower P/B (0.59x) may suggest operational inefficiencies or market concerns about its asset quality.

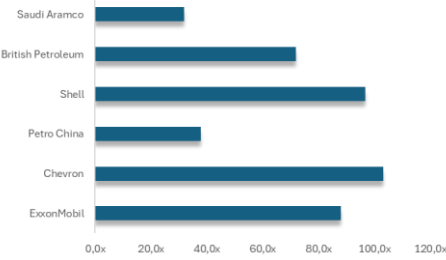
When considering EV/Production, Aramco's value of 1 709.3x far exceeds all competitors. Despite producing the highest number of crude oil barrels among oil majors, Saudi Aramco's EV, associated with its cost leadership and unmatched scale of operations, is remarkably higher than competitors. Similarly, the firm's Field Netback, a measure of profitability per barrel produced, of 185.9x far outpaces that of other oil majors, traced in second place by Chevron (98.9x). This ratio further exacerbates Saudi's cost efficiency and operating leverage.

However, when analysing EV/Reserves, Aramco has the lowest ratio among its peers, at 31.79. Despite appearing negative, this ratio highlights Saudi's vast crude oil reserves, which are the biggest proved reserves held by any oil company. Hence, despite the market valuing the firm at a premium, it's extremely vast reserves push this ratio downwards.

**Figure 31: EV/Reserves**  
**Source: own estimate**



**Figure 64: EV/Reserves**  
**Source: own estimate**



In summary, Saudi Aramco excels across most valuation and performance metrics, with investors attributing a commanding a premium valuation in most ratios analysed. This goes to show a sustained market confidence in the firm’s operations and prospects, as well as its ability to generate returns to shareholders. These findings emphasize Saudi Aramco’s leadership in the oil and gas industry; while demonstrating potential strategic challenges it must face to sustain its valuation and market dominance, particularly in an energy transition scenario.

## Scenario Analysis

The rationale utilized in the scenario analysis was similar to the one in the sensitivity analysis, using the sales value drivers as the main variables for change. Throughout the analysis, the growth in prices and quantities sold, as well as the growth in total revenues were changed between [1%-2%]. Further, the integration rate of the firm’s crude oil into its refining operations was also tested, as this driver significantly influences its Downstream revenue projections. During this analysis, three scenarios were considered, a Base case scenario; a best-case scenario; and a worst-case scenario.

### Upstream Variables

The best-case scenario relates to a slower energy transition worldwide, a strong economic rebound from China and Europe, as well as insignificant crude oil and natural gas projections to meet global demand. Considering this environment, prices would be set to surge in the following years and Saudi Aramco would be able to sell higher quantities of crude, as global economies would need to boost its energy sources. Furthermore, a resurgence in economies such as the Chinese and the German ones, would also imply higher demand for Saudi Aramco’s products, namely its natural gas. Finally, with Chinese corporations being the main producer of Saudi Aramco’s chemical products, a Chinese rebound would significantly boost Chemical products’ revenues. As such, this scenario demonstrates the significant upside that Saudi Aramco has a company can have, as the projected Shareholder return would stand at SAR 45.96, possessing an upside potential of 67.44%.

### Downstream Variables

Considering the Worst-case scenario, it relates to a faster energy transition and electric vehicle adoption by nations, lackluster Chinese economic conditions and a consequent recession into the future. Further, newly president-elect of the United States, Donald Trump, is set to impose policies that will boost the nation’s ability to produce natural gas and crude oil, significantly affecting market prices for these commodities in a negative manner. In this situation, prices would decline in the

following years and global oil supply would be higher than demand, particularly from 2030 onwards. As such, Saudi Aramco would have to settle for lower crude prices and potentially decreasing quantities sold. Moreover, a Chinese recession would imply notably low demand levels for the firm's chemical business, which are the main driver for Saudi Aramco's growth prospects in the future. Finally, EV adoption would hinder its refining business, further decreasing total Downstream revenues. Hence, this scenario demonstrates a potential downside to Saudi Aramco's energy and chemical business, attributed to a projected Shareholder return of SAR 22.83, representing an upside potential of -16.83%.

Considering the analyses performed, it is worth noting the disparity of 50.65% between the Best and Worst cases Upside Potentials, despite varying the same levels and at the same rate. This goes to show Saudi Aramco's stability as a business for the future and positive outlooks, which, despite having limited life on determined assets, the firm can create significant value from the and also determine a clear and profitable strategy for the future. Regardless, the lack of liquidity around the firm's shares, with most shares being owned by the Saudi government, represents a constraint around a potential share price surge in the future.

## **Final Recommendations**

Based on our analysis, we issue a HOLD recommendation for Saudi Aramco's stock, with a price target of SAR 28.48 for FY2025. This reflects an expected total shareholder return of 4.73%, supported by a dividend yield of SAR 1.43 per share. While Saudi Aramco's unparalleled scale, cost leadership, and vertically integrated business model position it as a dominant player in the global energy market, the company faces notable risks stemming from commodity price volatility, energy transition challenges, and its reliance on in-Kingdom revenues. From having the largest crude oil reserves from oil majors, to benefitting from notably high operating margins, Saudi Aramco possesses all the tools to remain a highly lucrative and stable company into the future. Furthermore, a consistent dividend policy followed by the company, having distributed SAR 1.55 per share in 2023, is set to remain constant into the future, coupled with a SEO of 1.7 billion additional shares being issued. Finally, its dominant position as the main crude oil provider and the sheer difference in size compared to other oil majors presents a significant competitive advantage.

# Appendix

Year ended December 31	Reformulated income statement											steady state					
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F
All numbers in million SAR																	
<b>Core Business</b>																	
<b>Upstream</b>																	
Revenue from contracts with customers	789 659	703 148	417 778	650 629	1 027 380	784 742	682 954	752 610	741 771	761 696	775 452	789 498	803 839	793 403	783 134	773 030	763 090
<i>Crude oil</i>	720 010	645 499	377 094	600 673	971 325	746 689	637 240	692 416	674 690	696 786	708 109	719 617	731 311	720 378	709 608	699 000	688 550
<i>Natural gas and NGLs</i>	69 649	57 649	40 684	49 956	56 055	38 053	45 714	60 194	67 081	64 910	67 343	69 881	72 528	73 024	73 525	74 030	74 540
Movement between provisional and final prices	(1 756)	5 405	(7 286)	5 026	(3 142)	(475)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)
Other revenue	569	697	464	411	390	375	491	541	533	547	557	567	577	570	562	555	548
<b>External revenue</b>	<b>788 472</b>	<b>709 250</b>	<b>410 956</b>	<b>656 066</b>	<b>1 024 628</b>	<b>784 642</b>	<b>683 073</b>	<b>752 779</b>	<b>741 932</b>	<b>761 872</b>	<b>775 638</b>	<b>789 693</b>	<b>804 045</b>	<b>793 601</b>	<b>783 325</b>	<b>773 214</b>	<b>763 267</b>
Other income related to sales	37 189	34 446	38 878	58 905	85 475	71 361	55 554	61 220	60 338	61 959	63 078	64 220	65 387	64 538	63 703	62 881	62 072
<b>Revenue and other income related to sales</b>	<b>825 661</b>	<b>743 696</b>	<b>449 834</b>	<b>714 971</b>	<b>1 110 103</b>	<b>856 003</b>	<b>738 627</b>	<b>813 999</b>	<b>802 270</b>	<b>823 830</b>	<b>838 716</b>	<b>853 913</b>	<b>869 432</b>	<b>858 139</b>	<b>847 027</b>	<b>836 095</b>	<b>825 339</b>
Royalties and other taxes	(127 930)	(109 643)	(47 017)	(69 003)	(167 398)	(106 997)	(92 218)	(101 628)	(100 164)	(102 856)	(104 714)	(106 612)	(108 549)	(107 139)	(105 752)	(104 387)	(103 044)
Producing and manufacturing	(34 843)	(35 064)	(38 857)	(36 455)	(49 954)	(44 555)	(41 595)	(45 839)	(45 178)	(46 393)	(47 231)	(48 087)	(48 961)	(48 325)	(47 699)	(47 083)	(46 478)
Exploration	(7 928)	(7 291)	(7 293)	(7 285)	(8 447)	(9 416)	(8 098)	(8 924)	(8 795)	(9 032)	(9 195)	(9 361)	(9 532)	(9 408)	(9 286)	(9 166)	(9 048)
Selling, administrative and general	(19 155)	(22 036)	(24 509)	(28 325)	(40 997)	(35 455)	(29 853)	(32 899)	(32 425)	(33 296)	(33 898)	(34 512)	(35 139)	(34 683)	(34 234)	(33 792)	(33 357)
Research and development	(1 359)	(1 293)	(1 477)	(1 844)	(2 164)	(2 396)	(1 959)	(2 159)	(2 128)	(2 185)	(2 225)	(2 265)	(2 306)	(2 276)	(2 247)	(2 218)	(2 189)
Depreciation and amortization	(27 495)	(30 855)	(39 702)	(42 503)	(44 209)	(48 997)	(47 731)	(50 716)	(53 701)	(56 686)	(57 710)	(58 755)	(59 823)	(59 046)	(58 282)	(57 530)	(56 790)
<b>Operating costs</b>	<b>(218 351)</b>	<b>(206 183)</b>	<b>(158 854)</b>	<b>(185 415)</b>	<b>(313 170)</b>	<b>(247 817)</b>	<b>(221 453)</b>	<b>(242 165)</b>	<b>(242 392)</b>	<b>(250 448)</b>	<b>(254 973)</b>	<b>(259 592)</b>	<b>(264 310)</b>	<b>(260 877)</b>	<b>(257 499)</b>	<b>(254 176)</b>	<b>(250 907)</b>
<b>Upstream EBIT</b>	<b>607 310</b>	<b>537 513</b>	<b>290 980</b>	<b>529 556</b>	<b>796 933</b>	<b>608 186</b>	<b>517 174</b>	<b>571 833</b>	<b>559 878</b>	<b>573 382</b>	<b>583 743</b>	<b>594 321</b>	<b>605 122</b>	<b>597 262</b>	<b>589 528</b>	<b>581 919</b>	<b>574 432</b>
Statutory taxes	(303 655)	(268 757)	(145 490)	(264 778)	(398 466)	(304 093)	(258 587)	(285 917)	(279 939)	(286 691)	(291 871)	(297 160)	(302 561)	(298 631)	(294 764)	(290 959)	(287 216)
Zakat expense	(786)	0	(402)	(938)	(970)	(668)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)
Other comprehensive income	115 452	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Cash flow hedge and other	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
<b>Upstream result</b>	<b>302 892</b>	<b>268 544</b>	<b>144 931</b>	<b>263 994</b>	<b>398 207</b>	<b>302 943</b>	<b>257 991</b>	<b>285 321</b>	<b>279 343</b>	<b>286 095</b>	<b>291 276</b>	<b>296 565</b>	<b>301 965</b>	<b>298 035</b>	<b>294 168</b>	<b>290 364</b>	<b>286 620</b>
<b>Downstream</b>																	
Revenue from contracts with customers	403 306	393 296	353 468	684 762	975 967	859 372	780 767	845 075	866 957	914 581	958 092	1 003 956	1 052 308	1 055 871	1 059 761	1 063 980	1 068 531
<i>Crude oil</i>	8 268	22 049	31 400	60 208	105 401	91 945	78 468	85 262	83 079	85 800	87 194	88 611	90 051	88 705	87 379	86 073	84 786
<i>Refined and chemical products</i>	392 882	369 478	314 066	607 771	835 884	750 355	694 925	740 653	763 869	809 039	850 856	894 990	941 575	946 424	951 578	957 074	962 816
<i>Natural gas and NGLs</i>	2 156	1 769	2 287	3 992	19 292	4 018	5 637	7 423	8 272	8 004	8 304	8 617	8 944	9 005	9 067	9 129	9 192
<i>Metal Products</i>	0	0	5 715	12 791	15 390	13 054	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738
Movement between provisional and final prices	(514)	245	(58)	273	(255)	(74)	26	26	26	26	26	26	26	26	26	26	26
Other Revenue	1 783	1 558	2 377	4 342	4 969	7 390	4 797	5 192	5 326	5 619	5 886	6 168	6 465	6 487	6 511	6 537	6 565
<b>External Revenue</b>	<b>404 575</b>	<b>395 099</b>	<b>355 787</b>	<b>689 377</b>	<b>980 681</b>	<b>866 688</b>	<b>785 590</b>	<b>850 293</b>	<b>872 310</b>	<b>920 226</b>	<b>964 004</b>	<b>1 010 150</b>	<b>1 058 799</b>	<b>1 062 384</b>	<b>1 066 298</b>	<b>1 070 543</b>	<b>1 075 122</b>
Other income related to sales	115 452	96 643	55 104	95 923	173 943	131 731	122 481	132 569	136 002	143 473	150 299	157 493	165 079	165 637	166 248	166 910	167 624
<b>Revenue and other income related to sales</b>	<b>520 027</b>	<b>491 742</b>	<b>410 891</b>	<b>785 300</b>	<b>1 154 624</b>	<b>998 419</b>	<b>908 071</b>	<b>982 863</b>	<b>1 008 312</b>	<b>1 063 698</b>	<b>1 114 303</b>	<b>1 167 643</b>	<b>1 223 878</b>	<b>1 228 021</b>	<b>1 232 545</b>	<b>1 237 452</b>	<b>1 242 745</b>
Royalties and other taxes	(80 575)	(72 498)	(42 947)	(75 790)	(174 112)	(124 798)	(113 373)	(122 711)	(125 888)	(132 804)	(139 122)	(145 781)	(152 802)	(153 319)	(153 884)	(154 497)	(155 158)
Purchases	(201 176)	(225 170)	(181 116)	(352 377)	(490 690)	(471 225)	(410 008)	(339 473)	(353 109)	(369 298)	(387 344)	(406 361)	(426 406)	(428 464)	(430 646)	(432 954)	(435 387)
<i>Refined and Chemical products</i>	(160 045)	(157 438)	(122 011)	(226 649)	(291 696)	(277 022)	(264 042)	(285 526)	(294 476)	(311 889)	(328 010)	(345 023)	(362 982)	(364 851)	(366 838)	(368 944)	(371 171)
<i>Crude oil</i>	(41 131)	(67 372)	(47 911)	(93 418)	(152 556)	(162 236)	(113 057)	(10 615)	(10 344)	(10 682)	(10 856)	(11 032)	(11 212)	(11 044)	(10 879)	(10 716)	(10 556)
<i>NGL and other products</i>	0	0	(11 194)	(32 310)	(46 438)	(31 967)	(32 909)	(43 332)	(48 290)	(46 727)	(48 479)	(50 306)	(52 211)	(52 569)	(52 929)	(53 293)	(53 660)
Producing and manufacturing	(21 719)	(23 185)	(35 493)	(40 040)	(51 958)	(51 968)	(51 136)	(55 348)	(56 781)	(59 900)	(62 750)	(65 754)	(68 921)	(69 154)	(69 409)	(69 685)	(69 983)
Selling, administrative and general	(12 064)	(14 571)	(22 387)	(31 112)	(42 642)	(41 354)	(36 701)	(39 724)	(40 753)	(42 991)	(45 036)	(47 192)	(49 465)	(49 632)	(49 815)	(50 014)	(50 228)
Research and development	(856)	(855)	(1 349)	(2 025)	(2 251)	(2 795)	(2 409)	(2 428)	(2 490)	(2 627)	(2 752)	(2 884)	(3 023)	(3 033)	(3 044)	(3 056)	(3 069)
Depreciation and amortization	(11 941)	(14 350)	(30 888)	(37 764)	(41 425)	(42 352)	(47 710)	(52 659)	(57 607)	(62 555)	(65 531)	(68 668)	(71 975)	(72 219)	(72 485)	(72 774)	(73 085)
<b>Operating costs</b>	<b>(328 330)</b>	<b>(350 628)</b>	<b>(314 180)</b>	<b>(539 109)</b>	<b>(803 078)</b>	<b>(734 492)</b>	<b>(661 338)</b>	<b>(612 343)</b>	<b>(636 629)</b>	<b>(670 176)</b>	<b>(702 536)</b>	<b>(736 641)</b>	<b>(772 591)</b>	<b>(775 822)</b>	<b>(779 284)</b>	<b>(782 979)</b>	<b>(786 909)</b>
Share of results of joint ventures and associates	(1 415)	(9 455)	(3 554)	7 874	2 873	(4 001)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)
<b>Downstream EBIT</b>	<b>190 282</b>	<b>131 659</b>	<b>93 157</b>	<b>254 065</b>	<b>354 419</b>	<b>259 926</b>	<b>245 481</b>	<b>369 267</b>	<b>370 430</b>	<b>392 270</b>	<b>410 515</b>	<b>429 750</b>	<b>450 034</b>	<b>450 947</b>	<b>452 009</b>	<b>453 221</b>	<b>454 583</b>
Statutory taxes	(38 056)	(26 332)	(18 631)	(50 813)	(70 884)	(51 985)	(49 096)	(73 853)	(74 086)	(78 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)
Tax adjustments	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 252)	(109 257)	(114 568)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)
Zakat expense	(495)	0	(367)	(1 030)	(1 009)	(779)	(637)	(765)	(844)	(807)	(766)	(764)	(789)	(794)	(784)	(780)	(782)
Other comprehensive income	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
Cash flow hedge and other	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
<b>Downstream result</b>	<b>113 421</b>	<b>63 741</b>	<b>47 904</b>	<b>160 007</b>	<b>205 962</b>	<b>134 815</b>	<b>132 585</b>	<b>196 924</b>	<b>197 286</b>	<b>208 785</b>	<b>218 389</b>	<b>228 468</b>	<b>239 064</b>	<b>239 415</b>	<b>239 859</b>	<b>240 377</b>	<b>240 967</b>
<b>Corporate</b>																	
Other Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532
External Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532
<b>Revenue and other income related to sales</b>	<b>1 329</b>	<b>1 347</b>	<b>1 366</b>	<b>1 487</b>	<b>1 646</b>	<b>1 951</b>	<b>2 016</b>	<b>2 200</b>	<b>2 217</b>	<b>2 311</b>	<b>2 391</b>	<b>2 475</b>	<b>2 563</b>	<b>2 55</b>			



