

## COMPANY OVERVIEW

### East Africa's leading CO<sub>2</sub> manufacturer

Carbacid Investments plc is an investment holding company, listed on the Nairobi Securities Exchange. It is involved in the production, processing, and sale of carbon dioxide gas through its principal subsidiary, Carbacid (CO<sub>2</sub>) Limited. It has two other subsidiaries, Goodison Twenty-Nine Limited, and Goodison Forty-Seven Limited which are investment companies.

Formerly a sub-division of BEA Sawmills Limited, the company was founded in 1961 through various mergers and acquisitions and renamed Carbacid Investments Limited.

Its distribution network spans across East Africa as well as Zimbabwe, Zambia, Southern Sudan and Somalia.

### Products and Services

Carbacid produces natural, certified food grade (+99.99% purity) carbon dioxide for the beverage and brewery industries, where it is used to carbonate water, soft drinks and alcoholic beverages. The carbon dioxide is extracted from natural underground reservoirs and purified on site. Carbacid's natural CO<sub>2</sub> is certified as Halal compliant.

Other products and services include Individual quick freeze, Industrial CO<sub>2</sub>, Medical CO<sub>2</sub>, Dry ice, Dry ice for vaccine storage, CO<sub>2</sub> for soda makers, Cylinder testing and validation.

### Production Infrastructure and CO<sub>2</sub> Distribution

Economies of scale due to continual investment in the latest technology coupled with superior produce and service is what differentiates Carbacid from its domestic and regional competitors.

The company boasts a robust production infrastructure characterized by two fully operational mines, comprehensive processing facilities, and state-of-the-art quality control measures. Augmenting this impressive setup is a fleet of long-haul trucks equipped with cryogenic tankers, complemented by strategically positioned CO<sub>2</sub> storage tanks at customers' premises.

The proprietary fleet, consisting of pressurized rigid and semi-trailer tankers, efficiently facilitates the distribution of CO<sub>2</sub> throughout the East and Central Africa region. This integrated system underscores the Group's commitment to maintaining a high-quality production capacity and ensuring seamless delivery to their regional clientele.

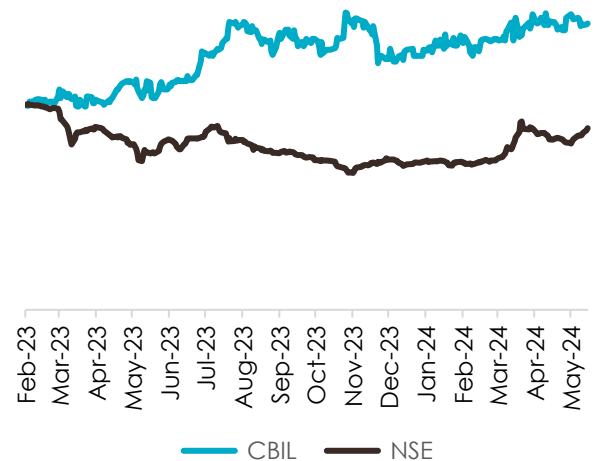
## Share Data

Industry **Basic & diversified chemicals.**

<b>Recommendation</b>	<b>BUY</b>
Current Price (KES) – 21 <sup>st</sup> May 2024	<b>16.90</b>
<b>Target Price (KES)</b>	<b>21.24</b>
Upside	<b>25.3%</b>
52WK High (KES)	<b>18.00</b>
52WK Low (KES)	<b>11.00</b>
Market Cap (Bn)	<b>KES 4.4</b>
Free Float	<b>31.9%</b>
Bloomberg Ticker	CBIL KN

Source: Bloomberg, NSE, NCBA IB Research

### Carbacid Vs NSE Performance



Source: Bloomberg, NSE, NCBA IB Research

### A frontrunner in a specialized industry segment

Carbacid has solidified its position as a dominant force in the CO<sub>2</sub> manufacturing sector. As the primary provider of pure, naturally sourced carbon dioxide in East Africa, it is the largest supplier, catering to prominent beverage bottlers and breweries across the region.

Despite an increase in local competition from alcohol-based CO<sub>2</sub>, the company continues to pursue its strategy to provide an end-to-end stock management for its customers. It strives for full delivery of CO<sub>2</sub> that is free of an alcohol base, which is a particular requirement by select market segments for ethical reasons and improvement of customers' yields.

### Top Shareholding

Below are the top shareholders as of 30<sup>th</sup> April 2024.

