September Update

Profitably and Sustainably Growing Value

September 2025

Private and Confidential

Forward Looking Statements Safe Harbor

This presentation of VAALCO Energy, Inc. ("Vaalco" or the "Company") includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbors created by those laws and other applicable laws and "forward-looking information" within the meaning of applicable Canadian securities laws(collectively, "forward-looking statements"). Where a forward-looking statement expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. All statements other than statements of historical fact may be forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "forecast," "outlook," "aim," "target," "will," "could," "should," "may," "likely," "plan" and "probably" or similar words may identify, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements in these materials include, but are not limited to, statements relating to (i) estimates of future drilling, production, sales and costs of acquiring crude oil, natural gas and natural gas liquids; (ii) expectations regarding future exploration and the development, growth and potential of Vaalco's operations, project pipeline and investments, and schedule and anticipated benefits to be derived therefrom; (iii) expectations regarding future acquisitions, investments or divestitures; (iv) expectations of future dividends; (v) expectations of future balance sheet strength; and (vi) expectations of future equity and enterprise value.

Such forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by the forward-looking statements. These risks and uncertainties include, but are not limited to: risks relating to any unforeseen liabilities of Vaalco; the ability to generate cash flows that, along with cash on hand, will be sufficient to support operations and cash requirements; risks relating to the timing and costs of completion for scheduled maintenance of the floating, production, storage and offloading("FPSO") servicing the Baobab field; and the risks described under the caption "Risk Factors" in Vaalco's most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q filed with the SEC.

Dividends beyond the third quarter of 2025 have not yet been approved or declared by the Board of Directors (the "Board") for Vaalco. The declaration and payment of future dividends remains at the discretion of the Board and will be determined based on Vaalco's financial results, balance sheet strength, cash and liquidity requirements, future prospects, crude oil and natural gas prices, and other factors deemed relevant by the Board. The Board reserves all powers related to the declaration and payment of dividends. Consequently, in determining the dividend to be declared and paid on Vaalco common stock, the Board may revise or terminate the payment level at any time without prior notice.Any forward-looking statement made by Vaalco in this presentation is based only on information currently available to Vaalco and speaks only as of the date on which it is made. Except as may be required by applicable federal securities laws, Vaalco undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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Non-GAAP Financial Measures

This presentation contains certain non-GAAP financial measures determined by methods other than in accordance with U.S. generally accepted accounting principles ("GAAP"). Vaalco uses non-GAAP financial measures, including "Adjusted EBITDAX" and "Free Cash Flow" (or "FCF") as useful measures of Vaalco's core operating and financial performance and trends across periods. These non-GAAP financial measures have limitations as analytical tools and should not be viewed as a substitute for financial results determined in accordance with GAAP, nor are they necessarily comparable to non-GAAP performance measures that may be presented by other companies. Reconciliations of these non-GAAP financial measures to the most directly comparable GAAP financial measures are included at the end of this presentation or in the Q2 2025 earnings release .