Year ended December 31	Cash Flow Statement						Steady state										
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F
All numbers in million SAR																	
<b>Upstream</b>																	
EBIT	607 310	537 513	290 980	529 556	796 933	608 186	517 174	571 833	559 878	573 382	583 743	594 321	605 122	597 262	589 528	581 919	574 432
Statutory Taxes	(303 655)	(268 757)	(145 490)	(264 778)	(398 466)	(304 093)	(258 587)	(285 917)	(279 939)	(286 691)	(291 871)	(297 160)	(302 561)	(298 631)	(294 764)	(290 959)	(287 216)
Zakat expenses	(786)	0	(402)	(970)	(668)		(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)
<b>Recurrent NOPLAT</b>	<b>302 869</b>	<b>268 757</b>	<b>145 087</b>	<b>263 840</b>	<b>397 496</b>	<b>303 425</b>	<b>257 991</b>	<b>285 321</b>	<b>279 343</b>	<b>286 095</b>	<b>291 276</b>	<b>296 565</b>	<b>301 965</b>	<b>298 035</b>	<b>294 168</b>	<b>290 364</b>	<b>286 620</b>
Depreciation and amortization	27 495	30 855	39 702	42 503	44 209	48 997	47 731	50 716	53 701	56 686	57 710	58 755	59 823	59 046	58 282	57 530	56 790
Other comprehensive income	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	278	92	144	216	0	0	0	0	0	0	0	0	0	0	0
<b>Upstream Gross Cash Flow</b>	<b>330 387</b>	<b>299 399</b>	<b>184 910</b>	<b>306 590</b>	<b>442 559</b>	<b>352 156</b>	<b>305 722</b>	<b>336 037</b>	<b>333 044</b>	<b>342 782</b>	<b>348 986</b>	<b>355 320</b>	<b>361 788</b>	<b>357 081</b>	<b>352 450</b>	<b>347 893</b>	<b>343 410</b>
Change in Net Working Capital		14 495	29 524	(44 424)	(44 170)	26 657	20 981	(12 108)	1 746	(3 555)	(2 520)	(2 574)	(2 630)	1 610	1 576	1 542	1 508
Net Capex-PPE	(85 862)	(83 596)	(49 520)	(79 539)	(90 626)	(99 556)	(99 556)	(103 478)	(106 464)	(109 449)	(112 435)	(115 420)	(118 405)	(121 390)	(124 375)	(127 360)	(130 345)
Investment in intangibles	(2 018)	3 087	1 774	1 900	(882)		(2 716)	(1 023)	(841)	(910)	(918)	(926)	(934)	259	255	251	247
Change in Provisions	46	3 541	(659)	1 111	(600)		(140)	1 313	(204)	376	259	265	270	(197)	(194)	(190)	(187)
Change in Other Operating Net Assets	19 232	(8 487)	39 066	33 904	1 527		(7 882)	12 606	8 105	9 819	3 848	3 932	4 018	(2 614)	(2 562)	(2 511)	(2 460)
<b>Upstream Unlevered Free Cash Flow</b>	<b>245 292</b>	<b>128 980</b>	<b>252 428</b>	<b>354 055</b>	<b>288 223</b>	<b>216 408</b>	<b>233 347</b>	<b>235 387</b>	<b>239 063</b>	<b>274 450</b>	<b>279 387</b>	<b>284 426</b>	<b>310 823</b>	<b>306 751</b>	<b>302 745</b>	<b>298 603</b>	<b>294 531</b>
<b>Downstream</b>																	
EBIT	190 282	131 659	93 157	254 065	354 419	269 926	245 481	369 267	370 430	392 270	410 515	429 750	450 034	450 947	452 009	453 221	454 583
Statutory Taxes	(38 056)	(26 332)	(18 631)	(50 813)	(70 884)	(51 985)	(49 096)	(73 853)	(74 086)	(78 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)
Tax adjustments	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 224)	(109 257)	(114 568)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)
Zakat expenses	(495)	0	(367)	(1 009)	(779)		(637)	(765)	(844)	(807)	(766)	(764)	(789)	(794)	(784)	(780)	(782)
<b>Recurrent NOPLAT</b>	<b>113 407</b>	<b>63 881</b>	<b>48 047</b>	<b>159 838</b>	<b>205 223</b>	<b>135 377</b>	<b>132 585</b>	<b>196 924</b>	<b>197 286</b>	<b>208 785</b>	<b>218 389</b>	<b>228 468</b>	<b>239 064</b>	<b>239 415</b>	<b>239 859</b>	<b>240 377</b>	<b>240 967</b>
Depreciation and amortization	11 941	14 350	30 888	37 764	41 425	42 352	47 710	52 659	57 607	62 555	65 531	68 668	71 975	72 219	72 485	72 774	73 085
Other comprehensive income	14	(141)	(143)	169	739	(952)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	254	101	149	252	0	0	0	0	0	0	0	0	0	0	0
Movements to unappropriated reserves	0	0	0	(415)	885	119	0	0	0	0	0	0	0	0	0	0	0
<b>Downstream Gross Cash Flow</b>	<b>125 362</b>	<b>78 091</b>	<b>79 045</b>	<b>197 458</b>	<b>248 421</b>	<b>177 537</b>	<b>180 296</b>	<b>249 583</b>	<b>254 893</b>	<b>271 341</b>	<b>283 920</b>	<b>297 137</b>	<b>311 040</b>	<b>311 634</b>	<b>312 344</b>	<b>313 150</b>	<b>314 052</b>
Change in Net Working Capital		10 041	9 290	(52 027)	(47 210)	30 735	10 337	(12 543)	(2 416)	(6 236)	(5 517)	(5 799)	(6 097)	(357)	(400)	(443)	(486)
Net Capex-PPE	(53 012)	(209 181)	(63 976)	(63 447)	(83 789)	(83 789)	(101 630)	(113 934)	(118 882)	(123 830)	(128 383)	(133 512)	(138 641)	(143 770)	(148 900)	(154 030)	(159 160)
Investment in intangibles	(1 207)	(137 510)	2 102	1 150	(4 332)		(888)	(1 148)	(1 088)	(1 131)	(716)	(754)	(794)	(67)	(73)	(78)	(84)
Change in Provisions	180	1 414	5 563	188	1 569		595	154	1 741	343	986	890	938	876	74	80	87
Change in Other Operating Net Assets	5 764	17 978	2 239	45 754	7 517		(6 962)	5 035	9 750	6 562	6 107	6 067	6 389	2 618	682	731	781
Change in Investments in joint ventures and associates	2 841	(46 238)	(3 583)	(2 637)	2 722		(1 262)	(1 285)	(1 309)	(1 333)	(1 357)	(1 381)	(1 407)	(1 432)	(1 458)	(1 485)	(1 512)
<b>Downstream Unlevered Free Cash Flow</b>	<b>42 897</b>	<b>(285 201)</b>	<b>87 776</b>	<b>182 218</b>	<b>131 960</b>	<b>80 685</b>	<b>125 862</b>	<b>142 690</b>	<b>145 714</b>	<b>181 041</b>	<b>188 647</b>	<b>197 143</b>	<b>238 035</b>	<b>235 389</b>	<b>235 609</b>	<b>235 898</b>	<b>236 187</b>
<b>Corporate</b>																	
EBIT	(602)	(3 756)	(4 331)	(3 830)	(4 402)	(3 826)	(3 903)	(4 259)	(4 292)	(4 474)	(4 629)	(4 792)	(4 962)	(4 945)	(4 929)	(4 915)	(4 902)
Statutory taxes	120	751	866	766	880	765	781	852	858	895	926	958	992	989	986	983	980
Zakat expenses	(1)	0	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Recurrent NOPLAT</b>	<b>(483)</b>	<b>(3 005)</b>	<b>(3 466)</b>	<b>(3 066)</b>	<b>(3 523)</b>	<b>(3 063)</b>	<b>(3 124)</b>	<b>(3 409)</b>	<b>(3 435)</b>	<b>(3 581)</b>	<b>(3 705)</b>	<b>(3 835)</b>	<b>(3 971)</b>	<b>(3 957)</b>	<b>(3 945)</b>	<b>(3 933)</b>	<b>(3 923)</b>
Depreciation and amortization	1 898	5 061	5 618	5 254	5 984	5 691	5 833	6 365	6 413	6 686	6 918	7 161	7 415	7 390	7 366	7 345	7 326
Other non-cash adjustments to shareholders	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Corporate Gross Cash Flow</b>	<b>1 415</b>	<b>2 056</b>	<b>2 153</b>	<b>2 188</b>	<b>2 461</b>	<b>2 629</b>	<b>2 709</b>	<b>2 956</b>	<b>2 979</b>	<b>3 105</b>	<b>3 213</b>	<b>3 326</b>	<b>3 444</b>	<b>3 432</b>	<b>3 421</b>	<b>3 412</b>	<b>3 403</b>
Change in Net Working Capital	(1 047)	(7 323)	(5 914)	(3 087)	(2 877)		2 686	(2 229)	(1 001)	(1 782)	(1 681)	(1 785)	(1 894)	(1 866)	(1 176)	(85)	(95)
Net CAPEX - PPE	(19 579)	(10 878)	(6 482)	(7 581)	(4 076)		(7 700)	(11 643)	(6 896)	(9 390)	(9 220)	(9 570)	(9 937)	(7 138)	(7 135)	(7 133)	(7 134)
Investments in intangibles	(1)	(2)	3	0	(1)		(1)	(0)	(0)	(0)	(0)	(0)	(0)	0	0	0	0
Change in Provisions	153	4 268	(3 868)	233	(541)		58	1 152	(1 297)	524	(103)	40	43	(804)	5	5	5
Change in Other Operating Net Assets	(14 358)	(13 093)	29 518	(30 398)	(27 483)		16 481	(125)	(7 620)	(2 781)	(1 773)	(1 452)	(1 476)	(1 048)	916	896	875
<b>Corporate Unlevered Free Cash Flow</b>	<b>(32 776)</b>	<b>(24 874)</b>	<b>15 445</b>	<b>(38 372)</b>	<b>(32 350)</b>	<b>14 233</b>	<b>(9 889)</b>	<b>(13 835)</b>	<b>(10 204)</b>	<b>(9 564)</b>	<b>(9 440)</b>	<b>(9 821)</b>	<b>(7 423)</b>	<b>(3 968)</b>	<b>(2 965)</b>	<b>(2 945)</b>	<b>(2 945)</b>
Non-Core EBIT	1 084	1 986	1 336	992	6 939	9 692	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189
Statutory Taxes	(217)	(397)	(267)	(198)	(1 388)	(1 938)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)
Change in Non-Core IC	(8 137)	714	(8 716)	(8 716)	(21 400)	(23 944)	12 973	(7 827)	(7 550)	(9 213)	(10 363)	(11 828)	(13 507)	(14 689)	(16 865)	(19 362)	(22 225)
Other comprehensive income	3 835	1 109	(3 556)	7 540	17 176	(665)	0	0	0	0	0	0	0	0	0	0	0
<b>Total Unlevered FCF</b>	<b>249 774</b>	<b>(182 868)</b>	<b>355 266</b>	<b>499 228</b>	<b>370 977</b>	<b>327 650</b>	<b>344 843</b>	<b>360 043</b>	<b>368 712</b>	<b>438 915</b>	<b>450 117</b>	<b>461 591</b>	<b>530 096</b>	<b>524 658</b>	<b>519 437</b>	<b>512 883</b>	<b>506 415</b>
Finance income	2 781	5 385	1 846	795	7 955	22 275	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640
Finance costs	(2 959)	(6 026)	(10 564)	(12 058)	(8 882)	(8 186)	(831)	(845)	(859)	(873)	(879)	(885)	(889)	(886)	(882)	(880)	(877)
Tax shield	36	132	1 744	2 253	185	(2 818)	(1 362)	(1 359)	(1 356)	(1 353)	(1 352)	(1 351)	(1 350)	(1 351)	(1 352)	(1 353)	(1 353)
Change in Net Debt	64 403	315 422	(105 792)	(260 156)	449		17 901	310	293	291	134	115	93	(74)	(67)	(60)	(50)
Transactions with shareholders	(313 613)	(225 709)	(280 956)	(280 764)	(366 007)		(347 214)	(345 078)	(360 445)	(368 827)	(438 665)	(449 629)	(460 854)	(524 705)	(519 344)	(514 197)	(507 716)
Transactions with non-controlling interests	(36)	100 129	40 492	42 434	(16 680)		(3 785)	(5 511)	(5 316)	(5 590)	(5 793)	(6 007)	(6 231)	(10 721)	(10 654)	(10 589)	(10 527)
<b>Financing Parties FCF</b>	<b>(249 774)</b>	<b>182 868</b>	<b>(355 266)</b>	<b>(499 228)</b>	<b>(370 977)</b>	<b>(327 650)</b>	<b>(344 843)</b>	<b>(360 043)</b>	<b>(368 712)</b>	<b>(438 915)</b>	<b>(450 117)</b>	<b>(461 591)</b>	<b>(530 096)</b>	<b>(524 658)</b>	<b>(519 437)</b>	<b>(512 883)</b>	<b>(506 415)</b>

Year ended December 31	Discounted Cash Flow Model									
	2024F	2025F	2026F	2027F	2028F	2029F	2030F	20		

ExxonMobil						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		7%	-12%	15%	33%	18%
Return on Assets		4%	-6%	7%	16%	10%
Return on Invested Capital - Core		16%	1%	18%	30%	26%
<b>Margins</b>						
Gross Margin	46%	46%	48%	46%	45%	44%
EBITDA Margin	17%	15%	10%	18%	25%	22%
EBIT Margin	11%	8%	-15%	11%	19%	16%
Net Income Margin	7%	5%	-12%	8%	13%	10%

Data						
Lifting costs (\$/per barrel)		15	14	11	13	12
Total production of hydrocarbons in million boe/d						3 738
Proved reserves of crude oil						6 847
Proved reserves of natural gas in (billion cubic feet)						34 464
Total proved reserves in mmboe						16 928
EV						397 021
EBIT						53 632
<b>Multiples</b>						
EV/EBIT						7,4x
EV/Revenues						1,2x
Price/earnings						10,5x
Price to Book						1,9x
EV(in million SARs)/million boe produced						398,3x
Field Netback						53,8x
EV/Reserves						88,0x

Liquidity Analysis						
Current Ratio	0,8x	0,8x	0,8x	1,0x	1,4x	1,5x
Quick Ratio	0,5x	0,5x	0,5x	0,7x	1,1x	1,1x
Cash Ratio	0,1x	0,0x	0,1x	0,1x	0,4x	0,5x
<b>Cash Conversion Cycle</b>						
Average Collection Period	31	37	41	41	37	40
Average Holding Period	36	37	55	36	33	40
Average Payable Period	70	84	102	96	85	92

Petro China						
Exchange rate (CNY/SAR)	0,55	0,54	0,57	0,59	0,54	0,53
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		6%	3%	9%	13%	13%
Return on Assets		3%	1%	5%	7%	7%
Return on Invested Capital - Core		21%	13%	26%	34%	33%
<b>Margins</b>						
Gross Margin	34%	32%	36%	33%	32%	35%
EBITDA Margin	14%	14%	14%	15%	15%	16%
EBIT Margin	6%	5%	4%	7%	8%	9%
Net Income Margin	3%	3%	2%	4%	5%	6%

Data						
Lifting costs (\$/per barrel)		12	11	11	12	11
Total production of hydrocarbons in million boe/d						1 759
Proved reserves of crude oil						6 219
Proved reserves of natural gas in (billion cubic feet)						72 794
Total proved reserves in mmboe						19 322
EV						1 380 000
EBIT						255 568
<b>Multiples</b>						
EV/EBIT						5,4x
EV/Revenues						0,5x
Price/earnings						5,3x
Price to Book						0,6x
EV(in million SARs)/million boe produced						415,8x
Field Netback						77,0x
EV/Reserves						37,9x

Liquidity Analysis						
Current Ratio	0,7x	0,7x	0,8x	0,9x	1,0x	1,0x
Quick Ratio	0,4x	0,4x	0,6x	0,7x	0,7x	0,7x
Cash Ratio	0,2x	0,2x	0,2x	0,3x	0,4x	0,4x
<b>Cash Conversion Cycle</b>						
Average Collection Period	9	9	10	8	8	8
Average Holding Period	42	39	37	30	28	33
Average Payable Period	58	56	63	49	48	53

Chevron						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		2%	-4%	12%	26%	13%
Return on Assets		1%	-2%	7%	15%	8%
Return on Invested Capital - Core		5%	-1%	14%	30%	20%
<b>Margins</b>						
Gross Margin	43%	45%	47%	43%	41%	41%
EBITDA Margin	24%	24%	13%	25%	27%	24%
EBIT Margin	13%	4%	-7%	14%	20%	15%
Net Income Margin	9%	2%	-6%	10%	14%	11%

Data						
Lifting costs (\$/per barrel)		10	9	11	11	11
Total production of hydrocarbons in million boe/d						1 139
Proved reserves of crude oil						4 777
Proved reserves of natural gas in (billion cubic feet)						31 610
Total proved reserves in mmboe						10 647
EV						293 230
EBIT						30 053
<b>Multiples</b>						
EV/EBIT						9,8x
EV/Revenues						1,5x
Price/earnings						11,8x
Price to Book						1,7x
EV(in million SARs)/million boe produced						965,4x
Field Netback						98,9x
EV/Reserves						103,3x

Liquidity Analysis						
Current Ratio	1,3x	1,1x	1,2x	1,3x	1,5x	1,3x
Quick Ratio	1,0x	0,8x	0,9x	1,0x	1,2x	1,0x
Cash Ratio	0,3x	0,2x	0,3x	0,2x	0,5x	0,3x
<b>Cash Conversion Cycle</b>						
Average Collection Period	2	4	7	1	4	0
Average Holding Period	33	33	44	41	30	36
Average Payable Period	53	64	77	65	47	62

Shell						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		8%	-11%	11%	22%	11%
Return on Assets		4%	-5%	5%	10%	5%
Return on Invested Capital - Core		7%	-6%	7%	18%	10%
<b>Margins</b>						
Gross Margin	19%	21%	23%	27%	26%	26%
EBITDA Margin	16%	17%	16%	22%	22%	21%
EBIT Margin	10%	9%	-12%	12%	18%	12%
Net Income Margin	6%	5%	-12%	8%	11%	6%

Data						
Lifting costs (\$/per barrel)		13	11	10	10	10
Total production of hydrocarbons in million boe/d						3 427
Proved reserves of crude oil						3 567
Proved reserves of natural gas in bscf						29 729
Total proved reserves in mmboe						9 787
EV						252 640
EBIT						27 348
<b>Multiples</b>						
EV/EBIT						9,2x
EV/Revenues						0,8x
Price/earnings						11,4x
Price to Book						1,1x
EV(in million SARs)/million boe produced						276,4x
Field Netback						29,9x
EV/Reserves						96,8x

Liquidity Analysis						
Current Ratio	1,3x	1,2x	1,4x	1,4x	1,3x	1,2x
Quick Ratio	1,0x	0,9x	1,1x	1,1x	1,1x	1,0x
Cash Ratio	0,3x	0,2x	0,4x	0,3x	0,4x	0,4x
<b>Cash Conversion Cycle</b>						
Average Collection Period	32	37	68	66	38	21
Average Holding Period	39	45	106	89	50	38
Average Payable Period	48	56	136	121	68	51
Average Payable Period	55	64	174	145	81	68

British Petroleum						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		4%	-21%	10%	-2%	19,1%
Return on Assets		1%	-7%	3%	0%	6%
Return on Invested Capital - Core		10%	-8%	5%	15%	23%
<b>Margins</b>						
Gross Margin	17%	31%	26%	28%	32%	32%
EBITDA Margin	11%	18%	-6%	20%	13%	20%
EBIT Margin	6%	7%	-20%	11%	7%	13%
Net Income Margin	3%	3%	-19%	5%	-1%	7%

Data						
Lifting costs (\$/per barrel)		13	11	10	10	10
Total production of hydrocarbons in million boe/d						2 313
Proved reserves of crude oil						3 321
Proved reserves of natural gas in bscf						17 471
Total proved reserves in mmboe						6 759
EV						129 670
EBIT						37 300
<b>Multiples</b>						
EV/EBIT						3,5x
EV/Revenues						0,6x
Price/earnings						4,3x
Price to Book						1,4x
EV/million boe produced						210,2x
Field Netback						60,5x
EV/Reserves						71,9x

Liquidity Analysis						
Current Ratio	1,0x	1,0x	1,2x	1,1x	1,1x	1,2x
Quick Ratio	0,8x	0,7x	0,9x	0,8x	0,8x	0,9x
Cash Ratio	0,3x	0,3x	0,5x	0,4x	0,3x	0,4x
<b>Cash Conversion Cycle</b>	<b>(11)</b>	<b>(29)</b>	<b>(17)</b>	<b>(28)</b>	<b>(27)</b>	<b>(43)</b>
Average Collection Period	29	55	60	60	50	53
Average Holding Period	26	67	68	73	60	57
Average Payable Period	66	151	145	161	137	154

Saudi Aramco						
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		32%	16%	33%	37%	26%
Return on Assets		25%	12%	22%	28%	18%
Return on Invested Capital - Core		33%	18%	29%	40%	27%
<b>Margins</b>						
Gross Margin	57%	49%	47%	50%	53%	47%
EBITDA Margin	39%	32%	31%	36%	34%	31%
EBIT Margin	37%	27%	23%	32%	31%	26%
Net Income Margin	22%	13%	12%	20%	18%	14%

Data						
Lifting costs (\$/per barrel)		2,83	3,01	3,04	3,05	3,19
Total production of hydrocarbons in million boe/d						4 672
Proved reserves of crude oil						191 349
Proved reserves of natural gas in bscf						207 450
Total proved reserves in mmboe						251 195
EV						7 985 650
EBIT						868 287
<b>Multiples</b>						
EV/EBIT						9,2x
EV/Revenues						4,3x
Price/earnings						17,6x
Price to Book						4,6x
EV/million boe produced						1709,3x
Field Netback						185,8x
EV/Reserves						31,8x

Liquidity Analysis						
Current Ratio	2,1x	1,9x	1,6x	2,0x	2,6x	2,3x
Quick Ratio	1,8x	1,7x	1,4x	1,8x	2,3x	2,0x
Cash Ratio	1,0x	1,0x	0,9x	1,1x	1,5x	1,2x
<b>Cash Conversion Cycle</b>	<b>34</b>	<b>31</b>	<b>54</b>	<b>47</b>	<b>41</b>	<b>39</b>
Average Collection Period	25	28	36	34	26	32
Average Holding Period	36	36	60	50	41	41
Average Payable Period	27	32	43	37	27	34

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# SAUDI ARAMCO

OIL AND GAS

PEDRO MOTA & JOÃO MARTINS

# COMPANY REPORT

16<sup>TH</sup> DECEMBER 2024

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## The in-depths of Saudi Aramco

### *The unmatched oil and gas company*

- Saudi Aramco possesses the world's largest proved oil and gas reserves with 260 billion barrels of oil equivalent comprised of 191 billion of barrels of crude oil, 26 billion barrels of oil equivalent of Natural Gas Liquids and 208 trillion of standard cubic feet of Natural Gas.
- Saudi Aramco's overall production levels reached a level of 12.8 million barrels of oil equivalent per day in 2023.
- The company has demonstrated a robust financial performance, achieving record breaking net profits of SAR 604 billion in 2022. Further, the company benefits from industry-leading margins, achieving a Net Profit margin of 23% in 2023.
- Saudi Aramco reached an upstream carbon intensity of 10.7 Kg CO<sub>2</sub>e/boe, an extremely low value compared to its peers.
- With the energy sector expected to suffer from changes in the next years, energy companies are obliged to adapt to future trends. Saudi Aramco has embraced this change, with its Downstream business representing a record high 54% of its Total Revenues.
- Based on our valuation model, the total expected shareholder return for the FY2025 is 4.73% with a share price of SAR 28.48 and a dividend per share of SAR 1.43.

### Company description

Saudi Aramco is the world's largest integrated oil and gas producer. It operates within the energy sector and its main focuses are the exploration, production, refining and marketing of crude oil and its derivatives, natural gas and chemicals.