Name	No of shares	Shares held %
1. Aksaya Investment Holding Ltd	127,172,592	49.90
2. BOC Kenya Plc	14,850,000	5.83
3. Miss Tessa Irena Friedman	11,275,695	4.42
4. Standard Chartered Kenya Nominee a/c	7,623,600	2.99
5. Mwangi, Peter Kingori	5,658,941	2.22
6. Standard Chartered Kenya Nominee a/c	5,000,000	1.96
7. Kampf, Brenda Clare	4,037,130	1.58
8. Shah, Anju Mohanlal Dharamshi	3,561,100	1.40
9. Shah, Mayur Mohanlal	3,544,800	1.39
10. Shah, Jinit Mohanlal	3,486,400	1.37
	<b>186,184,656</b>	<b>73.06%</b>
11. Other shareholders	68,667,329	26.94
<b>TOTAL</b>	<b>254,851,985</b>	<b>100%</b>

Source: Company Annual Reports, NCBA IB Research

## INVESTMENT CASE

### Exponential Growth & Market Leadership

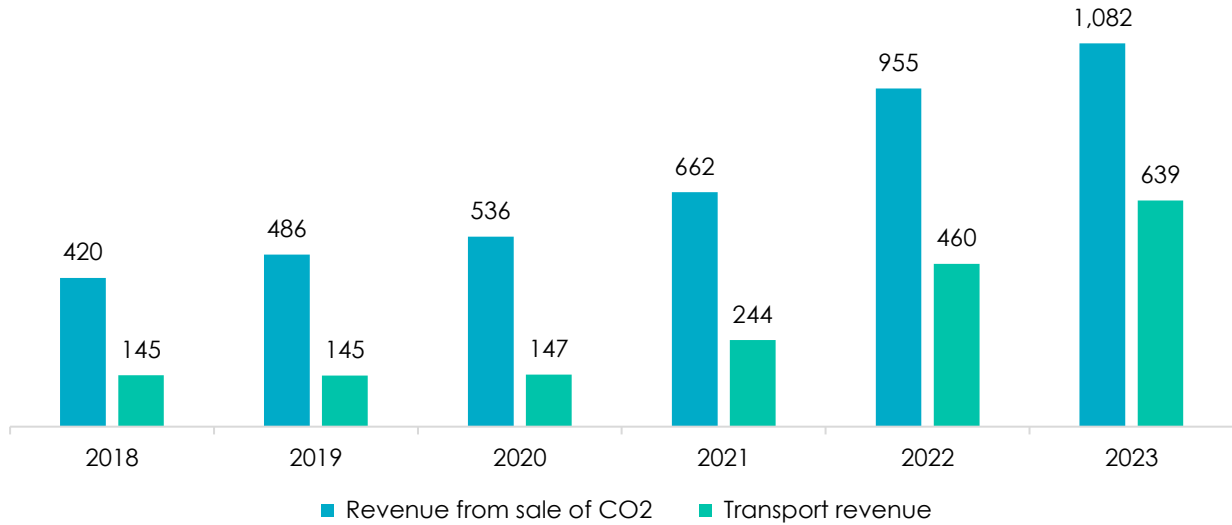
Carbacid has exhibited sturdy growth with a CAGR of 21.90% between 2018 and 2022. The growth has been supported by both local and regional expansion.

Revenue from logistics has also recorded impressive growth of 38.84%, supported by a large delivery fleet of cryogenic tankers enabling timely Turn-around-time, (T-A-T). The firm's continued partnerships with providers such as Scania EA are expected to cement its position in the market.

In 2023 the manufacturer recorded a 21.65% increase in total turnover supported by growth in sales, launch of new products as well as entry into new markets i. e., Zambia, Eastern DRC and Somalia.

We expect revenue from sale of CO<sub>2</sub> and transport revenue to grow by 22.40% and 38.96% respectively driven by the manufacturer's continued investments in new plants and fleet to increase capacity. A new plant is expected to be operational in Q42024.