WI CPR Reserves and Resources

This presentation contains crude oil and natural gas metrics which do not have standardized meanings or standard methods of calculation as classified by the SEC and therefore such measures may not be comparable to similar measures used by other companies. WI CPR reserves represent proved ("1P") and proved plus probable ("2P") and proved plus probable plus possible ("3P") estimates as reported by NSAI and GLJ and prepared in accordance with the definitions and guidelines set forth in the 2018 Petroleum Resources Management Systems approved by the Society of Petroleum Engineers. The SEC definitions of proved, probable and possible reserves are different from the definitions contained in the 2018 Petroleum Resources Management Systems approved by the Society of Petroleum Engineers. As a result, 1P, 2P and 3P WI CPR reserves may not be comparable to United States standards. The SEC requires United States oil and gas reporting companies, in their filings with the SEC, to disclose only proved reserves after the deduction of royalties and production due to others but permits the optional disclosure of probable and possible reserves in accordance with SEC definitions. 1P, 2P and 3P WI CPR reserves, as disclosed herein, may differ from the SEC definitions of proved, probable and possible reserves because: Pricing for SEC is the average closing price on the first trading day of each month for the prior year which is then held flat in the future, while the 1P, 2P and 3P WI CPR pricing assumption was $79.79 per barrel of oil beginning in 2025, $69.79 in 2026, and inflating 2% thereafter; and Lease operating expenses are typically not escalated under the SEC's rules, while for the WI CPR reserves estimates, they are escalated at 2% annually beginning in 2026. In addition, Vaalco uses terms in this presentation, including "1C," "2C," and "3C," that SEC guidelines strictly prohibit Vaalco from including in its SEC filings. 1C is a low estimate scenario, 2C is a best estimate scenario, and 3C is a high estimate scenario of "contingent resources"; that is, quantities of petroleum potentially recoverable from known accumulations by the application of development projects not currently considered to be commercial owing to one of more contingencies. Prospective resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. These estimates by their nature are more speculative than estimates of proved, probable and possible reserves that meet the SEC's definitions of such terms and are subject to substantially greater risk of being realized. Management uses 1P, 2P, 3P, 1C, 2C and 3C as a measurement of operating performance because it assists management in strategic planning, budgeting and economic evaluations. Management believes that the presentation of these metrics are useful to its international investors, particularly those that invest in companies trading on the London Stock Exchange, in order to better compare reserve information to other London Stock Exchange-traded companies that report similar measures. However, they should not be used as a substitute for proved reserves calculated in accordance with the definitions prescribed by the SEC. In evaluating Vaalco's business, investors should rely on Vaalco's SEC proved reserves and other oil and natural gas disclosures included in Vaalco's latest Form 10-K and other reports and filings with the SEC and consider 1P,2P, 3P, 1C, 2C and 3C only supplementally.