**Recommendation:** HOLD

**Price Target FY25:** SAR 28.48

**Price (as of 16-Dec-24)** SAR 28.85

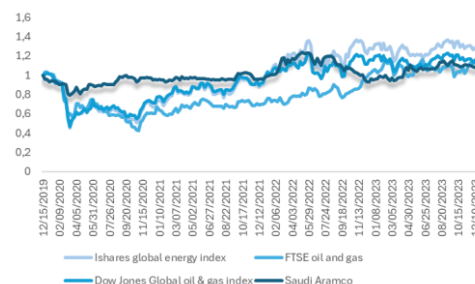
Reuters: 2222.SE

52-week range (SAR) 26.8-33.75

Market Cap (SAR) 6.64 trillion

Outstanding Shares (millions) 241,948.7

Source: Bloomberg



Source: Investing.com

(Values in SAR billions)	2023	2024E	2025F
Upstream Revenues	856	738.63	814
Downstream Revenues	998.42	908.07	982.86
Total Revenues	1,856.37	1,648.71	1,799.06
EBITDA	965.33	861.28	1,047.83
Net Profit	434.7	387.45	478.84
Total Invested Capital	1736.74	1799.61	1936.93
Dividends per share (SAR)	1.42	1.51	1.41
EPS (SAR)	1.87	1.62	1.99
P/E (SAR)	18.4	18.55	18.99

Source: Company's report and owns estimate

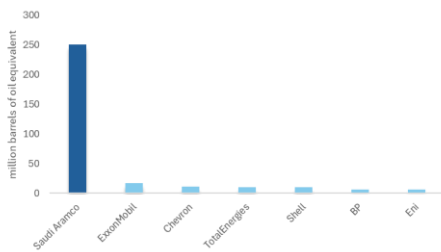
THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY JOÃO MARTINS & PEDRO MOTA, MASTERS IN FINANCE STUDENTS OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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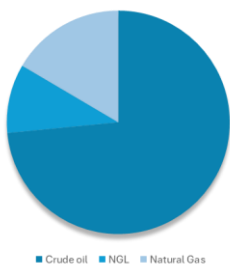
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## Company Overview

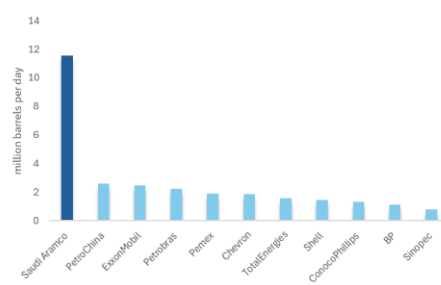
**Figure 1:** Proved hydrocarbon reserves (2023)  
**Source:** Statista



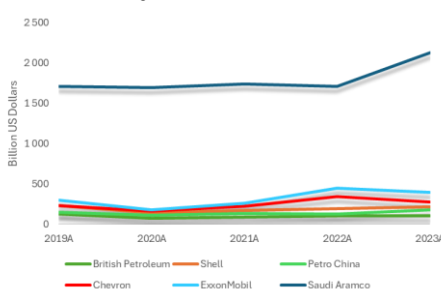
**Figure 2:** Saudi Aramco proved reserves breakdown 2023  
**Source:** Annual report



**Figure 3:** Major oil companies' liquid production (2023)  
**Source:** Statista



**Figure 4:** Major oil companies market capitalization  
**Source:** Bloomberg



Saudi Aramco (TADAWUL), officially known as the Saudi Arabian Oil Company, is the world's largest integrated oil and gas producer. Headquartered in Dhahran, Saudi Arabia, Aramco was founded in 1933 and its majority-owned by the Saudi Government proving as their main source of income.

Aramco operates within the energy sector and its main focuses are the exploration, production, refining and marketing of crude oil, natural gas, and chemicals. With the world's largest proved oil and gas reserves, estimated to be 260 billion of barrels of oil equivalent composed of 191 billion of barrels of crude oil, 26 billion barrels of Natural Gas Liquids<sup>1</sup> and 208 trillion of standard cubic feet of Natural Gas and an unmatched production capacity averaging around 12.8 million barrels per day in 2023, Saudi Aramco is the biggest oil and gas company in the world.

Listed on the Saudi Exchange under the ticker symbol 2222 since 2019, Saudi Aramco had a market capitalization of around SAR 8 trillion (\$ 2.1 trillion) with 242 billion shares outstanding and ranked 6<sup>th</sup> biggest in the world as of 31 of December 2023. Some of its main competitors to whom we will compare it throughout this paper are ExxonMobil, Chevron, PetroChina, Shell and British Petroleum<sup>2</sup>. Aramco operates in every continent around the globe however their main sources of oil come from Saudi Arabia, North America, and China.

Saudi Aramco is presented as a conglomerate of several different joint ventures and associates that allow the company to leverage its position as the biggest oil and derivatives producer in the world. Their recent 70% equity acquisition, in 2020, of Saudi Basic Industries Corporation<sup>3</sup> from SAR 259.13 billion, allowed the company to significantly increase their refined products production such as chemicals and meet global demands.

Aramco has made significant investments in sustainability initiatives, focusing on reducing its carbon footprint through cleaner fuels, carbon capture technologies, and the development of green hydrogen. Additionally, the company has been expanding to refining capacity, both domestically and globally in key high growth geographies such as China, India, and Southeast Asia, which are integral to existing businesses and future expansion strategy. As of 2023, Aramco's main

<sup>1</sup> Natural Gas Liquids - NGL

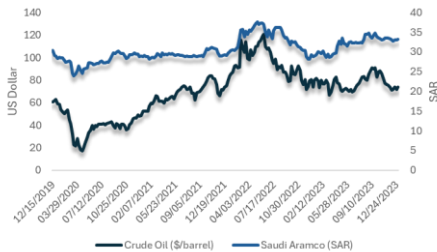
<sup>2</sup> British Petroleum - BP

<sup>3</sup> Saudi Basic Industries Corporation - SABIC

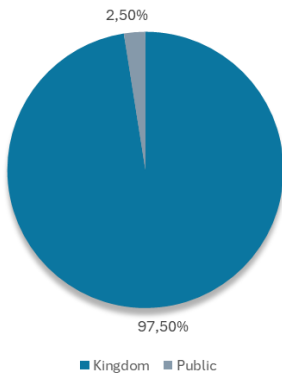
source of revenues come from in-Kingdom sales representing around 62% of total sales with the United States in second place representing 12%.

Since its IPO, Saudi Aramco’s share price has demonstrated resilience amidst market volatility, closely tracking global crude oil price trends. For instance, during periods of elevated crude oil prices in 2022, Aramco’s stock reached historic highs, benefiting from increased revenues and market confidence. Conversely, declines in crude oil prices have been mirrored by downward pressure on its stock. A graphical analysis plotting Aramco’s share price performance against global Brent crude oil prices highlights a strong correlation between the two, underscoring the company’s sensitivity to fluctuations in the energy market. Quantitatively, a sensitivity analysis reveals that a \$10 per barrel change in crude oil prices results in an estimated 12% change in Aramco’s share price according to our model.

**Figure 5:** Saudi Aramco share price vs crude oil  
**Source:** Bloomberg



**Figure 6:** Saudi Aramco shareholding structure  
**Source:** Saudi Aramco



Saudi Aramco’s shareholding structure and governance framework highlight its unique status as a major oil producer and a publicly held company with significant government ownership. As of December 31, 2023, the Saudi Government remained the largest shareholder, controlling 97.50% of the company. This dominant stake underscores the government’s substantial influence over Aramco’s strategic direction and operations. The remaining 2.50% of shares are publicly traded on the Saudi Stock Exchange, stemming from Aramco’s historic 2019 IPO. The IPO offered 3 billion shares at SAR 32 (\$8.53) per share, raising approximately \$25.6 billion, marking the largest initial public offering in history at that time surpassing Alibaba<sup>4</sup>.

Aramco has announced plans for a secondary public offering of its shares, aimed at boosting the company’s overall market capitalization and enhancing liquidity in the stock market. By increasing the free float, this offering could attract a broader range of institutional investors, potentially improving Aramco’s valuation while providing the Saudi Government with additional capital for domestic economic initiatives such as funding Aramco’s mega projects. However, liquidity for Aramco’s publicly traded shares remains relatively limited, given the small free float and the government’s overwhelming ownership stake. This constrains active trading volumes and may create challenges for new investors seeking to enter or exit positions efficiently.

<sup>4</sup> Financial Times. “Saudi Aramco Prices IPO at Top of Range.” *Financial Times*, December 5, 2019.

Aramco’s governance structure reflects its dual role as a profit-driven enterprise and a strategic asset of the Saudi Kingdom. The Board of Directors, comprising 11 members, oversees the company’s strategic decisions and operational risks. Notably, five board members are independent directors with diverse professional backgrounds, contributing to balanced decision-making. The Chairman of the Board, Saudi Arabia’s Minister of Energy Abdulaziz bin Salman Al Saud, highlights the government’s pivotal role in Aramco’s governance and alignment with national priorities.

The Board operates through four specialized committees: the Audit Committee, the Sustainability Risk and HSE (Health, Safety, and Environment) Committee, the Nomination Committee, and the Compensation Committee. These committees enhance the board’s oversight by addressing specific operational and governance areas. To align the Board’s interests with those of the company, directors are compensated through a combination of salary and stock-based incentives, ensuring that their personal financial outcomes are tied to Aramco’s performance.

Day-to-day operations are managed by the company’s President and CEO, who is appointed by the Board of Directors. The executive team oversees upstream, downstream, and corporate service efficiency, ensuring that production targets and operational goals are met.

## Business Model

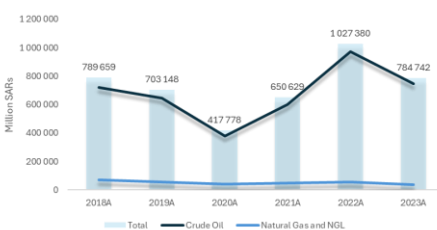
Saudi Aramco's business model is designed around its position as the world’s largest integrated oil and gas company, leveraging its dominance across the hydrocarbon value chain to capture value from both upstream and downstream activities. The company’s operations span from exploration and production of crude oil, natural gas, and condensates to refining, petrochemicals, and trading, enabling it to optimize revenue generation and reduce operational risks. This integration allows Aramco to source feedstock internally for downstream operations, minimizing exposure to volatile input costs while enhancing supply chain efficiency. Solar energy-producing facilities, used exclusively to provide electricity and steam for oil and gas facilities, further reduce operational costs and demonstrate Aramco's commitment to energy efficiency.

In the upstream segment, Saudi Aramco's activities focus on exploration, development, and production of crude oil, natural gas, and NGL. With most of its fields located in the central region and eastern provinces of Saudi Arabia, the company benefits from easily accessible reserves and an extensive pipeline network that connects production sites to domestic customers and export

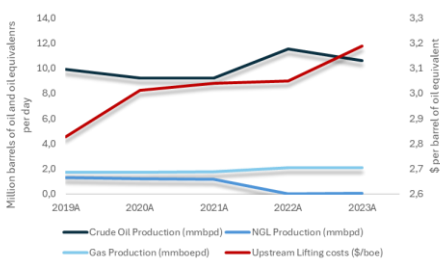
**Figure 7:** Saudi Aramco revenue breakdown  
*Source: Annual report*



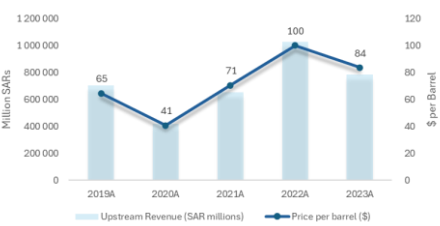
**Figure 8:** Saudi Aramco's upstream revenue breakdown  
*Source: Annual report*



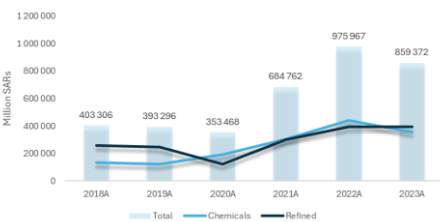
**Figure 9:** Saudi Aramco's upstream production and lifting costs  
*Source: Annual report*



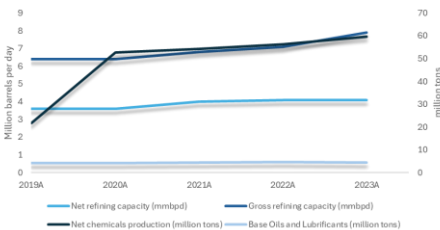
**Figure 10:** Saudi Aramco's upstream revenue vs crude oil prices  
*Source: Annual report*



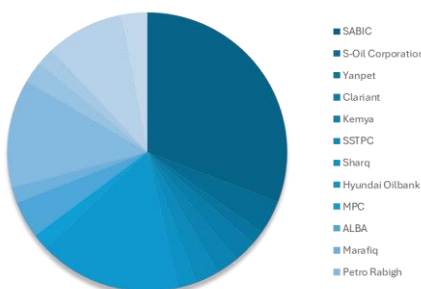
**Figure 11:** Saudi Aramco's downstream revenue breakdown  
*Source: Annual report*



**Figure 12:** Saudi Aramco's downstream production and refining capacities  
*Source: Annual report*



**Figure 13:** Saudi Aramco's chemical revenue breakdown by company  
*Source: Annual report*



terminals. This infrastructure supports efficient processing into refined and petrochemical products while maintaining low operational costs. Aramco extracts five different grades of crude oil, with 68% classified as premium grade. Its production processes are characterized by low carbon intensity compared to other global producers, averaging 10.7 kgCO<sub>2</sub>e per barrel of oil equivalent, showcasing a strong environmental performance in a traditionally high-emission industry.

As of December 31, 2023, the upstream segment accounted for approximately 46% of Aramco's total revenues, with an average production of 12.8 million barrels of oil equivalent per day. This includes crude oil, natural gas, and NGL, with crude oil alone contributing 10.62 million barrels per day, nearing the company's maximum sustainable capacity of 12 million barrels per day. This flexibility allows Aramco to adjust production levels in alignment with OPEC+ quotas and global demand shifts. Revenue generated by the upstream segment is highly correlated with crude oil prices, with a R<sup>2</sup> of 0.87 showing significant sensitivity to price fluctuations. For instance, in 2022, when crude oil prices averaged \$100 per barrel, Aramco achieved its highest-ever upstream revenue of SAR 1.02 trillion (\$274 billion). The company's low production costs further enhance its competitive edge, with lifting costs averaging around SAR 12 (\$3.19) per barrel, among the lowest globally. This cost advantage is a result of its vast reserves, such as the Ghawar and Safaniya fields, economies of scale, and an extensive infrastructure network.

The downstream segment represents a growing component of Saudi Aramco's business model, accounting for approximately 54% of the company's total revenues as of December 31, 2023. This segment includes refining, petrochemicals, base oils, lubricants, retail, distribution, and power generation, offering a diversified revenue stream. Aramco's net refining capacity has steadily increased, reaching approximately 4.1 million barrels per day in 2023, of which 62% originates from wholly owned or affiliated in-Kingdom refineries. The company's chemical production reached 59.6 million tons in 2023, driven by its strategic acquisition of a 70% equity stake in SABIC for SAR 259.13 billion in 2020. This acquisition doubled Aramco's petrochemical revenues in a span of two years, from SAR 191 billion in 2020 to SAR 441 billion in 2022.

Aramco's vertical integration provides a distinct competitive advantage, particularly in its ability to source 47% of the crude oil utilized in downstream operations from its upstream segment. This reduces the company's reliance on external suppliers and stabilizes margins amid crude oil price volatility. Additionally, Aramco's downstream investments align with global demand trends, particularly the growing demand for petrochemicals driven by increased

consumption of plastics, fertilizers, and industrial chemicals. Emerging markets in Asia, Africa, and the Middle East, characterized by rising urbanization and energy needs, are expected to drive future growth in the downstream sector, making it a critical area of focus for the company's long-term strategy.

Saudi Aramco's business model is further strengthened by its focus on sustainability and technological advancements. Investments in carbon capture and storage, green hydrogen, and low-carbon fuel production demonstrate a commitment to aligning with global decarbonization efforts. Additionally, the company leverages digital technologies to enhance operational efficiency across its upstream and downstream activities.

Despite these strengths, Aramco faces challenges inherent to the oil and gas industry, including dependency on crude oil prices, geopolitical risks, and the long-term threat of energy transition toward renewables. The company's success in addressing these challenges while capitalizing on its integrated value chain and cost advantages will be pivotal in maintaining its dominance in an increasingly competitive and dynamic global energy market.

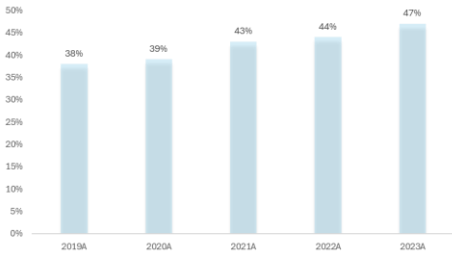
Overall, Saudi Aramco's business model reflects a balance between operational excellence and strategic diversification. By leveraging its unparalleled scale, low production costs, and vertical integration, the company is well-positioned to navigate short-term market dynamics and invest in long-term growth opportunities. The focus on petrochemicals, sustainability, and emerging market expansion underscores Aramco's adaptability and resilience in a rapidly changing energy landscape, making it a cornerstone of the global energy industry.

### Organic and Inorganic Growth

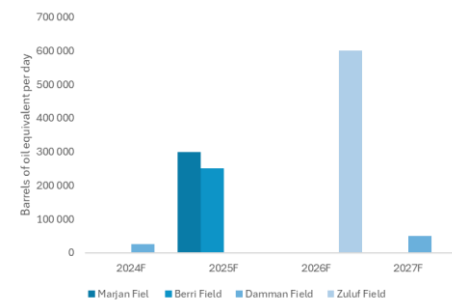
Saudi Aramco pursues a balanced approach to internal growth, leveraging both organic and inorganic strategies to sustain its dominance in the global energy market. The company's approach varies depending on the segment, reflecting its strategic priorities and the specific characteristics of upstream and downstream operations.

In the upstream segment, Saudi Aramco primarily relies on organic growth to optimize production and improve operational efficiency. This focus is exemplified by the company's ongoing investment in research and development (R&D), with approximately 0.30% of upstream revenues allocated toward innovative solutions that enhance drilling and production capabilities. These initiatives help Aramco meet its maximum sustainable capacity (MSC) target of 12 million barrels per day (mmbpd). In 2023, the company advanced key projects at its Marjan, Berri, Dammam, and Zuluf fields, which are expected to collectively add 900,000 to 1

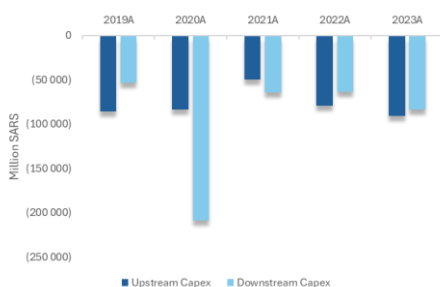
**Figure 14:** Saudi Aramco's % of upstream crude oil utilized in downstream operations  
**Source:** Annual report



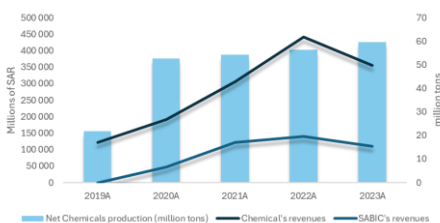
**Figure 15:** Saudi incremental upstream capacity by new project  
**Source:** S&P Global & Saudi Aramco



**Figure 16:** Saudi Aramco CAPEX  
Source: Annual report & own estimate



**Figure 17:** Saudi Aramco's chemical revenue & production  
Source: Annual report



million barrels per day of additional production capacity upon completion<sup>56</sup>. Beyond crude oil, Aramco is pivoting towards meeting Saudi Arabia's increasing demand for natural gas, with significant progress in the Jafurah Gas Plant. This flagship project is expected to sustainably produce an additional 2.0 billion standard cubic feet per day (bscfd) of gas from 2025 to 2030, reinforcing the company's role in the Kingdom's transition toward cleaner energy sources.

In addition to organic growth, Aramco pursues selective inorganic initiatives to strengthen its upstream capabilities, particularly in natural gas. In 2023, the company acquired a minority stake in Midocean Energy, a global LNG producer, for SAR 1.88 billion. This investment signals Aramco's strategic intent to expand its presence in the LNG market, a segment with growing demand as the world shifts toward lower-carbon energy solutions.

In the downstream segment, Aramco relies heavily on inorganic growth through joint ventures and acquisitions to solidify its position as a leading global producer, particularly in petrochemicals. The company's refining operations boast a capacity of 4.1 (mmbpd), supported by a combination of wholly owned and affiliated refinery stations, both domestically and internationally. In 2023, Aramco invested SAR 44.4 billion in a joint project through HAPCO in collaboration with North Huajin and Panjin Xincheng. This investment enhances Aramco's ability to meet global refining demand while diversifying its geographic footprint.

Aramco's chemical operations have also benefited from its inorganic strategy. The 2020 acquisition of a 70% stake in SABIC for SAR 259.1 billion was a transformative move. This acquisition increased the company's chemical production from 21.7 million metric tons in 2020 to 52.6 million metric tons in 2021, representing a remarkable 242% growth. The integration of SABIC has not only expanded Aramco's product portfolio, but also enabled the company to capitalize on the rising global demand for industrial chemicals and plastics.

To complement its refining and petrochemical operations, Aramco has been expanding its global retail presence, often through the acquisition of local retailers. These initiatives have enhanced Aramco's ability to distribute refined products and access new markets. Notably, the company is set to enter the Chilean and Pakistani<sup>7</sup> markets in 2024, further solidifying its international presence.