### Sale of CO<sub>2</sub> & Transport Revenue in KES Mn



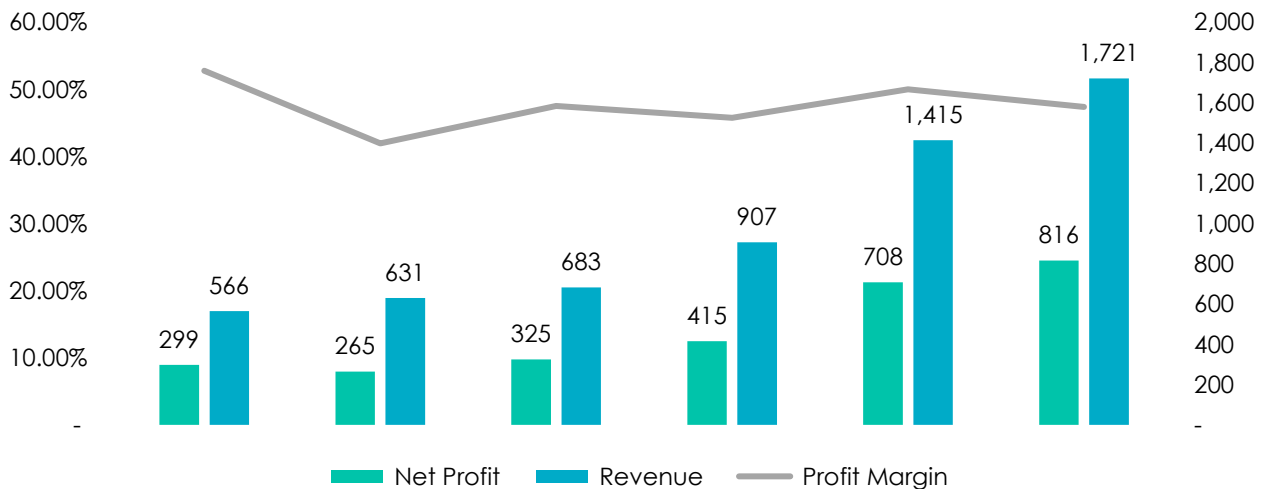
Source: Company financials, NCBA IB Research

We are however cognizant of the impact of continued inflationary pressures, rising costs of power and fuel, which have a direct impact on the operating costs.

Sales have been boosted by both in-country and new market expansions.

The company has maintained an average net profit margin of 47.59%, which is indicative of efficient product pricing and cost management.

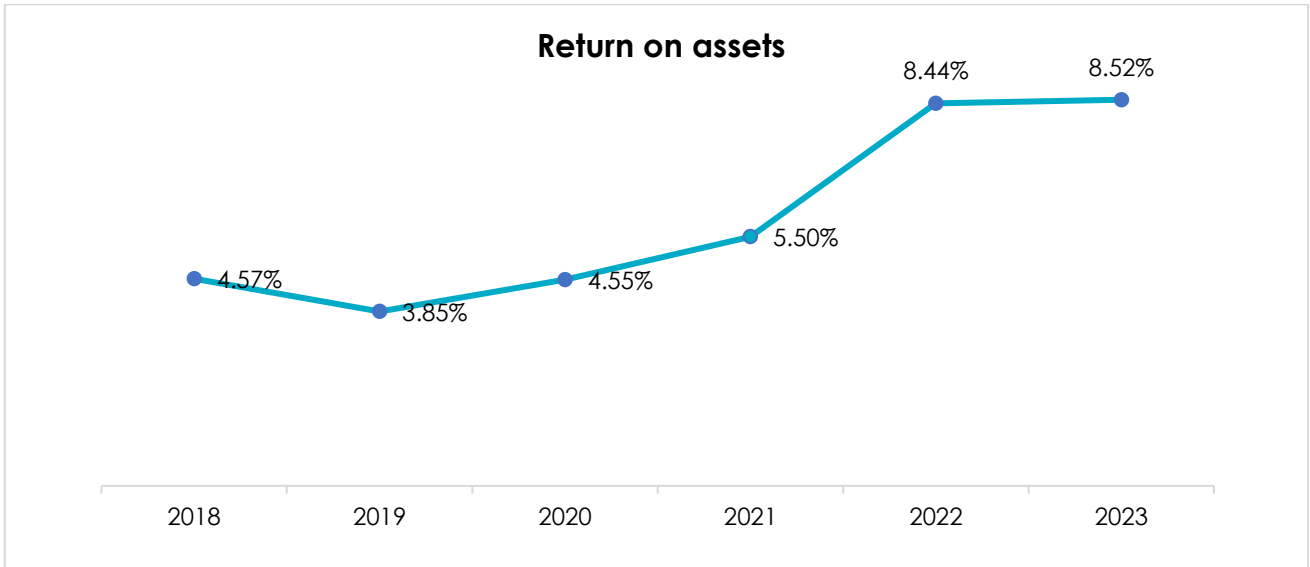
### Revenue, Profit & Profit Margin



Source: Company financials, NCBA IB Research

The growth in profitability has in turn impacted the Return on Assets (ROA). In the last five years, ROA has grown from 4.9% to 8.9% with a CAGR of 5.91% indicating the company's efficiency in asset deployment and ability to make impactful strategic decisions.

In 2023, the group made investments worth KES 300Mn towards procurement of new assets. In the same year, the group assets also hit the KES 5Bn mark.