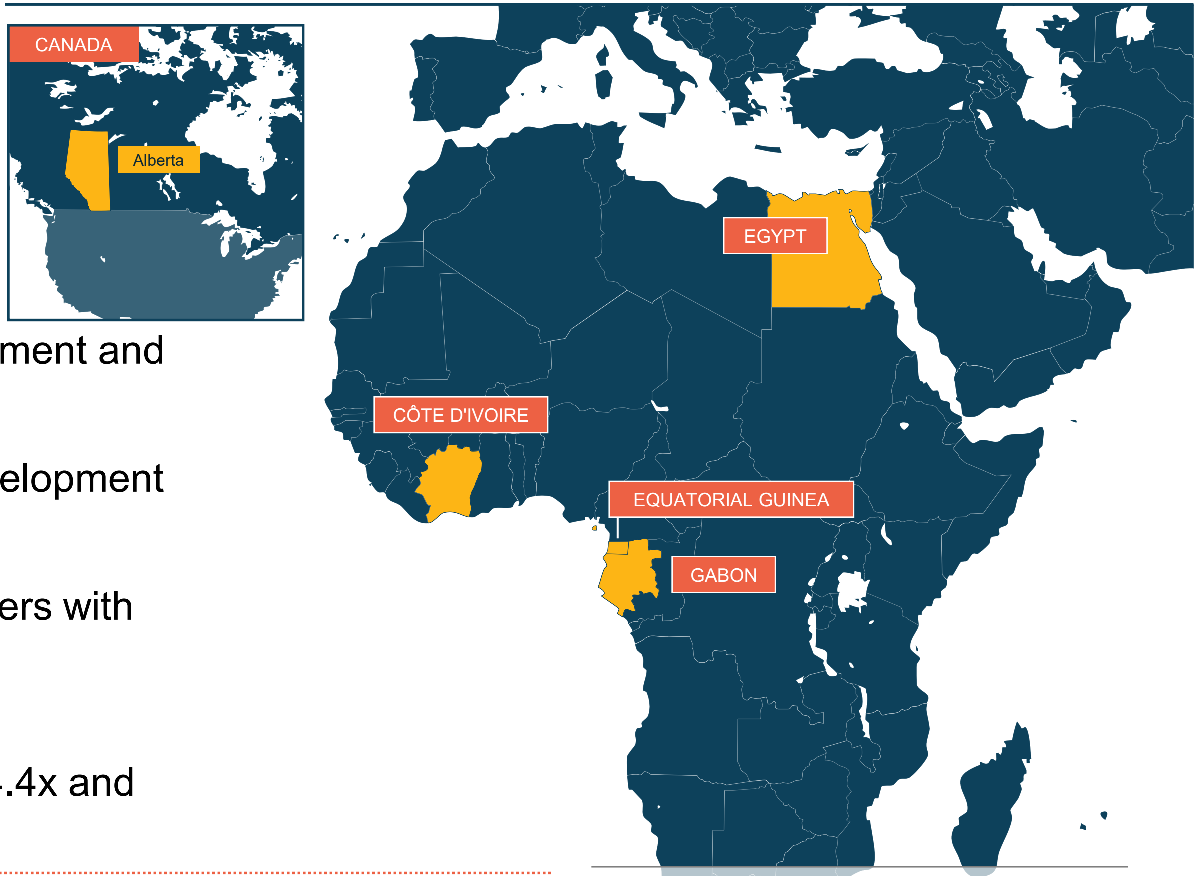
Other Oil and Gas Advisories

Investors are cautioned when viewing BOEs in isolation. BOE conversion ratio is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalencies described above, utilizing such equivalencies may be incomplete as an indication of value.

Who Are Vaalco?

A leading independent diversified oil & gas operator

- Established in 1985, Listed on NYSE & LSE with 255 employees
- Operating and developing successfully in five countries. Completing major development projects and keeping an average uptime of 97% over all assets
- Diverse long-life portfolio with material production, near-term development and significant upside
- Multiple development catalysts in the near-term, with fully funded development campaigns in three countries in 2025
- Sustainable dividend in place offering a material income to shareholders with potential for further shareholder returns in future
- Proven track record of accretive inorganic growth. Multiple accretive transactions since 2021, growing WI production and 2P reserves by 4.4x and 12x respectively



2024 WI Production	2024 NRI Sales of	2024 Adjusted EBITDAX [(1)]	SEC Proved Reserves[(2)] of	2P WI CPR Reserves[(2)]	Current Dividend Yield
24,738 BOEPD	19,843 BOEPD	$303 million	45.0 MMBOE	96.1 MMBOE	6.4%

63% institutionally owned

97% free float

Top quartile dividend yield

Russell 3000 index member

1. Adjusted EBITDAX is a Non-GAAP financial measure and is described and reconciled to the closet GAAP measure in the attached table under "Non-GAAP Financials Measures" in Appendix
2. Reserves estimates as of December 31,2024 based on NSAI and GLJ reports