<sup>5</sup> S&P Global Commodity Insights. "Saudi Aramco Gets Directive to Keep Maximum Sustained Crude Capacity at 12 Mil b/d." January 30, 2024

<sup>6</sup> Saudi Aramco. "Aramco Signs Contracts Worth \$18 Billion to Boost Capacity at Marjan and Berri Oilfields." News Release, July 9, 2019

<sup>7</sup> Aramco. "Aramco Completes Acquisition of Stake in Gas and Oil Pakistan." *Aramco Newsroom*.

Vertical integration remains a cornerstone of Aramco’s downstream strategy. By constructing advanced pipeline infrastructure and implementing innovative energy technologies, the company aims to streamline its supply chain while improving sustainability. In collaboration with the Public Investment Fund (PIF) and ACWA<sup>8</sup> Power Company, Aramco is developing two photovoltaic projects to supply renewable energy to its operations, reinforcing its commitment to environmental stewardship. Additionally, the establishment of Aramco Trading Americas, an affiliate of Aramco Trading Company (ATC), enhances the operational efficiency of the downstream segment. This subsidiary focuses on trading crude oil directly produced by Aramco, ensuring optimized resource allocation and value capture.

Through its dual focus on organic and inorganic growth, Saudi Aramco has demonstrated its ability to adapt to evolving market dynamics while maintaining its competitive edge. The upstream segment benefits from organic investments that enhance operational efficiency and production capacity, while the downstream segment thrives on acquisitions and joint ventures that diversify revenue streams and expand market reach. Together, these strategies position Aramco for continued growth and resilience in a rapidly changing energy landscape.

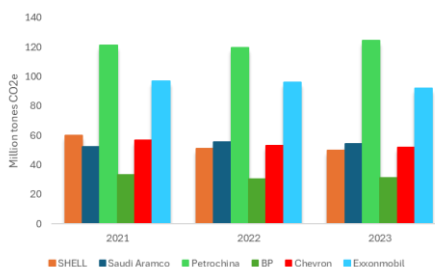
## ESG

Saudi Aramco recognizes the growing importance of ESG considerations and has implemented various measures to mitigate environmental concerns, enhance societal value, and strengthen governance practices. These initiatives aim to address external criticisms and improve the company’s standing in ESG rankings, but their ultimate impact on valuation remains nuanced and dependent on execution and market perception.

### Environmental Policies

As the world’s largest integrated oil and gas producer, Aramco faces significant environmental scrutiny. Crude oil remains a leading source of global greenhouse gas (GHG) emissions, contributing 15% of total global emissions in 2023 (IEA). To address these concerns, Aramco has committed to achieving net-zero Scope 1<sup>9</sup> and Scope 2<sup>10</sup> emissions by 2050. The company plans to abate 52 million

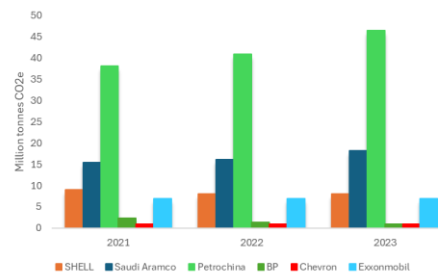
Figure 18: Scope 1 GHG emissions  
Source: Companies sustainability reports



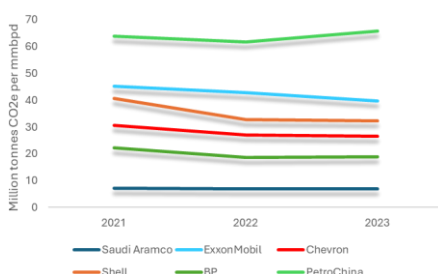
<sup>8</sup> ACWA Power. “ACWA Power, PIF Company Badeel, and Aramco Subsidiary SAPCO Reach Financial Close for Haden, Muwayh, and Al Khushaybi Solar PV Projects.” *ACWA Power Newsroom*

<sup>9</sup> Scope 1 emissions are direct greenhouse gas emissions from sources owned or controlled by a company, such as fuel combustion in facilities or vehicles.

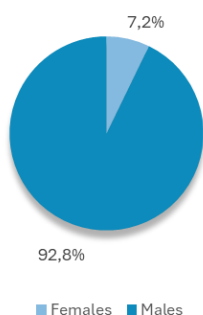
**Figure 19: Scope 2 GHG emissions**  
Source: Companies sustainability reports



**Figure 20: Scope 1 and scope 2 GHG emissions per million barrels per day produced**  
Source: Companies sustainability, annual reports and own estimate



**Figure 21: Saudi Aramco's workforce diversity**  
Source: Annual report



metric tons of CO<sub>2</sub> by 2035, utilizing technologies such as carbon capture, utilization, and storage (CCUS) and transitioning to low-carbon fuels. However, the effectiveness of these technologies and their impact on the company's operating costs and cash flows remain uncertain.

In 2023, Aramco reported Scope 1 emissions of 54.4 million metric tons of CO<sub>2</sub>, a 2,33% reduction from 2022, largely driven by lower hydrocarbon sales rather than structural improvements. Scope 2 emissions rose by 13,04% to 18.2 million metric tons due to the inclusion of the Jazan refinery in GHG reporting. Upstream carbon intensity, a critical efficiency metric, stood at 10.7 kg CO<sub>2</sub>e/boe in 2023, a slight increase from 2022 levels, attributed to reduced upstream production. While Aramco's carbon intensity remains among the lowest in industry, this metric alone does not sufficiently offset broader concerns about its environmental footprint.

The potential valuation impact of these initiatives includes a lower weighted average cost of capital (WACC) through improved investor confidence and access to green financing. For instance, a 0.1% reduction in WACC due to enhanced ESG ratings could increase enterprise value by approximately SAR 61 billion, according to our model. However, the capital expenditures required for CCUS, and other low-carbon projects may constrain free cash flows in the medium term, partially offsetting these benefits.

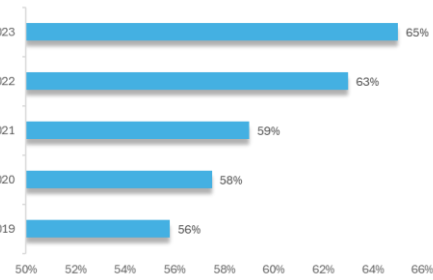
## Social Policies

Aramco has made measurable progress in social responsibility, particularly in workforce safety and diversity. In 2023, the company achieved its lowest recordable case rate of 0.042 cases per 200,000 hours worked, a significant improvement in operational safety. Fatalities decreased by 66.7%, underscoring the effectiveness of enhanced safety protocols.

Aramco has also increased workforce diversity, with female employees constituting 7.2% of the workforce in 2023, up from 6.4% in 2022. However, the financial implications of this progress remain ambiguous, as there is limited evidence directly linking workforce diversity to operational or financial performance in the oil and gas sector. Similarly, the company's board includes five independent directors, one of whom is female, enhancing governance diversity.

<sup>10</sup> Scope 2 emissions are indirect emissions from the generation of purchased electricity, heat, or steam used by the company.

Figure 22: Saudi Aramco's iktva program  
Source: Annual report



The company's In-Kingdom Total Value Add<sup>11</sup> (iktva) program, aimed at increasing local procurement, reached 65% in 2023, up from 56% in 2019. While this supports Saudi Arabia's Vision 2030, it may impose additional costs if local suppliers are less competitive. A detailed cost-benefit analysis is necessary to determine whether these initiatives align with shareholder interests.

## Governance Policies

Aramco's governance framework is designed to balance government oversight with market expectations. The Saudi Government's 97.5% ownership provides strategic direction, while the company maintains international governance standards, including independent board representation and quarterly financial reporting. The alignment of executive compensation with stock performance ensures management accountability, but the heavy government influence raises questions about potential conflicts between shareholder value maximization and national economic objectives.

## Industry analysis

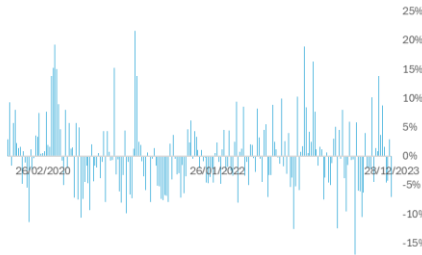
Throughout the period between 2020 and 2023, the outlook for the crude oil industry has suffered drastic changes. Due to the COVID-19 pandemic and consequent lack of economic activity, crude oil hit its lowest level in 30 years, at only \$37.83 per barrel. Not long after, due to the eruption of war in Ukraine and its consequent impacts on the energy sector, crude oil would surge to its highest level in more than a decade, at \$123.70 per barrel. Further, the ongoing Middle Eastern conflict has maintained crude oil prices at high levels throughout 2023, averaging \$77.64 per barrel. Alongside this increase in crude oil and gas prices, record high inflation was recorded across consumer goods, significantly hindering households and businesses' financial positions. These events, allied with strict energy transition targets determined by countries worldwide and a further election of Donald Trump as the president of the United States, are set to notably affect the economic environment for oil and gas companies, with oil majors needing to adapt to changing market conditions.

## Crude Oil

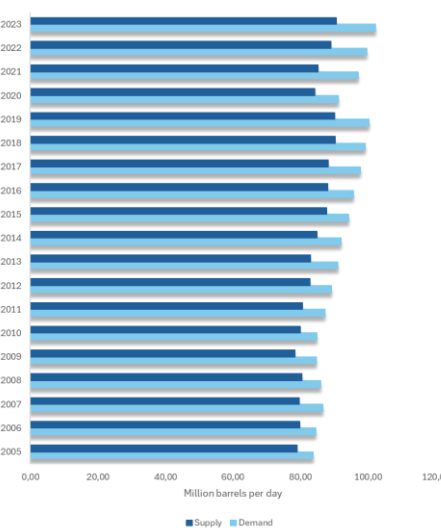
Crude oil remains the cornerstone of Saudi Aramco's operations and the global energy system. As of 2023, global crude oil demand stands at approximately 102

<sup>11</sup> Aramco's In-Kingdom Total Value Add program, launched in 2015, aims to localize 70% of its supply chain, increase energy-related exports, and create jobs for Saudi nationals. By promoting local procurement, developing workforce skills, and attracting investments.

**Figure 23:** US % daily change of crude oil inventories  
 Source: Investing.com



**Figure 24:** Global crude oil supply and demand  
 Source: Statista



million barrels per day, driven by transportation and industrial applications, particularly in emerging markets such as China and India.

The levels of US crude oil inventories play a significant role in global oil markets, impacting prices and, by extension, Saudi Aramco’s financial performance. The level of the inventories has been below average for the better part of the of the 4-year period between 2019 and 2023 resulting in tighter market conditions and therefore increasing oil prices.

With demand for crude oil projected to increase, the OPEC+ cartel is set to gradually end imposed production cuts, which are expected to boost its production by a total of 2.2 million barrels per day. Despite this projection, a persistent slowdown in the Chinese economy allied with a projected increase in the production of crude oil from the United States <sup>12</sup> may impact negatively Saudi Aramco’s ability to boost its sales. Furthermore, according to EIA<sup>13</sup>, the IEA<sup>14</sup> and McKinsey<sup>15</sup> projections, the peak of crude oil demand is projected to occur between 2029 and 2030, with demand slowly decreasing afterwards. Demand projections may fluctuate heavily, given the exponential adoption of electric vehicles around the world and countries’ willingness to combat climate change. Nonetheless, the aviation industry’s rebound allied with the chemical industry’s projected boost, are set to represent steady sources of demand for crude oil.

Accordingly, we expect the price of crude oil to remain between [\$70 - \$76] per barrel from 2024-2034. As shown by past trends, global demand for crude oil has surpassed crude oil supply impacting countries’ crude oil inventories and driving market prices higher. This price upswing, attributed to an optimistic scenario will imply prices hovering around [\$80 - \$92] per barrel. On the contrary, a faster adoption of EV vehicles, alongside stricter climate change policies, may lead to lower demand for crude oil, thus affecting market prices. Hence, prices would vary between [\$60 - \$67] per barrel. In the optimistic and pessimistic scenarios, growth in crude oil prices would fluctuate 2% upwards or downwards.

## Natural Gas and NGLs

The global market for natural gas is expanding, driven by its role as a cleaner-burning bridge fuel in the energy transition. Saudi Aramco’s natural gas operations are vital for meeting domestic energy needs and supporting its industrial base. Additionally, liquefied natural gas is becoming an important

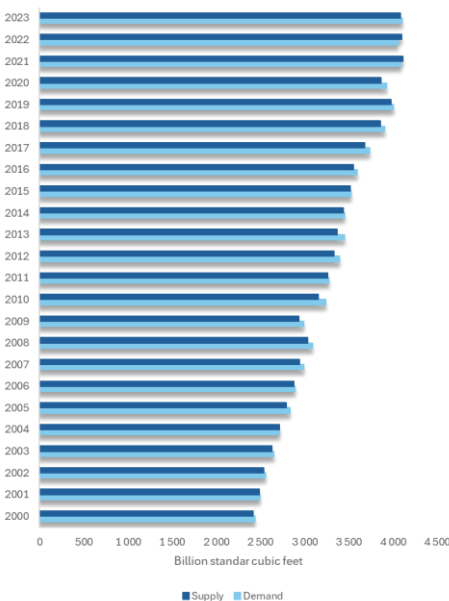
<sup>12</sup> Rapier, Robert. “Why US Oil Production Is 6.5% Ahead of Last Year’s Record Pace.” *Forbes*, September 26, 2024.

<sup>13</sup> U.S. Energy Information Administration. “Short-Term Energy Outlook: Global Oil.” *U.S. Energy Information Administration*

<sup>14</sup> International Energy Agency. 2024. *Oil 2024: Analysis and Forecasts to 2024*. International Energy Agency.

<sup>15</sup> McKinsey & Company. 2024. *Global Oil Supply and Demand Outlook to 2040*. McKinsey & Company.

**Figure 25:** Global natural gas supply and demand  
*Source: Statista*

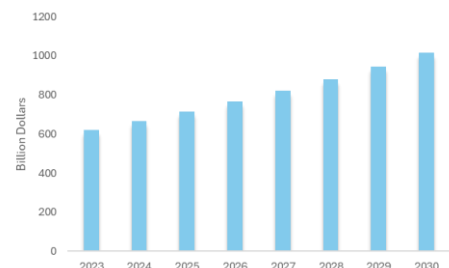


export opportunity as demand grows in Asia and Europe. Natural gas liquids, such as propane and butane, are critical feedstocks for the petrochemical industry, further integrating Aramco’s operations.

However, similarly to the crude oil industry, natural gas spot prices have fluctuated heavily throughout the past 3 years, from \$5.617/MBTU<sup>16</sup> in June 2020 to \$36.136/MBTU in August 2022 due to the Russia-Ukraine conflict, stabilizing afterwards in 2023. According to McKinsey<sup>17</sup>, at the current pace, the natural gas industry is set increase by [10% - 15%] until 2050, boosted by an energy transition from coal to gas in Asia. Prices for natural gas are expected to hover around [\$16,000/mmscf<sup>18</sup> – \$27,000/mmscf] in this case. Nevertheless, gas prices are highly volatile and potential economic shocks can affect market prices either positively or negatively. The NGL market is seeing large improvements in recent years, with Saudi Arabia<sup>19</sup> and the United States having committed to boosting their LNG supply by a CAGR (2023-2030) of 6.94%. Further, the demand for this commodity will continue past 2030 with market demand potentially overcoming market supply and boosting prices.

### Petrochemicals

**Figure 26:** Petrochemical industry value  
*Source: Grandview research*



Petrochemicals represent a key growth area for Saudi Aramco, aligned with its strategic goal of transitioning toward a fully integrated energy and chemicals company. The petrochemical sector is critical for producing plastics, synthetic materials, and fertilizers, with demand largely driven by industrial and consumer markets. While petrochemical demand has historically been resilient, it is increasingly influenced by global sustainability efforts and the push to reduce plastic waste. Demand for petrochemicals stagnated in 2023 due to a previous stockpile in propylene and ethylene inventories by companies in 2022 allied with an economic slowdown in the Chinese economy during the country’s post-Covid recovery<sup>20</sup>. Nonetheless, an expected rebound in the Chinese economy in 2024 will significantly increase demand for petrochemical products in the short-term, with forecasts for global demand growth for these products ranging between [3% - 5%] this year.

Furthermore, global demand for petrochemicals is expected to rise at a 7.30% CAGR (2024-2030)<sup>21</sup> driven by the lack of substitutes for these products. Margins

<sup>16</sup> Million British thermal units

<sup>17</sup> McKinsey & Company. “Global Energy Perspective 2023: Natural Gas Outlook.” *McKinsey & Company*

<sup>18</sup> Million Standard Cubic Feet

<sup>19</sup> Aramco. *Saudi Aramco Annual Report 2023*. Aramco

<sup>20</sup> S&P Global Commodity Insights. “Oversupply Weighs on Global Petrochemicals.” *S&P Global Commodity Insights Blog*, January 3, 2024.

<sup>21</sup> Grand View Research. “Petrochemical Market Size, Share & Trends Analysis Report.” *Grand View Research*

are expected to maintain current levels mainly due to significant barriers to entry in the industry and notable economies of scale from big players.

## Refined

Refined products, including gasoline, diesel, and jet fuel, are central to Saudi Aramco’s downstream operations. These products cater primarily to the transportation and industrial sectors, with demand closely tied to economic activity and mobility trends. The refining segment is under pressure from tightening emissions regulations, fuel efficiency improvements, and the growing penetration of electric vehicles. To address these challenges, Saudi Aramco has invested heavily in advanced refining technologies and integrated downstream assets to enhance operational efficiency and capture higher margins. The company’s focus on refining capacity expansion in key markets, including Asia, further supports its strategic goal of securing diversified revenue streams.

## Risks

Considering the current macroeconomic and geopolitical conditions, several heterogeneous variables may impose risks to Saudi Aramco’s financial performance. As such, these are, in our opinion, the four biggest risks to the company’s operations.

## Commodity prices

As a global leader in crude oil and natural gas production, Saudi Aramco faces significant exposure to commodity price volatility. Weekly price data from December 15, 2019, to December 31, 2023, shows standard deviations of 52% for natural gas and 31.5% for crude oil, underscoring the inherent risks tied to market fluctuations. These swings, driven by supply-demand imbalances, OPEC+ production policies, geopolitical tensions, and regulatory changes, directly impact revenue stability and operational planning.

Price volatility complicates production adjustments and capital allocation, especially for long-term projects requiring low break-even costs. Hedging strategies, including derivatives, are critical to managing financial exposure but add complexity. Despite its low-cost production advantage, Aramco’s reliance on hydrocarbons amplifies its vulnerability to prolonged market disruptions, affecting profitability and investor sentiment.

The high volatility of these commodities highlights the importance of operational flexibility, strategic hedging, and diversification into petrochemicals, renewables, and hydrogen to reduce dependency on crude oil and natural gas. Such

Figure 27: Global oil refinery capacity  
Source: Statista

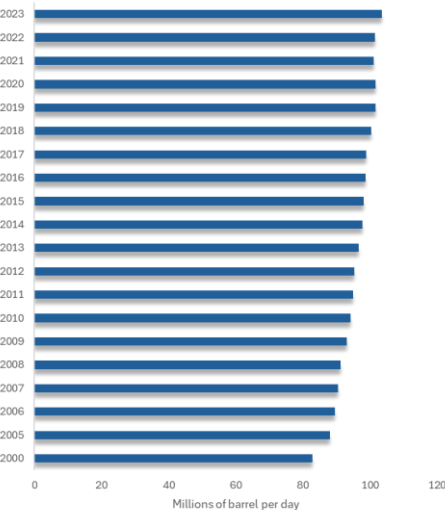
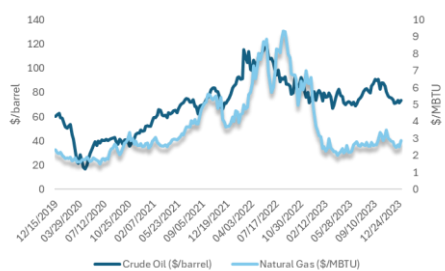


Figure 28: Crude oil & natural gas prices  
Source: Investing.com



measures are essential for enhancing resilience in an unpredictable energy market.

## Energy transition

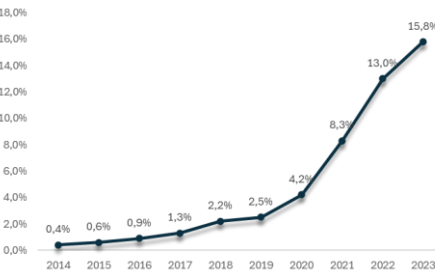
The global energy transition represents a profound long-term challenge for Saudi Aramco, as demand for hydrocarbons is threatened by the rapid adoption of cleaner energy technologies. Global market share of Electric vehicle (EV) increased by over 15% from 2014 to 2023, with projections indicating exponential growth fuelled by government incentives, technological advancements, and shifting consumer preferences. This trend directly undermines the demand for combustion fuels, which remain central to Aramco's operations.

Transitioning to clean energy sources presents both opportunities and challenges for Aramco. While diversification into renewables, hydrogen, and carbon capture could secure its role in a decarbonized future, the company faces fierce

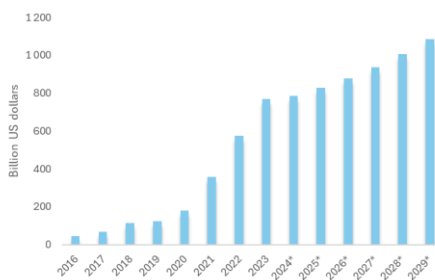
competition from established players with advanced expertise and infrastructure. Additionally, the transition requires significant capital investment, strategic realignment, and overcoming the inertia of its hydrocarbon-focused business model.