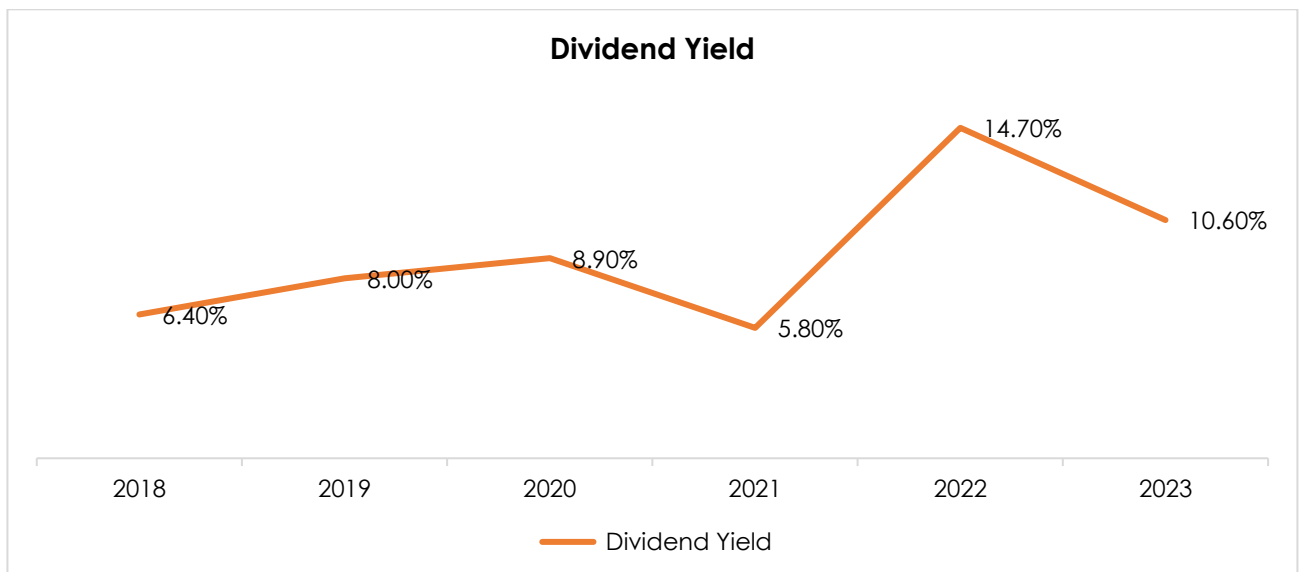
Source: Company financials, NCBA IB Research

### Expansion into regional markets

Carbacid continues to generate greater revenues from its regional markets as demonstrated in its export revenue. Export revenue has grown by 19.60% with a CAGR of 16.6%. This is indicative of the management's dynamism.

### Dividend payout ratio

The shareholder continues to be a main focus with the DPS growing from KES 0.70 in 2018 to KES 1.70 in 2023 representing a 142.86% increase. A dividend yield of 10.60%, which is well above inflation rate of 5.00% is indicative of the management's effectiveness in reinvesting the bulk of its earnings into expanding operations.



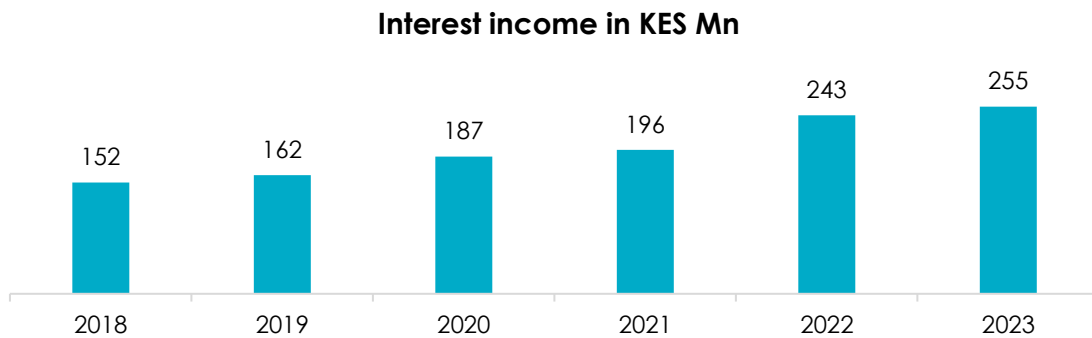
Source: Company financials, NCBA IB Research

### Growth in Interest Income

Profitability of Carbacid Group has been boosted by its subsidiaries, which possess diverse investments. From 2018 to 2023, interest income generated from financial securities has on average, constituted 79.0% of other income. There has been a consistent growth in interest income, with a CAGR of 11.2%. from KES 151.6Mn in 2018 to KES 255.3Mn in 2023.