Successful Execution of Multiple Work Programs Across Portfolio

Increasing production and reserves materially year-on-year for four years

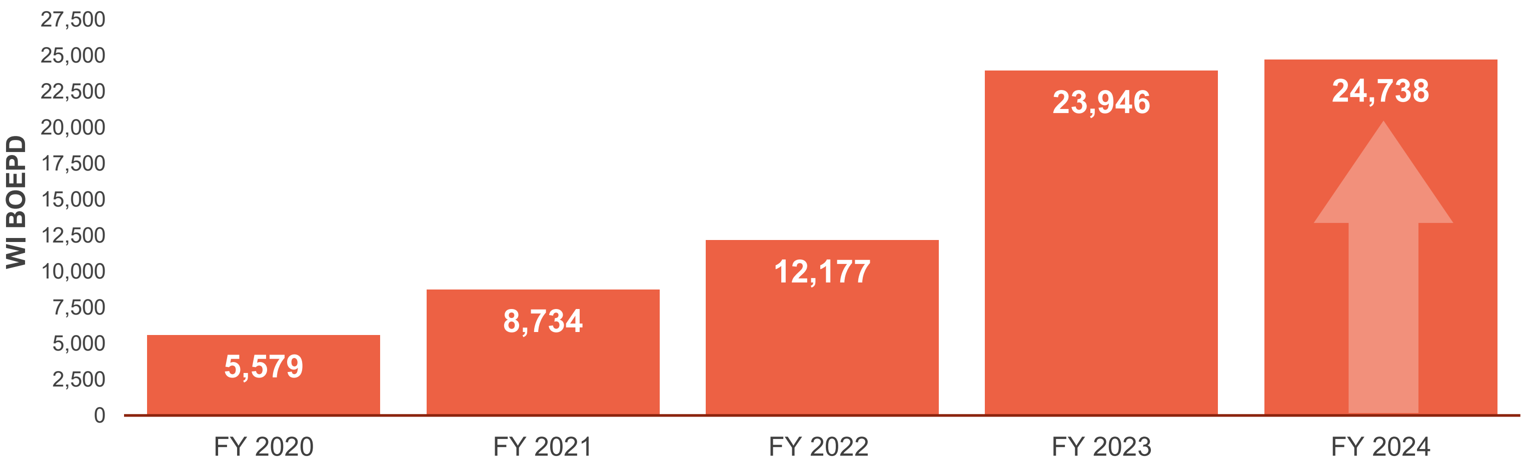
HIGHLIGHTS

WI Production increased by **4.4x** and 2P WI Reserves by **9.9x** in four years.

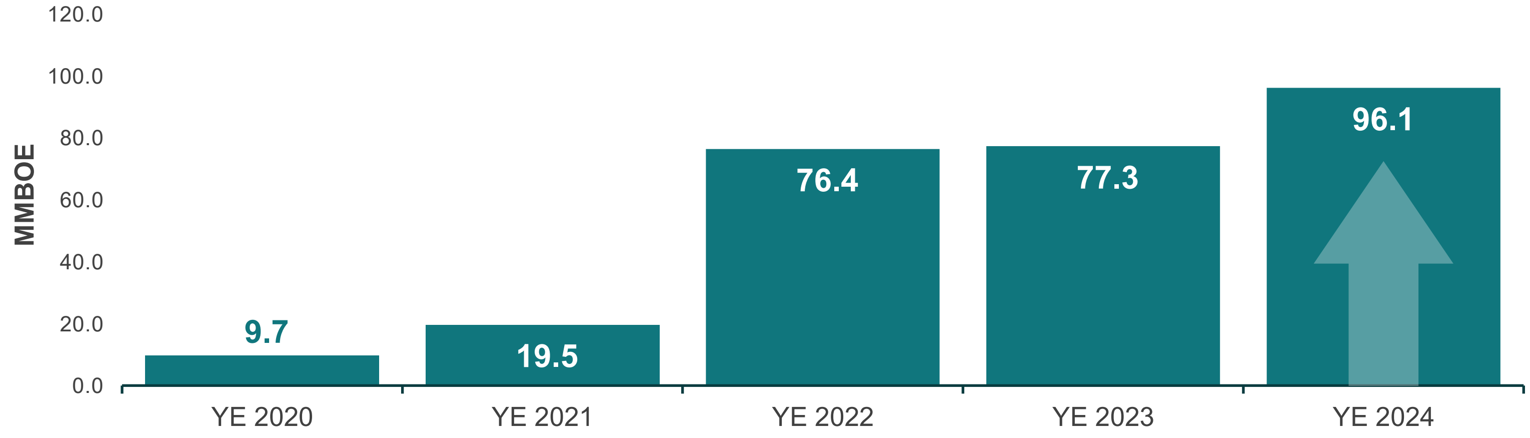
Organic 2P Reserves Replacement at Egypt of **100%** over last 2 years

Organic 2P Reserves Replacement at Etame, Gabon of **88%** over last 4 years with gross production of **23.2 MMBBLS** in this time

Production (WI)



2P WI Reserves[(1)]