Failure to adapt to this shift could erode Aramco's long-term profitability and valuation as investors increasingly favour environmentally sustainable companies. However, Aramco's financial strength and ability to leverage its technological and operational scale provide a potential competitive advantage in building a foothold in the clean energy market. The pace and strategic effectiveness of this transition will determine its ability to thrive in a decarbonized global economy.

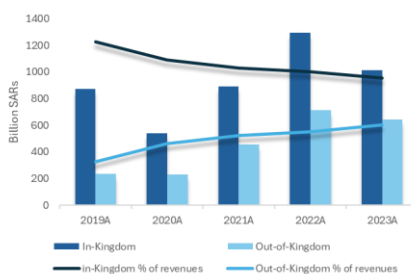
**Figure 29:** Global market share of electric vehicles  
*Source: Statista*



**Figure 30:** Global electric vehicle revenue forecast  
*Source: Statista*



**Figure 31:** Saudi Aramco's geographical distribution of revenue  
*Source: Annual report*



## Dominant portion of in-Kingdom Revenues

Saudi Aramco remains heavily reliant on its domestic market, with in-Kingdom revenues accounting for 61% of total revenues. This dependency exposes the company to significant risks tied to Saudi Arabia's economic health and energy policies. Any economic slowdown, fiscal tightening, or shifts in domestic energy consumption could substantially reduce demand for Aramco's crude oil, directly impacting its financial stability.

## Asian economic slowdown

Asian countries remain Saudi Aramco's largest importers of crude oil and natural gas, with China playing a pivotal role in driving demand. While China has

achieved its GDP growth target of 5% for 2023, this is below its pre-pandemic<sup>22</sup> growth rates and reflects broader structural challenges in its economy, including weaker industrial output and a slowdown in imports. If this moderation persists, it could temper demand for Aramco’s products, including crude oil and petrochemicals.

This potential reduction in demand poses a dual challenge for Saudi Aramco. It risks not only constraining near-term revenues but also affecting long-term strategic initiatives, such as its transition toward an integrated liquids-to-chemicals business. Additionally, as other Asian markets, like India, show signs of slower-than-expected growth, the overall demand outlook for Aramco’s products in the region could face increasing pressure.

## Financial Analysis

This financial analysis aims to evaluate the intrinsic value and growth potential of Saudi Aramco. By examining key financial metrics such as revenues, profitability KPIs, this analysis seeks to provide a comprehensive understanding of the company’s financial health and its potential for long-term investment returns. The analysis will also assess how the company’s current market position aligns with broader industry trends and macroeconomic conditions.

Figure 32: Asian countries GDP growth rate  
Source: Statista

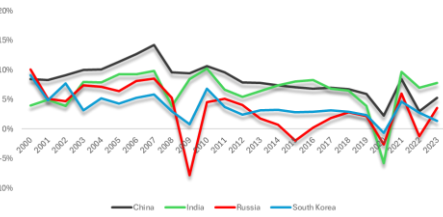


Figure 33: Industry revenues  
Source: Companies annual reports

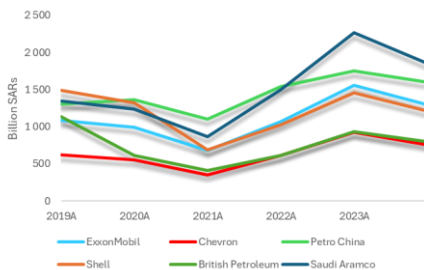
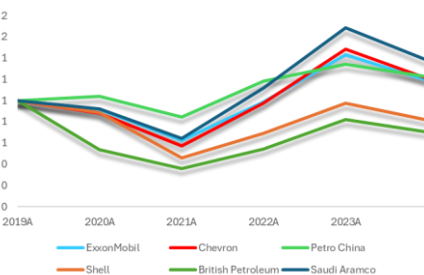


Figure 34: Industry revenues - rebased  
Source: Own estimate



### Revenues

From 2018 to 2023, Saudi Aramco's revenue demonstrated significant resilience and adaptability, with a performance closely tied to fluctuations in global oil prices and strategic diversification across segments. The upstream and downstream operations showed distinct contributions to overall revenue growth, reflecting the company’s ability to capitalize on macroeconomic trends and its structural advantages.

The upstream segment, including crude oil and natural gas/NGL revenues, remained the dominant contributor to Aramco's total revenue. Crude oil revenues ranged from SAR 720 billion in 2018 to SAR 746.7 billion in 2023, with a notable dip to SAR 377 billion in 2020 during the COVID-19 pandemic, reflecting the global decline in oil demand and prices (Brent crude averaged \$41 per barrel). However, the segment rebounded strongly, peaking at SAR 971 billion in 2022 as oil prices surged due to supply constraints and geopolitical tensions, including the Russia-Ukraine war.

<sup>22</sup> BBC News. "Saudi Aramco: Inside the World’s Most Profitable Company." *BBC News*

Natural gas and NGL revenues followed a similar trend, with a peak of SAR 69.6 billion in 2018, declining to SAR 40.6 billion in 2020, and recovering to SAR 56 billion in 2022. Despite their relatively smaller contribution compared to crude oil, these revenues highlighted the growing role of natural gas in Aramco's portfolio, driven by increasing global energy demand for cleaner fuels.

The downstream segment exhibited steady growth, particularly in refined and chemical products, underscoring Aramco's successful diversification efforts. Refined product revenues grew from SAR 258.8 billion in 2018 to SAR 395.57 billion in 2023, reflecting a compound annual growth rate (CAGR) of approximately 7.32% whereas chemicals grew from SAR 134.05 billion in 2018 to SAR 354.79 billion in 2023, presenting a CAGR of 17.61%. The downstream segment accounted for an increasing share of total revenues, mitigating the impact of volatile crude oil prices on the company's overall performance.

Revenues from crude oil within the downstream segment also increased significantly, rising from SAR 8.3 billion in 2018 to SAR 91.9 billion in 2023, indicating Aramco's capacity to optimize value through its integrated operations. Additionally, other product lines, including natural gas, NGLs, and metals, contributed to downstream revenue growth, albeit at a smaller scale.

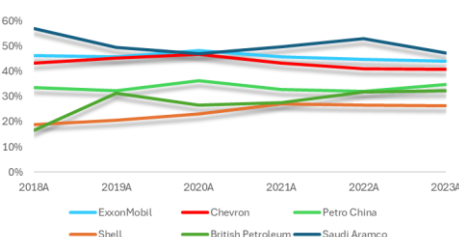
Saudi Aramco's ability to recover from the pandemic-induced downturn and achieve record revenues in 2022 and 2023 reflects its structural advantages, including low lifting costs (\$3-\$5 per barrel) and reliable supply chains. Furthermore, the company's strategic emphasis on downstream operations and petrochemicals enabled it to diversify revenue streams, reduce dependency on crude oil, and capture growth opportunities in high-demand markets like Asia.

Compared to its peers Saudi Aramco was behind in revenues from 2018 to 2020 averaging around SAR 1.15 trillion per year but after the rebound of crude oil prices and their new downstream acquisition, they gained some terrain.

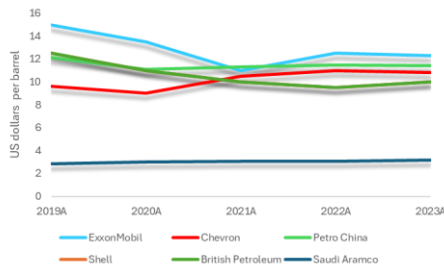
## Profitability Measures

Aramco's profitability metrics show its ability to consistently generate higher profits compared to its peers, even when oil prices go significantly down. Saudi Aramco has beaten every major competitor by a significant amount regarding Gross, EBITDA, EBIT and Net Margins. Saudi Aramco has consistently outperformed its peers in profitability metrics due to its cost leadership, vast low-cost reserves, and integrated operations. Its gross margin low break-even points, far exceeding peers like BP and Shell, which face higher costs and have been shifting towards lower margin projects such as renewable energies. Aramco's

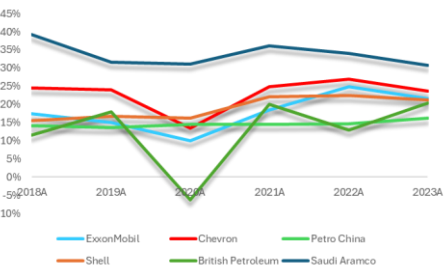
**Figure 35:** Industry Gross Margin  
Source: Own estimate



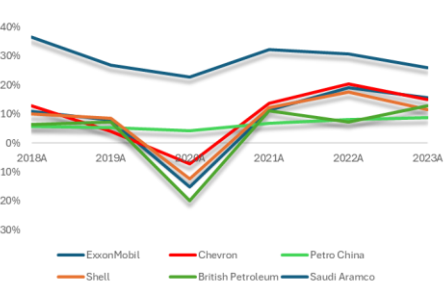
**Figure 36: Industry lifting costs**  
Source: Own estimate



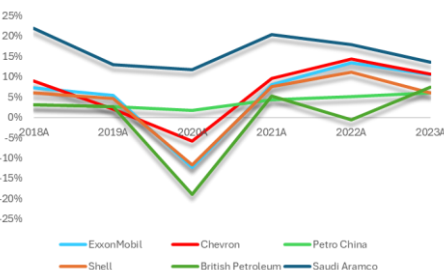
**Figure 37: Industry EBITDA margin**  
Source: Own estimate



**Figure 38: Industry EBIT margin**  
Source: Own estimate



**Figure 39: Industry EBIT margin**  
Source: Own estimate



EBITDA and EBIT margins are strengthened by economies of scale and strategic investments in high margin downstream projects.

One can observe from the graphics presented in the left, that Aramco possesses some of the lowest lifting costs in the industry, averaging in 2023 around \$3.9 per barrel, this allows the company to achieve higher margins and generate great profitability. Its net margin is driven by high oil prices, efficient cost management, and favourable tax policies.

Between 2018 and 2023, Saudi Aramco's profitability was directly influenced by the fluctuations in global oil prices. In 2018, Aramco's profitability was robust, with net income of approximately SAR 417 billion reaching a net income margin of 22%, driven by crude oil prices averaging around \$70 per barrel. In 2019, despite a slight drop in oil prices and market challenges, Aramco posted a net income of SAR 331 billion (net margin of 13%), which still made it the most profitable company amongst its peers.

In 2020, the COVID-19 pandemic caused a historic collapse in oil demand, leading to a significant reduction in Aramco's revenues and profitability. Net income dropped to SAR 183 billion which made the net margin drop to 12%, less than half of the previous year, as oil prices fell dramatically (Brent crude averaged around \$41 per barrel). Despite this, Aramco managed to remain profitable, supported by cost-cutting measures and its industry-leading production efficiency. As oil demand recovered in 2021, Aramco's net income surged to SAR 412 billion (net margin of 22%), largely due to a recovery in crude oil prices (Brent crude averaged around \$71 per barrel). The company's profitability was further sustained by increased production levels as OPEC+ eased output cuts.

In 2022, Saudi Aramco recorded a staggering net income of SAR 604 billion, the highest in its history, driven by a surge in oil prices following Russia's invasion of Ukraine. Brent crude prices averaged above \$100 per barrel for much of the year, and the tightening of global oil supply significantly boosted Aramco's profit margins. By 2023, although oil prices had stabilized, Aramco's net income remained strong, though slightly lower than 2022, with the company continuing to focus on operational efficiency and strategic investments in downstream sectors and petrochemicals. The company also made moves to diversify its revenue base, although its core profitability remained tied to crude oil prices.

## Return on Invested Capital

Return on invested capital measures how efficiently the company is generating returns from its capital. Saudi Aramco's ROIC is the highest amongst its peers

mainly because of minimum costs of production, vertically integrated operations, and an extensive resource base.

Between 2019 and 2023, Aramco’s ROIC ranged from 18% (2020) to 40% (2022), reflecting its ability to generate superior returns even during market downturns. In comparison, ExxonMobil’s ROIC averaged 18% and Shell’s 7% during the same period.

The dip in 2020 ROIC to 18% was a direct result of the pandemic’s impact on oil demand. However, Aramco’s disciplined cost management and reduced capital expenditures mitigated the decline. By 2022, surging oil prices and increased production levels drove ROIC to 40%, underscoring the company’s capital efficiency. In 2023, despite a stabilization in oil prices, Aramco sustained a healthy ROIC of 27% through diversification and operational optimization.

### Debt Structure

Saudi Aramco’s debt structure reflects its financial strategy and market conditions, particularly its approach to leveraging debt while maintaining a strong balance sheet.

In 2018, Saudi Aramco had minimal debt with a conservative Net debt-to book value of equity ratio of approximately -1.43% with more cash than debt. This low leverage allowed the company to maintain flexibility and incur significant capital expenditures for growth and infrastructure projects without compromising financial stability.

However, as global market conditions evolved, particularly during the COVID-19 pandemic in 2020, Aramco began to increase its debt levels to enhance liquidity. By the end of 2020, after the SABIC acquisition, which was funded with a mix of cash and debt (70% debt and 30% cash) its total debt reached SAR 536 billion (Net debt SAR 365 billion), reflecting a Net debt-to book value of equity ratio of 33.16%. In 2021, with the recovery of oil prices, Aramco reduced its debt to SAR 510 billion (Net debt 259 billion) whilst increasing their cash reserves significantly.

In 2022, Aramco’s debt levels decreased, with total debt around SAR 393 billion and a debt-to-equity ratio of 27%. In 2023 the debt levels decreased to SAR 290 billion with a debt-to-equity ratio of 19%.

## Balance Sheet and Income Statement Forecasts

Figure 40: Industry core return on invested capital  
Source: Own estimate

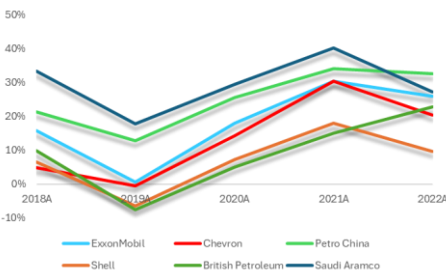


Figure 41: Saudi Aramco debt structure  
Source: Annual report & own estimate



This segment of the equity research aims at forecasting on an appropriate basis the key value drivers in Saudi Aramco’s operations, i.e., the variables that will mostly define the company’s value. This methodology was based on a set of assumptions derived through deep research among market specialists, a thorough analysis of the company’s report and future project, and our own personal judgement of company dynamics. The approach was applied to the company’s Balance Sheet, Income Statement and Cash Flow Statement.

## Revenue Forecast

### Upstream

When forecasting Saudi Aramco's upstream segment revenues, key value drivers considered were the quantities and prices of crude oil and natural gas, while revenues from NGLs were projected directly based on market trends.

To estimate crude oil revenues, a regression analysis was conducted using quarterly crude oil prices and total crude oil revenues from 2018 to 2023. The analysis revealed that for every \$1 increase in crude oil prices, Saudi Aramco's crude oil revenues would increase by SAR 2,475.92. this regression yielded a R<sup>2</sup> of 0.87 a p-value of 3.15E-11 and t-stat of 12.15, which then implies the relationship between these values is fit. This relationship served as the basis for projecting future crude oil revenues, with future crude oil prices being the primary driver. Demand for crude oil is assumed to peak between 2029 and 2030, after which both prices and quantities sold are expected to decline. Crude oil prices are projected to remain volatile, ranging from \$84/barrel in 2023 to \$73/barrel in 2026, eventually declining to \$72/barrel by 2034 due to diminishing demand.

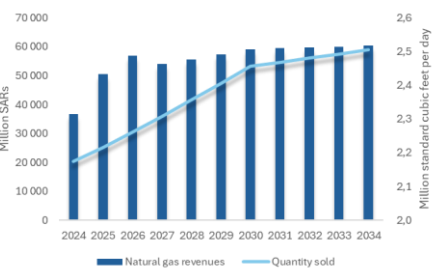
Considering the company’s position as a market leader, allied with a growing presence in the Asian market and the company’s vast reserves, we assumed the growth of number of barrels sold in the future to be higher than the projected market average. However, a Donald Trump re-election is set to increase crude oil production for the US, which in turn may decrease Saudi Aramco's pricing power and ability to export crude oil. Hence, barrels sold will reach 6.8 mmbpd in 2026 and a period high of 7.1 mmbpd in 2030. After the demand peak, quantities sold are expected to decrease at a 0.5% rate.

The forecasting method for natural gas closely mirrors that of crude oil. The Hubble spot rated was extracted for each year between the period [2018-2023], which was further utilized to calculate the quantity of natural gas sold per year. A regression analysis between natural gas prices and revenues was also conducted. Contrary to the prior regression, this one was neither significant nor a good model, with a p-value of 0.53 and an R<sup>2</sup> of 0.11. This is in accordance with

**Figure 42:** Saudi Aramco crude oil revenue & quantity sold forecast  
Source: Own estimate



**Figure 43:** Saudi Aramco natural gas revenue & quantity sold forecast  
Source: Own estimate



the rationale that gas prices are notably volatile and highly difficult to predict. Considering this information, we forecasted that prices are set to recover from recent trends, namely considering market adaptation to the Russian conflict, which significantly impacted market volatility, growing 35% in 2025 and 10% in 2026, with growth stagnating at 1% until 2030 and 0% from then on. As for quantities sold, they were derived from future demand estimates, particularly considering to the company’s strategic market positioning as the sole provider of natural gas to the Saudi Kingdom, as well as its significant position in the Asian market, which is transitioning from coal to gas as an energy source. As such, gas quantities sold were assumed to be above market projections, projected to grow 1% higher than industry trends, increasing by 2.1% until 2030 and achieving a period high of 2.51 mmscf in 2034.

NGL forecasts are grounded in global market projections and expected growth in demand. Forecasts for NGL demand are highly positive, as projected demand is set to overcome projected supply. According to Saudi Aramco’s projections, total production will increase at a 6.94% CAGR from 2023 until 2030. Given a US commitment to boost NGL sales <sup>23</sup> as well, more modest projections were assumed as market players adjust to a potential supply drought<sup>24</sup>.

Despite unfavourable long-term crude oil industry projections, Saudi Aramco is positioned to achieve above-average returns due to its vast reserves, low production costs, and the OPEC+ cartel’s influence on global market trends. Additionally, the company’s integration into downstream operations ensures continued internal demand for crude oil, supporting sales to its refining and petrochemical facilities, even if at reduced market prices. These factors collectively reinforce Saudi Aramco’s resilience in the upstream segment, enabling sustained profitability despite the challenges of a transitioning global energy landscape.

▪ Downstream

Considering the Downstream segment, the chemical product’s sales were forecasted on a total basis, as these comprise a plethora of products and derivatives with different market trends. As for the refined products, the percentage of crude oil, the main raw material, transferred from the Upstream to the Downstream operations was the main value driver.

When conducting a regression between refining products’ revenues and the % of crude oil used in Downstream operations, despite a limited number of

Figure 44: Saudi Aramco NGL revenue forecast  
Source: Own estimate

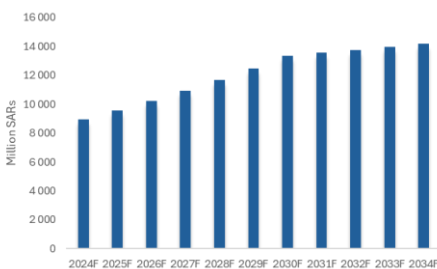
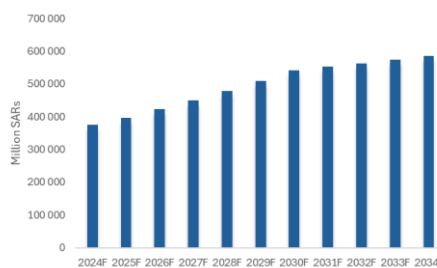


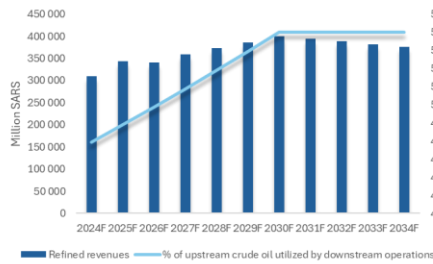
Figure 45: Saudi Aramco chemical revenue forecast  
Source: Own estimate



<sup>23</sup> S&P Global Commodity Insights. "Latest News." *S&P Global Commodity Insights*

<sup>24</sup> McKinsey & Company. "Global Energy Perspective 2023: Natural Gas Outlook." *McKinsey & Company*

**Figure 46:** Saudi Aramco refined revenue forecast  
 Source: Own estimate



observations (n =5), a p-value of 0.075 and an R<sup>2</sup> of 0.84 were attained, implying some correlation and potential causality between these two variables. We expect this integration process to maintain past levels of growth until 2030, growing at a 2% annual rate. Afterwards, the company will allocate more resources towards its chemicals business, and an increase in fuel substitutes in the market, with its total crude oil used in refining operations stagnating at a 54% rate. Demand for chemicals is set to increase notably, due to a lack of substitute products and increasing demand in emerging economies for these products. Further, Saudi Aramco possesses the necessary infrastructures to accompany this demand trend and benefit from significant margins, as it can provide crude oil to downstream operations at more favourable deals. Hence, we project sales to grow between the [5%-7%] threshold until 2030. Afterwards, a market forces will likely adjust, implying a lower revenue growth rate of 3%. With this, by 2034, this product line will represent the company’s second biggest source of revenue, only behind its main driver of income, which is its crude oil business, expected to provide 28.31% more revenues for the company in 2034 that in it did in 2023, in real terms.