The firm has increased its investments in financial assets such as equities, growing the portfolio from KES 1.05Bn in 2018 to KES 2.38Bn in 2023. The company also holds government securities and corporate bonds. In 2023, the group held equity investments worth KES 389.5Mn, an 11.0% increase from kes 350.9Mn held in 2022.

We expect exponential growth in interest income as the group continues to reap benefits from investments held by the holding company as well as the subsidiaries. Relatedly investment in equities, portends high long- term returns albeit with a commensurate high risk. To put this into perspective, the equities held by the Group are listed on the Nairobi Securities Exchange & Dar es Salaam Securities Exchange which recorded a 27.7% and 6.3%y-o-y decline in 2023 respectively.



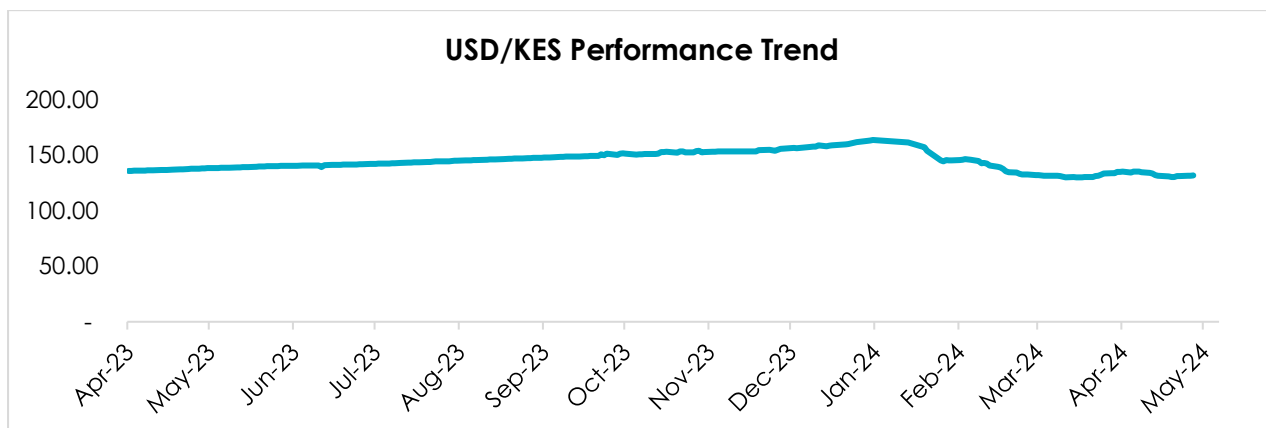
Source: Company financials, NCBA IB Research

### KEY INVESTMENT RISKS

#### Currency Depreciation

In 2023, KES declined by 26.9% against the US dollar. This has a direct impact on the Group since the costs of imports, suppliers, and other products throughout the supply chain are highly correlated to the exchange rate. This in turn puts a strain on overall profitability.

Erratic fluctuation in domestic currencies of the export regions may impede export profits.



Source: CBK, Bloomberg, NCBA IB Research

## Fuel Costs

Gasoline and energy prices in Kenya rose sharply in 2023.

Manufacturing companies are by definition energy intensive, and increased fuel costs has a direct impact on overall production. For reference, the Kenya National Bureau of Statistics Producer Price Index Third Quarter 2023 Release (September 2023) states that during the period, manufacturing costs had grown by 6.6% y-o-y with the greatest impact on chemical and chemical product manufacturing, which shot by 32%.

Furthermore, the total manufactured output of Soft Drinks for the period was 3.6% lower than 1H2022, according to the Kenya National Bureau of Statistics Leading Economic Indicators August 2023 Release.

Soft drink bottlers are one of Carbacid's main customers, and if their manufacturing capacities are strained, Carbacid's revenues suffer in tandem.

That being said, Carbacid has commissioned two solar power plants and a third one is expected in 2025. This provides a cheaper alternative to the national grid as the company anticipates a 20% decrease in costs of national grid backed power.