Considering the aspects, such as the company’s market leader position and scale, a sales premium was associated with the projections. As such, we not only expect Downstream sales to increase in the future, but also the company’s margins in this sector as it will be explained further in the Operating costs section.

- Corporate

The Corporate segment, as previously mentioned, represents solely a supporting segment to the company’s main sources of income. As such, we defined future revenues of this operating segment as a percentage of the other two segments revenues. This reasoning implies that, if the other segments are expanding, the corporate segment, which provides support to the other two also has to expand itself.

### Operating costs forecast

With regards to the operating costs, these were mainly derived on a % of revenues basis. We used this rationale as these costs are mainly attributed to the business of the company on a regular basis and highly correlate with the company’s revenues. Furthermore, the main method used when forecasting operating costs was using a period average between 2019 and 2023. Nonetheless, certain costs were derived through a different method. As is the case of Purchases, which are only attributed to the Downstream segment and

are mainly related with the Saudi Aramco's Downstream businesses purchasing crude oil and natural gas from its Upstream business to use as raw materials. Purchases were thus divided by type of product that would derive from them, but also following the previously mentioned average method to be forecasted. Finally, the D&A per segment was derived as a percentage of each segment's total PPE and forecasted accordingly.

## Net Working Capital (NWC)

As for the NWC, the main driver utilized were the sales revenues. Since the NWC components are related with the company's day-to-day operations, they will correlate with the company's sales. Nonetheless, certain captions were forecasted on a different basis. Firstly, operating cash was set at 5% of revenues. This allows for financial flexibility in case the company needs cash to finance machine malfunctions or oil related short-term expenses. Secondly, when forecasting inventory levels, trade receivables and trade payables, the average holding period, average collection period and average payable period were used as drivers, respectively. Furthermore, other NWC components were derived from different drivers, such as the number of employees from the cost of sales.

## Property, Plant and Equipment forecast

When it comes to Saudi Aramco's PP&E, the projections were made on a separate basis according to the company's segments. Regardless, for both the Upstream and Downstream businesses, future projects were used as the main PP&E driver for projections until 2027, utilizing each segment's revenues as the main driver for PP&E growth afterwards. Firstly, since the company is on an expansion projected, capital expenditures are expected to cover for D&A expenses, as the company needs to maintain its current infrastructures. For the Upstream segment, improvements on current crude oil facilities and its Master Gas Plant<sup>25</sup> project are set to represent the biggest CAPEX for the company, at SAR 33 825 and SAR 11 719 per year until 2027, respectively. For the Downstream segment, its HAPCO <sup>26</sup>refinery and petrochemical complex allied with the completion of the company's S-OIL<sup>27</sup> project will constitute its biggest expenditures, at SAR 33 300 and SAR 19 725 per year until 2027, respectively. From 2027 onwards, PP&E will assume the same growth pathway as each segment's revenues, with Upstreams' PP&E projected to decrease in the long

<sup>25</sup> Aramco. "Master Gas System: Fueling a Nation." *Aramco Elements Magazine*

<sup>26</sup> Aramco. "Aramco JV HAPCO to Commence Construction of Petrochemical Complex in China." *Aramco Newsroom*, 2023

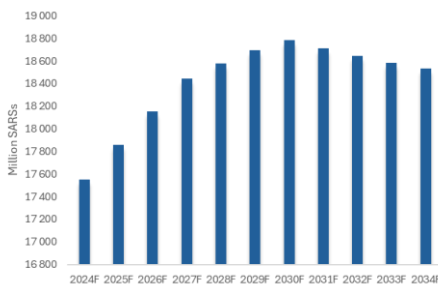
<sup>27</sup> Aramco. "Aramco Affiliate S-Oil to Build One of the World's Largest Petrochemical Crackers in South Korea." *Aramco Newsroom*, 2022.

term at a 1.3% annual rate, while Downstream’s PP&E will increase at a 0.6% annual rate, as Saudi Aramco assures its liquids-to-chemicals transition and countries worldwide utilize clean energy sources at a higher rate than fossil fuels. The Corporate segment’s PP&E, considering that this segment’s main purpose is to provide support to the other operating segment’s, was forecasted on a revenue basis.

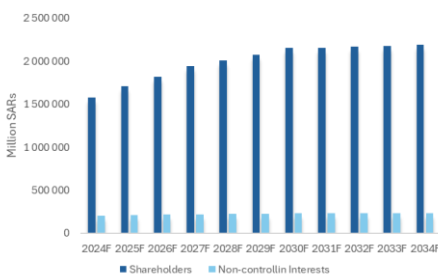
### Intangibles forecast

Considering the Intangible Assets, they were divided into different components which were, in turn, forecasted in different terms. As for the Goodwill, correspondent to the acquisition of SABIC, we forecasted that it would stay stable in the future at a period average between 2020-2023. With Saudi Aramco projected to focus on minority interest led acquisitions, no further Goodwill increases are expected. Regarding Exploration and evaluation, with these assets relating to the companies’ Upstream activities, we forecasted as a percentage of PPE attributed to this segment. The remaining Intangible components were either forecasted as a % of revenues or held constant.

**Figure 49:** Saudi Aramco net debt forecast  
**Source:** Own estimate



**Figure 50:** Saudi Aramco shareholder equity and non-controlling interest forecast  
**Source:** Own estimate



### Debt and Equity forecast

The last element that was not forecasted as a % of revenues, was the company’s leverage ratio, i.e., its Debt-to-Equity ratio. Saudi Aramco has, for its past, maintained a notably low D/E ratio. When comparing with its peers, independently of their scale, their financial position is significantly different than Saudi Aramco’s leverage position, with only ExxonMobil being remotely close at a D/E ratio of 3.81% in 2023. Saudi Aramco does not specifically disclose its D/E target for the future, only allowing for leverage flexibility according to the company’s policies. Accordingly, we defined the company’s D/E ratio at 0.25% for the foreseeable future. This allows the company to maintain a healthy financial situation, while also giving it some margin for potential adjustments in its debt position. As a further note, this capital structure is in line with the company’s quarterly dividend policy to its shareholders, namely is \$124 billion extraordinary dividend in the 2Q2024, representing a 30% increase to the dividend distribution in the prior year, which goes to show the company’s commitment to deliver value to shareholders.

## Methodology

### Discounted Cash Flow Method

The target share price for Saudi Aramco was determined using the Discounted Cash Flow (DCF) method, a valuation approach that discounts the company's forecasted future cash flows at its Weighted Average Cost of Capital (WACC). Forecasts were made from 2024 to 2034 to capture Saudi Aramco's medium-term performance and intrinsic value, with terminal values calculated for the period beyond.

### Discount rate (WACC) calculation

The weighted average cost of capital is the discount rate that represents the company's average cost of capital from all its sources, i.e., the return demanded by equity and debt holders according to its respective risk. Under a target Net Debt/Enterprise Value, it is projected that the company's capital structure will remain constant and all future cashflows will be discounted at the same rate.

### Market values & Target Net debt/Enterprise Value

For the WACC calculations, the market values of debt and equity were needed. Because the market conditions have been stable, the market value of debt is assumed to be the same as its book value. In contrast, information about the number of shares outstanding and the closing prices of the shares as of December 31<sup>st</sup> for the previous five years were obtained to determine the market value of equity. Market value of equity is then calculated by multiplying the closing prices by the total number of outstanding shares. Adding up the market value of debt and equity we reached the Enterprise Value of Saudi Aramco.

Building on the assumption that Saudi Aramco will maintain its historically low debt levels, the target Net Debt/Enterprise Value of 0.25% reflects its conservative capital structure pre-COVID and post-COVID. This low leverage is supported by strong cash flows from upstream operations and government backing, allowing Aramco to fund growth without relying heavily on debt. Compared to peers, Saudi Aramco's minimal debt provides resilience and flexibility, especially during market shocks.

### Growth Analysis

The terminal growth rate was determined by multiplying the reinvestment rate (RR) and the return on new invested capital (RONIC), capturing how efficiently reinvested capital is driving future cash flow growth. The reinvestment rate reflects the percentage of operating cash flows reinvested into new capital projects and is calculated by dividing the change of the invested capital by the segments' result, while RONIC measures the return on these new investments.

$$F1: CI_{95\%} = \beta \pm 1,96 \times SD$$

Figure 51: Upstream and Downstream company raw Betas  
Source: Bloomberg

Initial Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,655	0,651	0,647
OxyCapital	0,611	0,608	0,605
Kosmos Energy	1,137	1,130	1,123
Tullow Oil	1,698	1,691	1,684
Downstream			
Valero	0,636	0,632	0,628
Marathon	0,543	0,539	0,535
Reliance	1,207	1,204	1,201
Petrobras	1,199	1,195	1,191
Neste	1,218	1,213	1,208

For each of the segments, the terminal growth rate was calculated and values of -1.29%, 0.26% and -0.25% were reached respectively for upstream, downstream and corporate segment.

## Cost of equity

To account for the varying risks profiles across Saudi Aramco's business segments—upstream, downstream, and corporate—separate equity betas for upstream and downstream operations were calculated. While the risks in these segments are similar, they are not the same due to the nature of each operation and we thought to be best do try and calculate a different discount rate for each of the segments.

To capture these differences, we gathered the equity betas from Bloomberg for four different companies of the upstream segment (ConocoPhillips, Oxy Capital, Kosmos energy and Tullow oil) and for five downstream companies (Valero Energy Company, Marathon Petroleum Company, Reliance Industries Limited, Petrobras and Neste). After gathering the information relative to the equity betas of each of these companies and their respective standard errors, we calculated what would be the interval in which the betas would fall with a confidence of 95% using the formula **F1** – results in **figure 51**. Afterwards, we unlevered the betas of each companies using their respective capital structures plugging in the values in formula **F2** and reached the values presented in **figure 52**. To compare our results with Saudi Aramco's, we had to re-lever the betas using our estimate to what the capital structure of Aramco will be in 2025 using the formula **F3** reaching the values presented in **figure 53**. To reach the final values of the betas, we made a median of these betas per segment – results in **figure 54**.

$$F2: \beta_u = \beta_e \times \frac{E}{EV} + \beta_d \times \frac{D}{EV}$$

Figure 52: Upstream and Downstream company unlevered Betas  
Source: own estimate

Unlevered Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,605	0,601	0,598
OxyCapital	0,498	0,496	0,493
Kosmos Energy	0,762	0,758	0,754
Tullow Oil	0,619	0,617	0,616
Downstream			
Valero	0,514	0,510	0,507
Marathon	0,442	0,439	0,435
Reliance	1,116	1,114	1,111
Petrobras	0,881	0,878	0,876
Neste	1,116	1,112	1,107

$$F3: \beta_e = \beta_u + \frac{D}{E} \times (\beta_u - \beta_d)$$

Figure 53: Upstream and Downstream company re-levered Betas  
Source: own estimate

Relevered Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,609	0,605	0,602
OxyCapital	0,502	0,499	0,496
Kosmos Energy	0,767	0,763	0,759
Tullow Oil	0,623	0,621	0,620
Downstream			
Valero	0,518	0,515	0,511
Marathon	0,445	0,442	0,439
Reliance	1,126	1,123	1,121
Petrobras	0,889	0,886	0,883
Neste	1,126	1,121	1,117

Figure 54: Upstream and Downstream and Saudi Aramco Betas  
Source: own estimate

Outcomes			
Betas	Upstream	Downstream	Stock returns
Upper range	0,62	0,89	0,67
Raw Beta	0,61	0,89	0,66
Lower Range	0,61	0,88	0,66

To judge if our method is going to yield similar betas of Aramco's actual beta, we calculated our beta, standard error, and confidence interval based on Aramco's weakly stock returns from 19<sup>th</sup> of December 2019 to 28<sup>th</sup> of December 2023 and reached the values presented in **figure 54**.

Comparing the results, one can infer that even though the upstream beta is lower than the actual Aramco's beta, the downstream beta is superior and so, given the weights in the value of the operation, it is a reasonable assumption to proceed with the per-segment betas.

Given the minimal contribution of corporate cash flows to the overall cash flows, the beta we will be using to value this operation will be the beta calculated from the stock returns of Saudi Aramco.

## Cost of debt

$$F4: Rd = YTM - PD \times LGD$$

When determining the cost of debt for Saudi Aramco, the company's outstanding debt for the foreseeable future was considered. Firstly, all the existing issued debt was extracted from the Moody's database. Since the projected valuation timeframe was of 10 years, we considered as a proxy for the company's future debt its *Senior Unsecured (Foreign)* debt, which was issued on June 16<sup>th</sup>, 2024, and will mature on June 16<sup>th</sup>, 2034, the same time horizon as our valuation. According to the formula **F4**, the company's projected annualized probability of Default (PD), its Loss Given Default (LGD) and yield to maturity of the debt must be considered when calculating the expected return to debtholders. According to Moody's, Saudi Aramco possesses a credit rating of A1, which in turn implies an annualized probability of default of 0,22% and a LGD of 52.69%. This culminates in an expected cost of debt of 4,73% attributed to Saudi Aramco.

### Weighted average cost of capital

After gathering and calculating all the information necessary to calculate the WACC, we proceeded with the calculation of the three individual WACCs needed for this valuation. Using the appropriate formula **F5** and respective inputs, we got the results presented on table 5.

$$F5: WACC = \beta_e \times \frac{E}{EV} + \beta_d \times \frac{D}{EV} \times (1 - T)$$

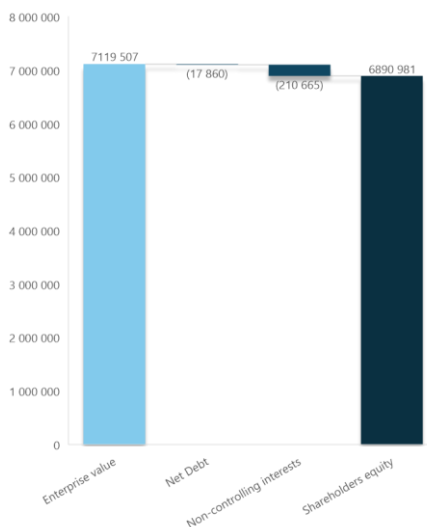
For the sake of the reliability of our model, with the WACCs calculated for the upstream and downstream segments, we calculated a "company-wide" WACC using a weighted average of the value of operations generated by each segment. The WACC derived from this equation totalled 6,81% which is only 43bp different from the WACC calculated using the stock returns from the company. We believe this small difference arises from the non-integrated companies we used for upstream and downstream betas. Since the purpose of the different betas for the different segments was to capture the risks associated with each segment individually, it failed to capture the vertical integration that Saudi Aramco uses in its business, driving the WACC upwards. Still, since the insignificance of the difference, we decided to proceed with per-segment WACCs.

### Valuation

With the WACCs and terminal growth rates calculated, the next step was to discount each segment's projected free cash flows (FCFs) using their respective discount rates. For the downstream and corporate segments, the terminal value was calculated using a perpetuity formula based on their respective terminal growth rates, reflecting the assumption of indefinite operation and growth.

In contrast, for the upstream segment, where operations depend on finite commodity reserves, a different approach was taken. Based on 2023 production levels, the estimated "lifetime" of reserves was calculated to be 73 years.

**Figure 55: Saudi Aramco FY2025 waterfall**  
Source: own estimate



**Figure 56: Valuation outcomes**  
Source: own estimate

Valuation outcomes	
Share Price	28,48 SAR
Total Dividends	345 078 SAR
Dividends per share	1,43 SAR
Shareholder return per share	29,90 SAR

Consequently, the terminal value for upstream operations was determined using an annuity formula, representing 73 years of cash flows discounted at the segment's WACC and incorporating the respective terminal growth rate.

Once the future free cash flows and terminal values for each segment were discounted, their sum provided the total value of operations per year. Adjustments were made to account for non-operating items, resulting in the calculation of Saudi Aramco's Enterprise Value.

To derive the shareholders' equity value, net debt and non-controlling interests were subtracted from the Enterprise Value. The target share price was then calculated by dividing the equity value by the total number of outstanding shares for 2025, which was assumed to remain constant at the 2023 level. This resulted in a share price of SAR 28.48.

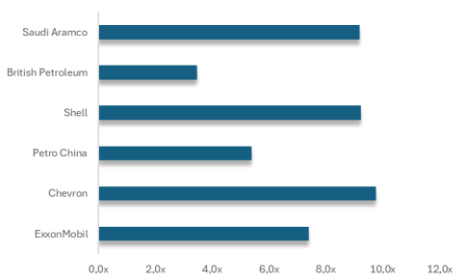
Finally, to calculate the total shareholder return per share, dividends per share were estimated under the assumption that the only transactions with shareholders in the future would be equity changes and dividends paid. Dividends of SAR 345 billion were projected, which, when divided by the total shares outstanding, resulted in SAR 1.43 per share. Adding this to the target share price produced a total shareholder return of SAR 29.90 See **figure 56**.

## Multiples Analysis

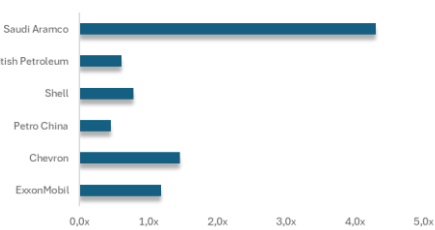
A Multiples valuation was conducted to better assess the financing decision about Saudi Aramco as an investment. As such, traditional Multiples ratios, such as Price-to-Earnings and EV/EBIT were used a proxy for valuation, considering the previously mentioned peer companies. Furthermore, industry specific ratios (EV/mmboe, Field Netback, EV/Reserves) were also considered. Saudi Aramco registered an EV/EBIT ratio of 9.20, positioning it at the higher end of the spectrum and demonstrates the company's significant operating leverage, associated with its below industry average operating costs.

In terms of EV/Revenue, Saudi Aramco stands out with a ratio of 4.30x, a figure substantially higher than any of its competitors. Despite having the highest revenues in the sector, investors associate a premium to Saudi's revenue generation capacities and pricing power. Other oil majors, such as ExxonMobil (1.19x) and Chevron (1.46x) lag far behind, demonstrating Saudi Aramco's greater ability to generate profits from revenue. This case also applies to the Saudi Aramco's significantly higher P/E ratio, 17.65x. Hence, investors are confident that the company will be able to better sustain its earnings potential into the future compared to its peers. Considering the company's P/B ratio, at 4.60x, reflects the market's perception about Saudi's asset base and its ability to

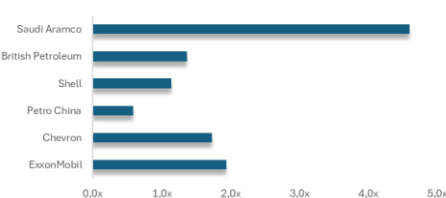
**Figure 57: EV/EBIT**  
Source: Bloomberg



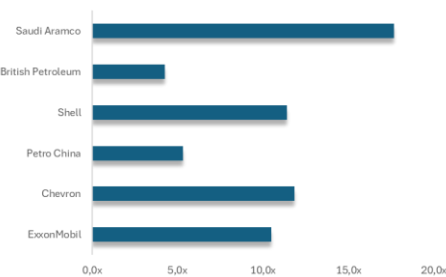
**Figure 58: EV/Revenues**  
Source: Bloomberg



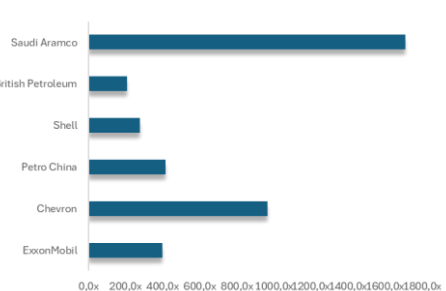
**Figure 59: Price to Book value**  
Source: Bloomberg



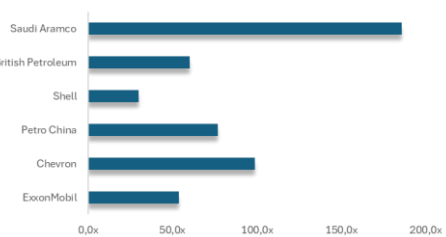
**Figure 60: Price earnings**  
Source: Bloomberg



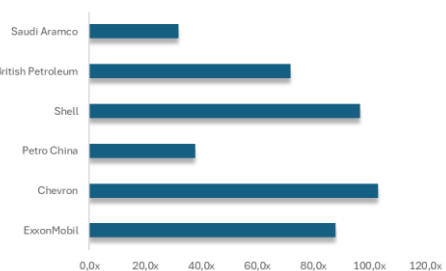
**Figure 61: EV/million barrels of oil equivalent produced**  
Source: own estimate



**Figure 62: Field Netback**  
Source: own estimate



**Figure 63: EV/Reserves**  
Source: own estimate



generate earnings from it. In contrast, PetroChina’s lower P/B (0.59x) may suggest operational inefficiencies or market concerns about its asset quality.

When considering EV/Production, Aramco’s value of 1 709.3x far exceeds all competitors. Despite producing the highest number of crude oil barrels among oil majors, Saudi Aramco’s EV, associated with its cost leadership and unmatched scale of operations, is remarkably higher than competitors. Similarly, the company’s Field Netback, a measure of profitability per barrel produced, of 185.9x far outpaces that of other oil majors, traced in second place by Chevron (98.9x). This ratio further exacerbates Saudi’s cost efficiency and operating leverage.

However, when analysing EV/Reserves, Aramco has the lowest ratio among its peers, at 31.79. Despite appearing negative, this ratio highlights Saudi’s vast crude oil reserves, which are the biggest proved reserves held by any oil company. Hence, despite the market valuing the company at a premium, it’s extremely vast reserves push this ratio downwards.

In summary, Saudi Aramco excels across most valuation and performance metrics, with investors attributing a commanding a premium valuation in most ratios analysed. This goes to show a sustained market confidence in the company’s operations and prospects, as well as its ability to generate returns to shareholders. These findings emphasize Saudi Aramco’s leadership in the oil and gas industry; while demonstrating potential strategic challenges it must face to sustain its valuation and market dominance, particularly in an energy transition scenario.

## Sensitivity Analysis

When conducting a sensitivity analysis on Saudi Aramco’s share price, we performed these procedures on both Upstream and Downstream variables, as well as on variables impacting the company’s discount rate. Throughout this analysis, we focused on the sales value driver’s impact on the company share price, as these drivers have been historically volatile and most likely will continue to be. By varying these inputs, we were able to infer share price sensitivity to each variable individually and on a simultaneous basis.

### Upstream Variables

In the upstream segment, we analysed the impact of changes in market prices and production quantities for both crude oil and natural gas on Saudi Aramco’s share price. The results indicate that crude oil prices are the most significant driver of the company’s valuation. Specifically, a 15% increase or decrease in

**Figure 64:** Sensitivity Analysis on upstream variables  
Source: own estimate

Upstream Variables			Share Price
28,48 SAR	Values in 2024		2025
<b>Worst</b>	Crude Oil - Price per barrel	60,4	25,95 SAR
	Crude Oil - Quantity of mmbpd sold	5,6	26,23 SAR
	Natural Gas - Price per mscfd	14376,8	29,81 SAR
	Natural Gas - mmscfd sold	1,8	29,81 SAR
<b>Base</b>	Crude Oil - Price per barrel	71,0	29,90 SAR
	Crude Oil - Quantity of mmbpd sold	6,6	29,90 SAR
	Natural Gas - Price per mscfd	16913,8	29,90 SAR
	Natural Gas - mmscfd sold	2,2	29,90 SAR
<b>Best</b>	Crude Oil - Price per barrel	81,7	33,84 SAR
	Crude Oil - Quantity of mmbpd sold	7,5	33,56 SAR
	Natural Gas - Price per mscfd	19450,9	29,99 SAR
	Natural Gas - mmscfd sold	2,5	29,99 SAR

crude oil prices results in a ~13% change in the share price. Similarly, a 15% change in the quantities of crude oil sold leads to a ~12% shift in the share price.

In contrast, variations in natural gas prices and production quantities have a minimal impact on the company's valuation. This is because natural gas revenues contribute a smaller proportion to the company's total upstream revenues and are therefore less influential on the overall share price. These findings align with Saudi Aramco's and the OPEC+ strategy of managing crude oil production cuts<sup>28</sup> to stabilize and increase market prices. By supporting higher oil prices, production adjustments directly enhance Saudi Aramco's revenues and, consequently, its share price.

## Downstream Variables

**Figure 65:** Sensitivity Analysis on downstream variables  
Source: own estimate

Downstream Variables			Share Price
27,93 SAR	Values in 2024		2025
<b>Worst</b>	Chemicals - revenue growth	4,80%	28,41 SAR
	Purchases in relation to its revenues	40,55%	27,93 SAR
<b>Base</b>	Chemicals - revenue growth	5,65%	28,48 SAR
	Purchases in relation to its revenues	38,55%	28,48 SAR
<b>Best</b>	Chemicals - revenue growth	6,50%	28,54 SAR
	Purchases in relation to its revenues	36,55%	29,02 SAR

When it comes to the Downstream segment, the two main drivers of share price shares were the revenue growth of the chemicals sector, which has become a motor for this segment's revenues since 2020 and the purchase margins in relation to the revenues of the downstream operations. When changing the chemical products projected growth rate for its revenues by 15%, the share price varies by ~0.24%, showing that, despite the downstream segment comprising more than 50% of total sales, the impact of the growth rate for the future of chemical revenues on share price is not very significant. Furthermore, when varying the purchase margins by 200bp the change in share price is ~1.9%. Hence, if Saudi is determined to perform its liquids-to-chemicals transition, it must undergo projects that yield above average returns and benefit from profitable margins. Further, the analysis shows the company's reliability on crude oil sales for expected earnings and a representative share price.

## Macroeconomic variables

As a final remark, sensitivity tests were conducted on WACC related variables. These variables affect remarkably the company's terminal value of operations, which is the main driver of its share price. As shown, a small variation in these inputs causes a big price correction in the company's share price. This goes to show the impact of market conditions and interest rate policies on asset values, as, when market conditions worsen, investor are less likely to accrue risky assets and these assets' valuations worsen. Regardless, Saudi Aramco's outstanding liquidity position, coupled with the lack of seasonality associated with the oil and chemical's industries, are set to maintain the company's discount rate at stable levels.

**Figure 66:** Sensitivity Analysis on debt and equity instruments  
Source: own estimate

Debt and Equity Instruments			Share Price
28,48 SAR	Values in 2024		2025
<b>Worst</b>	Risk free	3,16%	26,53 SAR
	Market risk premium	6,13%	27,04 SAR
<b>Base</b>	Risk free	2,66%	28,48 SAR
	Market risk premium	5,63%	28,48 SAR
<b>Best</b>	Risk free	2,16%	30,69 SAR
	Market risk premium	5,13%	30,06 SAR

<sup>28</sup> S&P Global Commodity Insights. "OPEC Delays Plan to Ease Crude Oil Output Cuts by One Month." *S&P Global Commodity Insights*, November 3, 2024.

## Scenario Analysis

The rationale utilized in the scenario analysis was similar to the one in the sensitivity analysis, using the sales value drivers as the main variables for change. Throughout the analysis, the growth in prices and quantities sold, as well as the growth in total revenues were influenced between [1%-2%]. Further, the integration rate of the company's crude oil into its refining operations was also tested, as this driver significantly influences its Downstream revenue projections. During this analysis, three scenarios were considered, a Base case scenario; a best case scenario; and a Worst case scenario.

### Upstream Variables

The Best case scenario relates to a slower energy transition worldwide, a strong economic rebound from China and Europe, as well as insignificant crude oil and natural gas projections in order to meet global demand. Considering this environment, prices would be set to surge in the following years and Saudi Aramco would be able to sell higher quantities of crude, as global economies would need to boost its energy sources. Furthermore, a resurgence in economies such as the Chinese and the German ones, would also imply higher demand for Saudi Aramco's products, namely its natural gas. Finally, with Chinese corporations being the main producer of Saudi Aramco's chemical products, a Chinese rebound would significantly boost Chemical products' revenues. As such, this scenario demonstrates the significant upside that Saudi Aramco has a company can have, as the projected Shareholder return would stand at SAR 45.96, possessing an upside potential of 67.44%.

### Downstream Variables

Considering the Worst case scenario, it relates to a faster energy transition and electric vehicle adoption by nations, lacklustre Chinese economic conditions and a consequent recession into the future. Further, newly president-elect of the United States, Donald Trump, is set to impose policies that will boost the nation's ability to produce natural gas and crude oil, significantly affecting market prices for these commodities in a negative manner. In this situation, prices would decline in the following years and global oil supply would be higher than demand, particularly from 2030 onwards. As such, Saudi Aramco would have to settle for lower crude prices and potentially decreasing quantities sold. Moreover, a Chinese recession would imply notably low demand levels for the company's chemical business, which are the main driver for Saudi Aramco's growth prospects in the future. Finally, EV adoption would hinder its refining business,

further decreasing total Downstream revenues. Hence, this scenario demonstrates a potential downside to Saudi Aramco's energy and chemical business, attributed to a projected Shareholder return of SAR 22.83, representing an upside potential of -16.83%.

Considering the analyses performed, it is worth noting the disparity of 50.65% between the Best and Worst cases Upside Potentials, despite varying the same levels and at the same rate. This goes to show Saudi Aramco's stability as a business for the future and positive outlooks, which, despite having limited life on determined assets, the company is able to create significant value from the and also determine a clear and profitable strategy for the future. Regardless, the lack of liquidity around the company's shares, with most shares being owned by the Saudi government, represents a constraint around a potential share price surge in the future.

## Final Recommendations

Based on our analysis, we issue a HOLD recommendation for Saudi Aramco's stock, with a price target of SAR 28.48 for FY2025. This reflects an expected total shareholder return of 4.73%, supported by a dividend yield of SAR 1.43 per share. While Saudi Aramco's unparalleled scale, cost leadership, and vertically integrated business model position it as a dominant player in the global energy market, the company faces notable risks stemming from commodity price volatility, energy transition challenges, and its reliance on in-Kingdom revenues. From having the largest crude oil reserves from oil majors, to benefitting from notably high operating margins, Saudi Aramco possesses all the tools to remain a highly lucrative and stable company into the future. Furthermore, a consistent dividend policy followed by the company, having distributed SAR 1.55 per share in 2023, is set to remain constant into the future, coupled with a SEO of 1.7 billion additional shares being issued. Finally, its dominant position as the main crude oil provider and the sheer difference in size compared to other oil majors presents a significant competitive advantage.

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### Report Recommendations

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<b>Buy</b>	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
<b>Hold</b>	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
<b>Sell</b>	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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## Appendix

Year ended December 31	Reformulated Income statement											steady state					
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F
All numbers in million SAR																	
<b>Core Business</b>																	
<b>Upstream</b>																	
Revenue from contracts with customers	789 659	703 148	417 778	650 629	1 027 380	784 742	682 954	752 610	741 771	761 696	775 452	789 498	803 839	793 403	783 134	773 030	763 090
Crude oil	720 010	645 499	377 094	600 673	971 325	746 689	637 240	692 416	674 690	696 786	708 109	719 617	731 311	720 378	709 606	699 000	688 550
Natural gas and NGLs	69 649	57 649	40 684	49 956	56 055	38 053	45 714	60 194	67 081	64 910	67 343	69 881	72 528	73 024	73 525	74 030	74 540
Movement between provisional and final prices	(1 756)	5 405	(7 286)	5 026	(3 142)	(4 75)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)	(3 71)
Other revenue	569	697	464	411	390	375	491	541	533	547	557	567	577	570	562	555	548
External revenue	788 472	709 250	410 956	656 066	1 024 628	784 642	683 073	752 779	741 932	761 872	775 638	789 693	804 045	793 601	783 325	773 214	763 267
Other income related to sales	37 189	34 446	38 878	58 905	85 475	71 361	55 554	61 220	60 338	61 959	63 078	64 220	65 387	64 538	63 703	62 881	62 072
Revenue and other income related to sales	825 661	743 696	449 834	714 971	1 110 103	856 003	738 627	813 999	802 270	823 830	838 716	853 913	869 432	858 139	847 027	836 095	825 339
Royalties and other taxes	(127 930)	(109 643)	(47 017)	(69 003)	(167 398)	(106 997)	(92 218)	(101 628)	(100 164)	(102 856)	(104 714)	(106 612)	(108 549)	(107 139)	(105 752)	(104 387)	(103 044)
Producing and manufacturing	(34 483)	(35 064)	(38 857)	(36 455)	(49 954)	(44 555)	(41 595)	(45 839)	(45 178)	(46 393)	(47 231)	(48 087)	(48 961)	(48 325)	(47 699)	(47 083)	(46 478)
Exploration	(9 928)	(7 291)	(7 293)	(7 285)	(8 447)	(9 416)	(8 098)	(8 924)	(8 795)	(9 032)	(9 195)	(9 361)	(9 532)	(9 408)	(9 286)	(9 166)	(9 048)
Selling, administrative and general	(19 155)	(22 036)	(24 509)	(28 325)	(40 997)	(35 455)	(29 853)	(32 899)	(32 425)	(33 296)	(33 898)	(34 512)	(35 139)	(34 683)	(34 234)	(33 792)	(33 357)
Research and development	(1 359)	(1 293)	(1 477)	(1 844)	(2 164)	(2 396)	(1 959)	(2 159)	(2 128)	(2 185)	(2 225)	(2 265)	(2 306)	(2 276)	(2 247)	(2 218)	(2 189)
Depreciation and amortization	(27 495)	(30 855)	(39 702)	(42 503)	(44 209)	(48 997)	(47 731)	(50 716)	(53 701)	(56 686)	(57 710)	(58 755)	(59 823)	(59 046)	(58 282)	(57 530)	(56 790)
Operating costs	(218 351)	(206 183)	(158 854)	(185 415)	(313 170)	(247 817)	(221 453)	(242 165)	(242 392)	(250 448)	(254 973)	(259 592)	(264 310)	(260 877)	(257 499)	(254 176)	(250 907)
Upstream EBIT	607 310	537 513	290 980	529 556	796 933	608 186	517 174	571 833	559 878	573 382	583 743	594 321	605 122	597 262	589 528	581 919	574 432
Statutory taxes	(303 655)	(268 757)	(145 490)	(264 778)	(398 466)	(304 993)	(258 587)	(285 917)	(279 939)	(286 691)	(291 871)	(297 160)	(302 961)	(298 631)	(294 764)	(290 959)	(287 216)
Zakat expense	(786)	0	(402)	(938)	(970)	(668)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)
Other comprehensive income	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Cash flow hedge and other	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Upstream result	302 892	268 544	144 931	263 994	398 207	302 943	257 991	285 321	279 343	286 095	291 276	296 565	301 965	298 035	294 168	290 364	286 620
<b>Downstream</b>																	
Revenue from contracts with customers	403 306	393 296	353 468	684 762	975 967	859 372	780 767	845 075	866 957	914 581	958 092	1 003 956	1 052 308	1 055 871	1 059 761	1 063 980	1 068 513
Crude oil	8 268	22 049	31 400	60 208	105 401	91 945	78 468	85 262	83 079	85 800	87 194	88 611	90 051	88 705	87 379	86 073	84 786
Refined and chemical products	392 882	369 478	314 066	607 771	835 884	750 355	694 925	740 653	763 869	809 039	850 856	894 990	941 575	946 424	951 578	957 041	962 816
Natural gas and NGLs	2 156	1 769	2 287	3 992	19 282	4 018	5 637	7 423	8 272	8 004	8 304	8 617	8 944	9 005	9 067	9 129	9 192
Metal Products	0	0	5 715	12 791	15 390	13 054	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738
Movement between provisional and final prices	(514)	245	(58)	273	(255)	(74)	26	26	26	26	26	26	26	26	26	26	26
Other Revenue	1 783	1 558	2 377	4 342	4 969	7 390	4 797	5 192	5 326	5 619	5 886	6 168	6 465	6 487	6 511	6 537	6 565
External Revenue	404 575	395 099	355 787	689 377	980 681	866 688	785 590	850 293	872 310	920 226	964 004	1 010 150	1 058 799	1 062 384	1 066 298	1 070 543	1 075 122
Other income related to sales	115 452	96 643	55 104	95 923	173 943	131 731	122 481	132 569	136 002	143 473	150 299	157 493	165 079	165 637	166 248	166 910	167 624
Revenue and other income related to sales	520 027	491 742	410 891	785 300	1 154 624	998 419	908 071	982 863	1 008 312	1 063 698	1 114 303	1 167 643	1 223 878	1 228 021	1 232 545	1 237 452	1 242 745
Royalties and other taxes	(80 575)	(72 498)	(42 947)	(75 790)	(174 112)	(124 798)	(113 373)	(122 711)	(125 888)	(132 804)	(139 122)	(145 781)	(152 802)	(153 319)	(153 884)	(154 497)	(155 158)
Purchases	(201 176)	(225 170)	(181 116)	(352 377)	(490 890)	(471 225)	(410 008)	(339 473)	(353 109)	(369 298)	(387 344)	(406 361)	(426 406)	(428 464)	(430 646)	(432 954)	(435 387)
Refined and Chemical products	(160 045)	(157 438)	(122 011)	(226 649)	(291 696)	(277 022)	(264 042)	(285 526)	(294 746)	(311 889)	(328 010)	(345 023)	(362 982)	(364 851)	(366 838)	(368 944)	(371 171)
Crude oil	(41 131)	(67 732)	(47 911)	(93 418)	(152 556)	(162 236)	(113 057)	(10 615)	(10 344)	(10 682)	(10 856)	(11 032)	(11 212)	(11 044)	(10 879)	(10 716)	(10 556)
NGL and other products	0	0	(11 194)	(32 310)	(46 438)	(31 967)	(32 909)	(43 332)	(48 290)	(46 727)	(48 479)	(50 306)	(52 211)	(52 599)	(52 929)	(53 293)	(53 660)
Producing and manufacturing	(21 719)	(23 185)	(35 493)	(40 040)	(51 958)	(51 968)	(51 136)	(55 348)	(56 781)	(59 900)	(62 750)	(65 754)	(68 921)	(69 154)	(69 409)	(69 685)	(69 983)
Selling, administrative and general	(12 064)	(14 571)	(22 387)	(31 112)	(42 642)	(41 354)	(36 701)	(39 724)	(40 753)	(42 991)	(45 036)	(47 192)	(48 465)	(48 832)	(49 815)	(50 014)	(50 228)
Research and development	(856)	(855)	(1 349)	(2 025)	(2 251)	(2 795)	(2 409)	(2 428)	(2 490)	(2 627)	(2 752)	(2 884)	(3 023)	(3 033)	(3 044)	(3 056)	(3 069)
Depreciation and amortization	(11 941)	(14 350)	(30 888)	(37 764)	(41 425)	(42 352)	(47 710)	(52 659)	(57 607)	(62 555)	(65 531)	(68 668)	(71 975)	(72 219)	(72 485)	(72 774)	(73 085)
Operating costs	(328 330)	(350 628)	(314 180)	(539 109)	(803 078)	(734 492)	(661 338)	(612 343)	(636 629)	(670 176)	(702 536)	(736 641)	(772 591)	(775 822)	(779 284)	(782 979)	(786 909)
Share of results of joint ventures and associates	(1 415)	(9 455)	(3 554)	7 874	2 873	(4 001)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)
Downstream EBIT	190 282	131 659	93 157	254 065	354 419	259 926	245 461	369 267	370 430	392 270	410 515	429 570	450 034	450 947	452 009	453 221	454 583
Statutory taxes	(39 056)	(26 332)	(18 631)	(50 813)	(70 884)	(50 993)	(49 096)	(73 853)	(74 086)	(78 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)
Tax adjustments	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 224)	(109 257)	(114 568)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)
Zakat expense	(495)	0	(367)	(1 030)	(1 009)	(779)	(637)	(765)	(844)	(807)	(766)	(784)	(789)	(794)	(784)	(780)	(782)
Other comprehensive income	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
Cash flow hedge and other	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
Downstream result	113 421	63 741	47 904	160 007	205 962	134 815	132 585	196 924	197 286	208 785	218 389	228 468	239 064	239 415	239 859	240 377	240 967
<b>Corporate</b>																	
Other Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532
External Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532
Revenue and other income related to sales	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532
Selling, administrative and general	(31)	(40)	(74)	(59)	(61)	(81)	(81)	(89)	(90)	(93)	(97)	(100)	(104)	(103)	(103)	(103)	(102)
Research and development	(2)	(2)	(4)	(4)	(3)	(5)	(5)	(5)	(5)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Depreciation and amortization	(1 898)	(5 061)	(5 618)	(5 254)	(5 984)	(5 691)	(5 833)	(6 365)	(6 413)	(6 686)	(6 918)	(7 161)	(7 415)	(7 390)	(7 366)	(7 345)	(7 326)
Operating costs	(1 931)	(5 103)	(5 697)	(5 317)	(6 048)	(5 777)	(5 919)	(6 459)	(6 509)	(6 785)	(7 021)	(7 267)	(7 5				