## Surge in Expenses

### Administrative and operating expenses

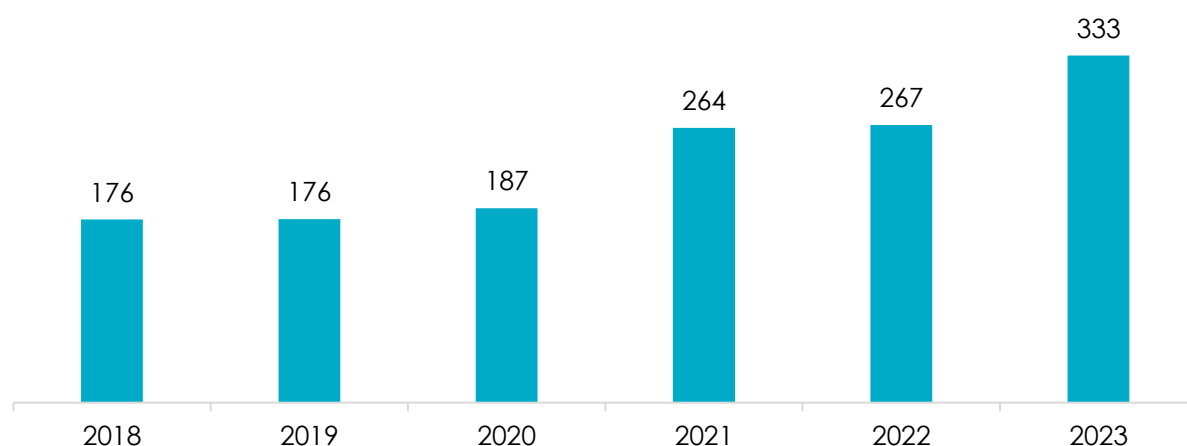
The firm's administrative and other operating expenses have grown at a CAGR of 24.5% from KES 175.9Mn in 2018 to KES 333.3Mn in 2023. The rise in expenses is driven by heightened electricity costs.

The reliability and cost of Kenya Power supply continue to be inconsistent, prompting the group to undertake significant investments in solar energy infrastructure. The firm has lined up three solar power generation plants with one commissioned in 2022, two of them expected to be commissioned in 2024 and the third in 2025.

Operating expenses have been increasing on the back of rising regulatory and compliance requirements.

The firm is awaiting a resolution regarding the intention to take over BOC. In 2020, Carbacid announced a takeover bid for industrial and medical gases firm BOC Kenya, in a bid to combine the two entities into the region's leading choice for industrial, medical and special gases. The takeover bid which was priced at KES63.50 per share, was objected to in court by minority shareholders who cited that the offer price was not reflective of potential future earnings that would be foregone if the transaction was successful. B.O.C was trading at KES 83.50 as of 28th March 2024.

### Administrative and other operating expenses in Kes Mn



Source: Company financials, NCBA IB Research

### Comparison with Peer Companies

Carbacid is comparable to BOC Kenya, Maghreb Oxygene (Morocco), Air Liquide (Tunisia), TOL Gases (Tanzania) and BASF (Germany). These are all major players in the gas and gas-related production and services sectors.

It has a low EV/EBITDA multiple which is indicative of undervaluation. Its high EBITDA Margin is reflective of healthy earnings.

Carbacid's P/E ratio is lower than peer average which is reflective of the stock being lowly priced compared to its earnings.

Carbacid is outperforming the peer average and is reporting the highest ROE. This shows that shareholder funds are efficiently allocated to generate profits.

	EV/EBITDA	EBITDA Margin	P/E	ROE
<b>Carbacid</b>	<b>3.64</b>	<b>67.24%</b>	<b>5.44</b>	<b>20.53%</b>
BOC	6.27	21.80%	9.32	9.10%
Maghreb Oxygene	9.51	9.9%	19.33	3.24%
Air Liquide	4.50	25.68%	7.50	20.60%
TOL Tanzania	5.73	38.25%	11.3	14.00%
BASF Germany	5.70	10.58%	10.20	20.53%
<b>Average</b>	<b>5.76</b>	<b>28.85%</b>	<b>10.51</b>	<b>14.13%</b>

### H1 2024 Financial performance

Carbacid Plc	Key Metrics Y/Y
<b>Turnover</b>	<b>Up 26.3% to KES 1.1Bn</b>
Operating Profit	Up 32.9% to KES 488.1Mn
Finance Income	Up 0.30% to KES 132.6Mn
<b>Profit Before Tax</b>	<b>Up 17.86% to KES 646.9Mn</b>
Profit After Tax	Up 17.86% to KES 485.2Mn
Equity investment	Up 3.71% to KES 403.4Mn
Corporate, treasury & money market bonds	Down 2.98% to KES 1.98Bn



Carbacid Plc	Key Metrics Y/Y
<b>EPS</b>	<b>Up 17.28% to KES 1.90</b>
Current price	KES 16.80
Target price	KES 21.24
Upside	25.3%
<b>P/E</b>	<b>8.84x</b>
<b>P/B</b>	<b>16.80x</b>
Dividend	No Dividend announced

Source: Company financials, NCBA IB Research

**Turnover** -Carbacid's total turnover increased by 26.3% to KES 1.1Bn in H1'2024.The growth is attributed to new liquid carbon dioxide markets within the East and Southern Africa.