Year ended December 31	Cash Flow Statement												Steady state				
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F
All numbers in million SAR																	
<b>Upstream</b>																	
EBIT	607 310	537 513	290 980	529 556	796 933	608 186	517 174	571 833	559 878	573 382	583 743	594 321	605 122	597 262	589 528	581 919	574 432
Statutory Taxes	(303 655)	(268 757)	(145 490)	(264 778)	(398 466)	(304 093)	(258 587)	(285 917)	(279 939)	(286 691)	(291 871)	(297 160)	(302 561)	(298 631)	(294 764)	(290 959)	(287 216)
Zakat expenses	(786)	0	(402)	(938)	(970)	(668)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)
<b>Recurrent NOPLAT</b>	<b>302 869</b>	<b>268 757</b>	<b>145 087</b>	<b>263 840</b>	<b>397 496</b>	<b>303 425</b>	<b>257 991</b>	<b>285 321</b>	<b>279 343</b>	<b>286 095</b>	<b>291 276</b>	<b>296 565</b>	<b>301 965</b>	<b>298 035</b>	<b>294 168</b>	<b>290 364</b>	<b>286 620</b>
Depreciation and amortization	27 495	30 855	39 702	42 503	44 209	48 997	47 731	50 716	53 701	56 686	57 710	58 755	59 823	59 046	58 282	57 530	56 790
Other comprehensive income	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	278	92	144	216	0	0	0	0	0	0	0	0	0	0	0
<b>Upstream Gross Cash Flow</b>	<b>330 387</b>	<b>299 399</b>	<b>184 910</b>	<b>306 590</b>	<b>442 559</b>	<b>352 156</b>	<b>305 722</b>	<b>336 037</b>	<b>333 044</b>	<b>342 782</b>	<b>348 986</b>	<b>355 320</b>	<b>361 788</b>	<b>357 081</b>	<b>352 450</b>	<b>347 893</b>	<b>343 410</b>
Change in Net Working Capital		14 495	29 524	(44 424)	(44 170)	26 657	20 981	(12 108)	1 746	(3 555)	(2 520)	(2 574)	(2 630)	1 610	1 576	1 542	1 508
Net Capex-PPE	(85 862)	(83 596)	(49 920)	(79 539)	(90 626)	(99 556)	(99 556)	(103 478)	(106 464)	(109 449)	(75 805)	(77 230)	(78 688)	(45 317)	(44 774)	(44 239)	(43 714)
Investment in intangibles	(2 018)	3 087	1 774	190	(892)	(2 716)	(2 716)	(1 023)	(841)	(910)	(318)	(325)	(332)	259	255	251	247
Change in Provisions	46	3 541	(659)	1 111	(600)	(140)	(140)	1 313	(204)	376	259	265	270	(197)	(194)	(190)	(187)
Change in Other Operating Net Assets	19 232	(8 487)	39 066	33 904	1 527	(7 882)	(7 882)	12 606	8 105	9 819	3 848	3 932	4 018	(2 614)	(2 562)	(2 511)	(2 460)
<b>Upstream Unlevered Free Cash Flow</b>	<b>245 292</b>	<b>128 980</b>	<b>252 428</b>	<b>354 055</b>	<b>288 223</b>	<b>216 408</b>	<b>233 347</b>	<b>235 387</b>	<b>239 063</b>	<b>274 450</b>	<b>279 387</b>	<b>284 426</b>	<b>310 823</b>	<b>306 751</b>	<b>302 745</b>	<b>298 803</b>	<b>298 803</b>
<b>Downstream</b>																	
EBIT	190 282	131 659	93 157	254 065	354 419	259 926	245 481	369 267	370 430	392 270	410 515	429 750	450 034	450 947	452 009	453 221	454 583
Statutory Taxes	(38 056)	(26 332)	(18 631)	(50 813)	(70 884)	(51 985)	(49 096)	(73 853)	(74 086)	(78 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)
Tax adjustments	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 224)	(109 257)	(114 568)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)
Zakat expenses	(495)	0	(367)	(1 030)	(1 009)	(779)	(637)	(765)	(844)	(607)	(766)	(764)	(789)	(794)	(784)	(780)	(782)
<b>Recurrent NOPLAT</b>	<b>113 407</b>	<b>63 881</b>	<b>48 047</b>	<b>159 838</b>	<b>265 223</b>	<b>135 377</b>	<b>132 585</b>	<b>196 924</b>	<b>197 286</b>	<b>208 785</b>	<b>218 389</b>	<b>228 468</b>	<b>239 664</b>	<b>239 454</b>	<b>239 859</b>	<b>240 377</b>	<b>240 967</b>
Depreciation and amortization	11 941	14 350	30 888	37 764	41 425	42 352	47 710	52 659	57 607	62 555	65 531	68 668	71 975	72 219	72 485	72 774	73 085
Other comprehensive income	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	254	101	149	252	0	0	0	0	0	0	0	0	0	0	0
Movements to unappropriated reserves	0	0	0	(415)	885	119	0	0	0	0	0	0	0	0	0	0	0
<b>Downstream Gross Cash Flow</b>	<b>125 362</b>	<b>78 091</b>	<b>79 045</b>	<b>197 458</b>	<b>248 421</b>	<b>177 537</b>	<b>180 296</b>	<b>249 583</b>	<b>254 893</b>	<b>271 941</b>	<b>283 920</b>	<b>297 137</b>	<b>311 040</b>	<b>311 634</b>	<b>312 344</b>	<b>313 150</b>	<b>314 052</b>
Change in Net Working Capital		10 041	9 290	(52 027)	(47 210)	30 735	10 337	(12 543)	(2 416)	(6 236)	(5 517)	(5 799)	(6 097)	(357)	(400)	(443)	(486)
Net Capex-PPE	(53 012)	(209 181)	(63 976)	(63 447)	(83 789)	(101 630)	(101 630)	(113 934)	(118 882)	(123 830)	(102 383)	(107 512)	(112 927)	(75 237)	(75 780)	(76 347)	(76 940)
Investment in intangibles	(1 207)	(137 510)	2 102	1 150	(4 332)	(868)	(868)	(1 148)	(1 088)	(1 131)	(716)	(754)	(794)	(67)	(73)	(78)	(84)
Change in Provisions	1 180	1 414	5 563	188	1 569	595	595	154	1 741	343	986	890	938	74	80	87	87
Change in Other Operating Net Assets	5 784	17 978	2 239	45 754	7 517	(6 962)	(6 962)	5 035	9 750	6 562	6 107	6 067	6 388	2 618	2 682	2 731	2 781
Change in Investments in joint ventures and associates	2 841	(46 238)	(3 583)	(2 637)	2 722	(1 262)	(1 262)	(1 285)	(1 309)	(1 333)	(1 357)	(1 381)	(1 407)	(1 432)	(1 458)	(1 485)	(1 512)
<b>Downstream Unlevered Free Cash Flow</b>	<b>42 697</b>	<b>(285 201)</b>	<b>87 776</b>	<b>182 218</b>	<b>131 960</b>	<b>80 685</b>	<b>125 862</b>	<b>142 690</b>	<b>145 714</b>	<b>181 041</b>	<b>188 647</b>	<b>197 143</b>	<b>238 035</b>	<b>235 389</b>	<b>235 609</b>	<b>235 898</b>	<b>235 898</b>
<b>Corporate</b>																	
EBIT	(602)	(3 756)	(4 331)	(3 830)	(4 402)	(3 826)	(3 903)	(4 259)	(4 292)	(4 474)	(4 629)	(4 792)	(4 962)	(4 945)	(4 929)	(4 915)	(4 902)
Statutory taxes	120	751	866	766	880	765	781	852	858	895	926	958	992	989	986	983	980
Zakat expenses	(1)	0	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Recurrent NOPLAT</b>	<b>(483)</b>	<b>(3 005)</b>	<b>(3 466)</b>	<b>(3 066)</b>	<b>(3 523)</b>	<b>(3 063)</b>	<b>(3 124)</b>	<b>(3 409)</b>	<b>(3 435)</b>	<b>(3 581)</b>	<b>(3 705)</b>	<b>(3 835)</b>	<b>(3 971)</b>	<b>(3 957)</b>	<b>(3 945)</b>	<b>(3 933)</b>	<b>(3 923)</b>
Depreciation and amortization	1 898	5 061	5 618	5 254	5 984	5 691	5 833	6 365	6 413	6 686	6 918	7 161	7 415	7 390	7 366	7 345	7 326
Other non-cash adjustments to shareholders	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Corporate Gross Cash Flow</b>	<b>1 415</b>	<b>2 056</b>	<b>2 153</b>	<b>2 188</b>	<b>2 461</b>	<b>2 629</b>	<b>2 709</b>	<b>2 956</b>	<b>2 979</b>	<b>3 105</b>	<b>3 213</b>	<b>3 326</b>	<b>3 444</b>	<b>3 432</b>	<b>3 421</b>	<b>3 412</b>	<b>3 403</b>
Change in Net Working Capital	(1 047)	(7 323)	(5 914)	(3 087)	(2 877)	2 686	2 686	(2 229)	(1 001)	(1 782)	(1 681)	(1 785)	(1 894)	(1 866)	(1 716)	(85)	(95)
Net Capex-PPE	(19 579)	(10 878)	(6 482)	(7 581)	(4 076)	(7 700)	(7 700)	(11 643)	(6 896)	(9 390)	(9 220)	(9 570)	(9 937)	(7 138)	(7 135)	(7 133)	(7 134)
Investment in intangibles	(1)	(2)	3	0	(1)	(1)	(1)	(8)	(9)	(9)	(9)	(9)	(9)	0	0	0	0
Change in Provisions	153	4 268	(3 868)	233	(541)	58	58	1 152	(1 297)	624	(103)	40	43	(804)	5	5	5
Change in Other Operating Net Assets	(14 358)	(13 093)	29 518	(30 398)	(27 483)	16 481	16 481	(125)	(7 620)	(2 761)	(1 773)	(1 452)	(1 476)	(1 048)	916	896	875
<b>Corporate Unlevered Free Cash Flow</b>	<b>(32 776)</b>	<b>(24 874)</b>	<b>15 445</b>	<b>(38 372)</b>	<b>(32 350)</b>	<b>14 233</b>	<b>(9 889)</b>	<b>(13 835)</b>	<b>(10 204)</b>	<b>(9 564)</b>	<b>(9 440)</b>	<b>(9 821)</b>	<b>(7 423)</b>	<b>(3 968)</b>	<b>(2 906)</b>	<b>(2 945)</b>	<b>(2 945)</b>
Non-Core EBIT	1 084	1 986	1 336	992	6 939	9 692	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189
Statutory Taxes	(217)	(397)	(267)	(196)	(1 386)	(1 936)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)
Change in Non-Core IC	(8 137)	714	(8 716)	(21 400)	(23 944)	12 973	12 973	(7 827)	(7 550)	(9 213)	(10 383)	(11 828)	(13 507)	(14 889)	(16 865)	(19 362)	(22 225)
Other comprehensive income	3 835	1 109	(3 556)	7 540	17 176	(665)	0	0	0	0	0	0	0	0	0	0	0
<b>Total Unlevered FCF</b>	<b>249 774</b>	<b>(182 868)</b>	<b>355 266</b>	<b>499 228</b>	<b>370 977</b>	<b>327 650</b>	<b>344 843</b>	<b>360 043</b>	<b>368 712</b>	<b>438 915</b>	<b>450 117</b>	<b>461 591</b>	<b>530 096</b>	<b>524 658</b>	<b>519 437</b>	<b>512 883</b>	<b>512 883</b>
Finance Income	2 781	5 365	1 846	795	7 955	22 275	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640
Finance costs	(2 969)	(6 026)	(10 564)	(12 058)	(8 302)	(8 186)	(831)	(845)	(859)	(873)	(879)	(885)	(889)	(836)	(832)	(830)	(877)
Tax shield	36	132	1 744	2 253	185	(2 818)	(1 362)	(1 359)	(1 356)	(1 353)	(1 352)	(1 351)	(1 350)	(1 351)	(1 352)	(1 352)	(1 353)
Change in Net Debt	64 403	315 422	(105 792)	(260 156)	449	17 901	17 901	310	293	291	134	115	93	(74)	(67)	(60)	(50)
Transactions with shareholders	(313 613)	(225 709)	(280 956)	(280 764)	(366 007)	(347 214)	(347 214)	(345 078)	(360 445)	(368 827)	(438 665)	(449 629)	(460 854)	(524 705)	(519 344)	(514 197)	(507 716)
Transactions with non-controlling interests	(36)	100 129	40 492	42 434	(16 690)	(3 785)	(3 785)	(5 111)	(5 316)	(5 590)	(5 793)	(6 007)	(6 231)	(10 721)	(10 654)	(10 589)	(10 527)
<b>Financing Parties FCF</b>	<b>(249 774)</b>	<b>182 868</b>	<b>(355 266)</b>	<b>(499 228)</b>	<b>(370 977)</b>	<b>(327 650)</b>	<b>(344 843)</b>	<b>(360 043)</b>	<b>(368 712)</b>	<b>(438 915)</b>	<b>(450 117)</b>	<b>(461 591)</b>					

ExxonMobil						
Year	Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,75
		2018A	2019A	2020A	2021A	2022A
<b>Returns</b>						
Return on Equity			7%	-12%	15%	33%
Return on Assets			4%	-6%	7%	16%
Return on Invested Capital - Core			16%	1%	18%	30%
<b>Margins</b>						
Gross Margin		46%	46%	48%	46%	45%
EBITDA Margin		17%	15%	10%	18%	25%
EBIT Margin		11%	8%	-15%	11%	19%
Net Income Margin		7%	5%	-12%	8%	13%

Data						
Lifting costs (\$/per barrel)			15	14	11	13
Total production of hydrocarbons in million boe/d						3 738
Proved reserves of crude oil						6 847
Proved reserves of natural gas in (billion cubic feet)						34 464
Total proved reserves in mmboe						16 928
EV						397 021
EBIT						53 632
<b>Multiples</b>						
EV/EBIT						7,4x
EV/Revenues						1,2x
Price/earnings						10,5x
Price to Book						1,9x
EV(in million SARs)/million boe produced						398,3x
Field Netback						53,8x
EV/Reserves						88,0x

Liquidity Analysis						
Current Ratio		0,8x	0,8x	0,8x	1,0x	1,4x
Quick Ratio		0,5x	0,5x	0,5x	0,7x	1,1x
Cash Ratio		0,1x	0,0x	0,1x	0,1x	0,5x
<b>Cash Conversion Cycle</b>		<b>(3)</b>	<b>(10)</b>	<b>(6)</b>	<b>(19)</b>	<b>(12)</b>
Average Collection Period		31	37	41	41	37
Average Holding Period		36	37	55	36	33
Average Payable Period		70	84	102	96	85

Petro China						
Year	Exchange rate (CNY/SAR)	0,55	0,54	0,57	0,59	0,54
		2018A	2019A	2020A	2021A	2022A
<b>Returns</b>						
Return on Equity			6%	3%	9%	13%
Return on Assets			3%	1%	5%	7%
Return on Invested Capital - Core			21%	13%	26%	34%
<b>Margins</b>						
Gross Margin		34%	32%	36%	33%	32%
EBITDA Margin		14%	14%	14%	15%	15%
EBIT Margin		6%	5%	4%	7%	8%
Net Income Margin		3%	3%	2%	4%	5%

Data						
Lifting costs (\$/per barrel)			12	11	11	12
Total production of hydrocarbons in million boe/d						1 759
Proved reserves of crude oil						6 219
Proved reserves of natural gas in (billion cubic feet)						72 794
Total proved reserves in mmboe						19 322
EV						1 380 000
EBIT						255 568
<b>Multiples</b>						
EV/EBIT						5,4x
EV/Revenues						0,5x
Price/earnings						5,3x
Price to Book						0,6x
EV(in million SARs)/million boe produced						415,8x
Field Netback						77,0x
EV/Reserves						37,9x

Liquidity Analysis						
Current Ratio		0,7x	0,7x	0,8x	0,9x	1,0x
Quick Ratio		0,4x	0,4x	0,6x	0,7x	0,7x
Cash Ratio		0,2x	0,2x	0,2x	0,3x	0,4x
<b>Cash Conversion Cycle</b>		<b>(7)</b>	<b>(7)</b>	<b>(17)</b>	<b>(11)</b>	<b>(12)</b>
Average Collection Period		9	9	10	8	8
Average Holding Period		42	39	37	30	28
Average Payable Period		58	56	63	49	48

Chevron						
Year	Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,75
		2018A	2019A	2020A	2021A	2022A
<b>Returns</b>						
Return on Equity			2%	-4%	12%	26%
Return on Assets			1%	-2%	7%	15%
Return on Invested Capital - Core			5%	-1%	14%	30%
<b>Margins</b>						
Gross Margin		43%	45%	47%	43%	41%
EBITDA Margin		24%	24%	13%	25%	27%
EBIT Margin		13%	4%	-7%	14%	20%
Net Income Margin		9%	2%	-6%	10%	14%

Data						
Lifting costs (\$/per barrel)			10	9	11	11
Total production of hydrocarbons in million boe/d						1 139
Proved reserves of crude oil						4 777
Proved reserves of natural gas in (billion cubic feet)						31 610
Total proved reserves in mmboe						10 647
EV						293 230
EBIT						30 053
<b>Multiples</b>						
EV/EBIT						9,8x
EV/Revenues						1,5x
Price/earnings						11,8x
Price to Book						1,7x
EV(in million SARs)/million boe produced						965,4x
Field Netback						98,9x
EV/Reserves						103,3x

Liquidity Analysis						
Current Ratio		1,3x	1,1x	1,2x	1,3x	1,5x
Quick Ratio		1,0x	0,8x	0,9x	1,0x	1,2x
Cash Ratio		0,3x	0,2x	0,3x	0,2x	0,5x
<b>Cash Conversion Cycle</b>		<b>2</b>	<b>(4)</b>	<b>7</b>	<b>1</b>	<b>4</b>
Average Collection Period		33	33	44	41	30
Average Holding Period		22	26	40	25	21
Average Payable Period		53	64	77	65	47

Shell						
Year	Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,75
		2018A	2019A	2020A	2021A	2022A
<b>Returns</b>						
Return on Equity			8%	-11%	11%	22%
Return on Assets			4%	-5%	5%	10%
Return on Invested Capital - Core			7%	-6%	7%	18%
<b>Margins</b>						
Gross Margin		19%	21%	23%	27%	26%
EBITDA Margin		16%	17%	16%	22%	21%
EBIT Margin		10%	9%	-12%	12%	18%
Net Income Margin		6%	5%	-12%	8%	11%

Data						
Lifting costs (\$/per barrel)			13	11	10	10
Total production of hydrocarbons in million boe/d						3 427
Proved reserves of crude oil						3 567
Proved reserves of natural gas in bsct						29 729
Total proved reserves in mmboe						9 787
EV						252 640
EBIT						27 348
<b>Multiples</b>						
EV/EBIT						9,2x
EV/Revenues						0,8x
Price/earnings						11,4x
Price to Book						1,1x
EV(in million SARs)/million boe produced						276,4x
Field Netback						29,9x
EV/Reserves						96,8x

Liquidity Analysis						
Current Ratio		1,3x	1,2x	1,4x	1,4x	1,3x
Quick Ratio		1,0x	0,9x	1,1x	1,1x	1,1x
Cash Ratio		0,3x	0,2x	0,4x	0,3x	0,4x
<b>Cash Conversion Cycle</b>		<b>32</b>	<b>37</b>	<b>68</b>	<b>66</b>	<b>38</b>
Average Collection Period		39	45	106	89	50
Average Holding Period		48	56	136	121	68
Average Payable Period		55	64	174	145	81

British Petroleum						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		4%	-21%	10%	-2%	19,1%
Return on Assets		1%	-7%	3%	0%	6%
Return on Invested Capital - Core		10%	-8%	5%	15%	23%
<b>Margins</b>						
Gross Margin	17%	31%	26%	28%	32%	32%
EBITDA Margin	11%	18%	-6%	20%	13%	20%
EBIT Margin	6%	7%	-20%	11%	7%	13%
Net Income Margin	3%	3%	-19%	5%	-1%	7%

Saudi Aramco						
Year	2018A	2019A	2020A	2021A	2022A	2023A
<b>Returns</b>						
Return on Equity		32%	16%	33%	37%	26%
Return on Assets		25%	12%	22%	28%	18%
Return on Invested Capital - Core		33%	18%	29%	40%	27%
<b>Margins</b>						
Gross Margin	57%	49%	47%	50%	53%	47%
EBITDA Margin	39%	32%	31%	36%	34%	31%
EBIT Margin	37%	27%	23%	32%	31%	26%
Net Income Margin	22%	13%	12%	20%	18%	14%

Data						
Lifting costs (\$/per barrel)		13	11	10	10	10
Total production of hydrocarbons in million boe/d						2 313
Proved reserves of crude oil						3 321
Proved reserves of natural gas in bscf						17 471
Total proved reserves in mmboe						6 759
EV						129 670
EBIT						37 300
<b>Multiples</b>						
EV/EBIT						3,5x
EV/Revenues						0,6x
Price/earnings						4,3x
Price to Book						1,4x
EV/million boe produced						210,2x
Field Netback						60,5x
EV/Reserves						71,9x

Data						
Lifting costs (\$/per barrel)		2,83	3,01	3,04	3,05	3,19
Total production of hydrocarbons in million boe/d						4 672
Proved reserves of crude oil						191 349
Proved reserves of natural gas in bscf						207 450
Total proved reserves in mmboe						251 195
EV						7 985 650
EBIT						868 287
<b>Multiples</b>						
EV/EBIT						9,2x
EV/Revenues						4,3x
Price/earnings						17,6x
Price to Book						4,6x
EV/million boe produced						1709,3x
Field Netback						185,8x
EV/Reserves						31,8x

Liquidity Analysis						
Current Ratio	1,0x	1,0x	1,2x	1,1x	1,1x	1,2x
Quick Ratio	0,8x	0,7x	0,9x	0,8x	0,8x	0,9x
Cash Ratio	0,3x	0,3x	0,5x	0,4x	0,3x	0,4x
<b>Cash Conversion Cycle</b>	<b>(11)</b>	<b>(29)</b>	<b>(17)</b>	<b>(28)</b>	<b>(27)</b>	<b>(43)</b>
Average Collection Period	29	55	60	60	50	53
Average Holding Period	26	67	68	73	60	57
Average Payable Period	66	151	145	161	137	154

Liquidity Analysis						
Current Ratio	2,1x	1,9x	1,6x	2,0x	2,6x	2,3x
Quick Ratio	1,8x	1,7x	1,4x	1,8x	2,3x	2,0x
Cash Ratio	1,0x	1,0x	0,9x	1,1x	1,5x	1,2x
<b>Cash Conversion Cycle</b>	<b>34</b>	<b>31</b>	<b>54</b>	<b>47</b>	<b>41</b>	<b>39</b>
Average Collection Period	25	28	36	34	26	32
Average Holding Period	36	36	60	50	41	41
Average Payable Period	27	32	43	37	27	34

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