**Operating Profit**- Cost increases have also been experienced in various inputs - fuel, power, spares - and this has meant a lower flow through to the operating profit. Operating profit increased by 32.9% to KES 488.1Mn.

**Finance Income** – In H1'2024, Carbacid's finance income increased insignificantly by 0.30% to KES 132.6Mn attributable to high interest rate environment.

**Government Securities**- In H1' 2024, investments in corporate and treasury bonds recorded a decline of 2.98% to KES 1.98Bn from KES 2.04Bn.

**Profit After Tax (PAT)** – PAT increased by 17.86% to KES 485.2Mn. Consequently, EPS grew by 17.28% to KES 1.90 from KES 1.62.

## Outlook

Despite a substantial uptick in operating costs arising from higher input costs, we believe the company will deliver a relatively strong performance. The performance will be pegged on;

- 1. Value addition:** The Group is adopting agile and optimal business processes. It has raised the quality of its production capacity and has continued to upgrade its assets and capabilities to differentiate its services from its competitors. The absence of an alcohol base in the Group's CO<sub>2</sub> product demonstrates the company's commitment to on customer-centricity, safe and high-quality products. We do however remain cognizant of the fact that global disruptions on the raw material supply chain are still expected to persist.
- 2. Diversification and Regional Presence** – The manufacturer has seen increase in turnover primarily driven by growth in regional demand and continued search for new markets. It continues to invest in R&D to diversify revenue streams and mitigate the impact of weak local performance and improve overall profitability.
- 3. Revamped Business Strategy** – Carbacid views ESG practices as a robust foundation for making fundamental choices on how to conduct business. The focus is to conduct business with a minimal adverse impact to the environment and communities. The Board recognizes that ESG will help identify and mitigate risks, and at the same time help to drive sustainable growth.



Global disruptions, inflationary pressures, weakening currency, increasing costs of operations will be major challenges for the rest of the financial year. Scarcity of the greenback in most regional markets including Malawi and Burundi where demand is high, is also a risk to the business.

Carbacid continues to focus on maintaining a flexible and adaptive business strategy, investing in innovation and technology, diversifying its customer base and geographic presence, and enhancing resilience in its supply chain and operations. Additionally, staying abreast of regulatory developments and market trends will be crucial for anticipating and responding to changes in the business environment.

## Valuation

We derive our target price by blending EV/EBITDA and P/E approaches to arrive at a 12-month target price of **KES 21.24 for Carbacid Investments plc**

The target price implies an upside of **25.3%** to the current trading price of **KES 16.90** as of 21<sup>st</sup> May 2024.

## Assumptions

- Risk free rate of 13.8% based on the 10-year Treasury bond yields.
- Tax rate of 30%.
- Equity risk premium of 14.11%.
- Beta of 0.26 on stock's relative volatility on the index.
- Long term growth rate of 5.3% based on GDP growth forecast for 2024

Valuation Methodology	Implied Price	Weighting	Weighted Value
DCF Approach	21.21	60%	12.73
EV/EBITDA Approach	20.77	40%	4.15
P/E Approach	21.78	40%	4.36
<b>Fair Value</b>		<b>100%</b>	<b>21.24</b>
<b>Current Price (21/05/2024)</b>			<b>16.90</b>
Upside/(Downside)			25.3%

## Investment Recommendation

We recommend a **BUY** based on a target price of **KES 21.24** implying a **25.3%** return on the current market price of KES 16.90 as of 21<sup>st</sup> May 2024.

The recommendation is based on the company's revamped business strategy underpinned by digitalization, product innovation and sustainability initiatives. The expectation for increased regional demand and opportunities in new markets will underpin the company's growth and profitability.

**Appendix I: Historical Profit and Loss Statement (KES Mn)**

	2018	2019	2020	2021	2022	2023
Revenue from sale of CO2	420	486	536	662	955	1,082
Transport revenue	145	145	147	244	460	639
<b>Total Revenue Actuals</b>	<b>566</b>	<b>631</b>	<b>683</b>	<b>907</b>	<b>1,415</b>	<b>1,721</b>
Cost Of sales Actuals	(206)	(230)	(259)	(353)	(574)	(709)
<b>Gross Profit Actuals</b>	<b>359</b>	<b>400</b>	<b>424</b>	<b>554</b>	<b>840</b>	<b>1,012</b>
Other income Actuals	197	204	231	241	321	394
Fair value gain on equity investments	(10)	(55)	(39)	13	23	27
fair value loss on investment property	12	5	(2)	(3)	-	(2)
Gain on disposal of financial assets	0	-	-	-	-	-
<b>Gross Profit and Other Income Actuals</b>	<b>559</b>	<b>554</b>	<b>614</b>	<b>804</b>	<b>1,184</b>	<b>1,431</b>
Impairment losses	(4)	(0)	-	-	-	-
Administrative and other operating expenses	(176)	(176)	(187)	(264)	(267)	(333)
Finance costs	-	-	-	-	(3)	(16)
<b>EBITDA</b>	<b>379</b>	<b>377</b>	<b>427</b>	<b>540</b>	<b>914</b>	<b>1,081</b>
Depreciation and Amortization of PPE	-	-	-	-	-	-
<b>Total Earnings Before Interest and Taxes</b>	<b>379</b>	<b>377</b>	<b>427</b>	<b>540</b>	<b>914</b>	<b>1,081</b>
Net Finance costs Actuals	-	-	-	-	-	-
<b>Profit before income tax Actuals</b>	<b>379</b>	<b>377</b>	<b>427</b>	<b>540</b>	<b>914</b>	<b>1,081</b>
Tax calculated at domestic rate; 30% Actuals	(80)	(113)	(102)	(125)	(206)	(265)
<b>Total Net Profit After Tax</b>	<b>299</b>	<b>265</b>	<b>325</b>	<b>415</b>	<b>708</b>	<b>816</b>

**Appendix II: Historical Statement of Financial Position (KES Mn)**

	2018	2019	2020	2021	2022	2023
<b>Non-Current Assets</b>						
Property, plant and equipment	951	919	884	938	995	1,360
Investment Property	245	250	247	244	299	297
intangible assets	1	0	0	1	2	1
Prepaid operating rentals	54	53	-	-	-	-
rights of use assets	-	-	53	52	52	52
financial assets	1,055	1,325	1,387	1,440	2,359	2,383
<b>Total Non-current Assets Actuals</b>	<b>2,306</b>	<b>2,547</b>	<b>2,572</b>	<b>2,676</b>	<b>3,706</b>	<b>4,092</b>
<b>Current Assets</b>						
Inventories Actuals	37	41	34	40	65	87
Total Receivables and Prepayments Actuals	147	175	195	213	367	548
Current tax recoverable	43	3	7	9	9	14
Financial Assets	31	16	-	-	-	-
short-term bank deposits	765	501	814	813	299	255
Cash at bank and cash in hand Actuals	43	220	6	168	15	117
<b>Total Current Assets Actuals</b>	<b>1,065</b>	<b>956</b>	<b>1,056</b>	<b>1,243</b>	<b>756</b>	<b>1,021</b>
<b>Total Assets Actuals</b>	<b>3,371</b>	<b>3,504</b>	<b>3,628</b>	<b>3,919</b>	<b>4,462</b>	<b>5,113</b>
<b>Capital Reserves Attributable to Company's Shareholder's Equity</b>						
Share capital	255	255	255	255	255	255
Share premium	0	0	0	0	0	0
Revaluation Surplus	152	143	122	58	42	33
Retained earnings Actuals	2,637	2,729	2,876	3,176	3,491	3,874
<b>Total equity Actuals</b>	<b>3,044</b>	<b>3,127</b>	<b>3,252</b>	<b>3,489</b>	<b>3,789</b>	<b>4,162</b>
<b>Non-Current Liabilities</b>						
Borrowings	-	-	-	-	40	205
Deferred income tax	214	208	192	181	175	217
<b>Total non-current liabilities Actuals</b>	<b>214</b>	<b>208</b>	<b>192</b>	<b>181</b>	<b>216</b>	<b>422</b>
<b>Current Liabilities</b>						
Total Trade Payables Actuals	85	106	113	171	276	388
Dividend Payable	28	34	47	46	59	72
Current tax payable	-	28	24	33	75	-
Borrowings	-	-	-	-	48	69
<b>Total Current Liabilities Actuals</b>	<b>113</b>	<b>168</b>	<b>183</b>	<b>249</b>	<b>458</b>	<b>529</b>
<b>Total Liabilities Actuals</b>	<b>327</b>	<b>376</b>	<b>376</b>	<b>430</b>	<b>673</b>	<b>951</b>
<b>Total Equity and Liabilities Actuals</b>	<b>3,371</b>	<b>3,504</b>	<b>3,628</b>	<b>3,919</b>	<b>4,462</b>	<b>5,113</b>

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### Rating Definitions

**BUY** – Total expected 12-month return (incl. dividends) greater than 20%  
**ACCUMULATE** - Total expected 12-month return (incl. dividends) between 10% - 20%  
**HOLD** – Total expected 12-month return (incl. dividends) between 0% -10%  
**SELL** – Total expected 12-month return (incl. dividends) less than 0%

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