1.Reserves based on NSAI and GLJ reports

Achieving Significant Shareholder Returns

By maximizing the value of, and free cash flow from, its existing resources

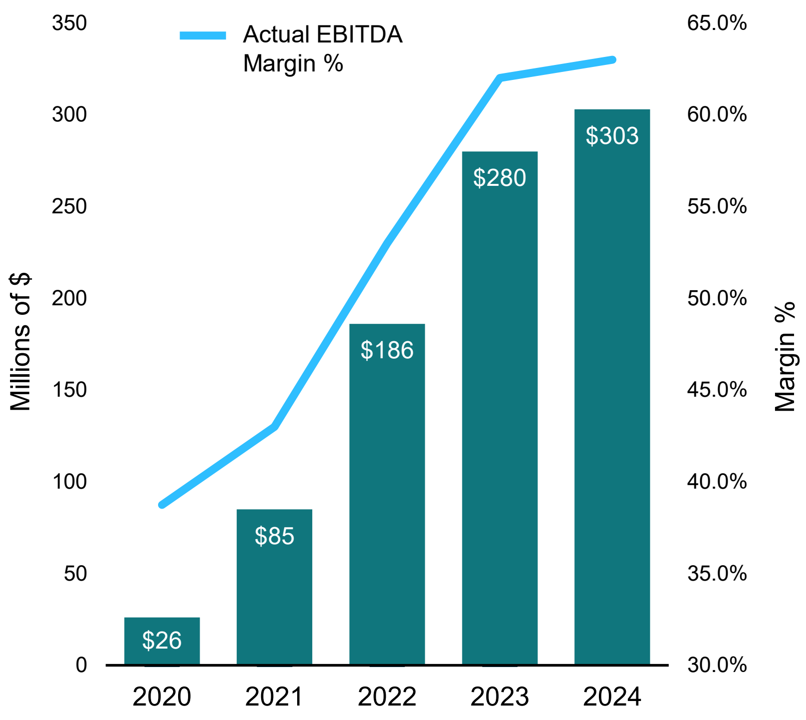
HIGHLIGHTS

Adjusted EBITDA grown by more than **11x** in Four Years

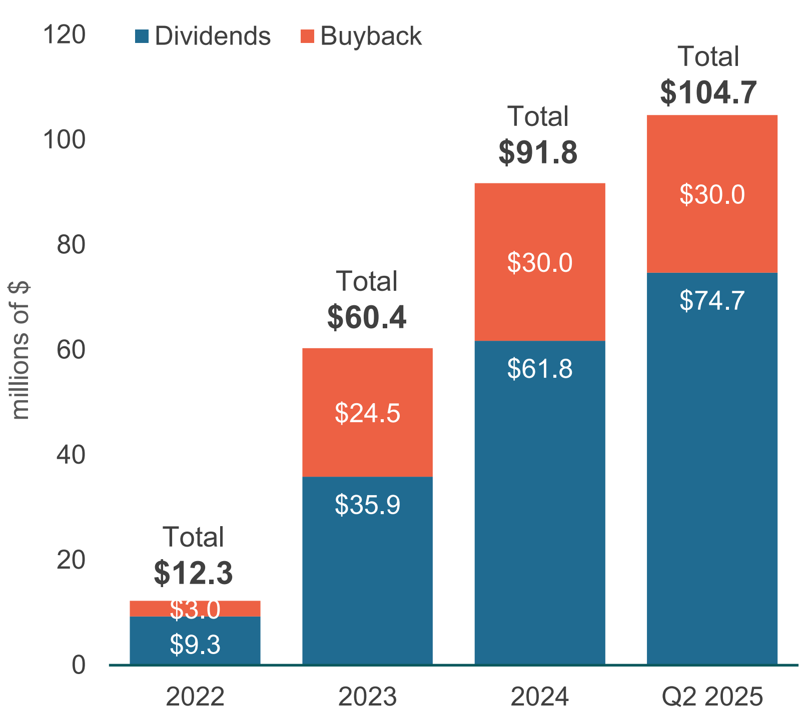
Over $100 million of shareholder returns between 2022 and Q2 2025

Over 75% of FCF returned to shareholders between 2022 and 2024

Adjusted EBITDAX



Cumulative Shareholder Returns



Accelerating Financial Metrics and Peer Group Leading Dividend Yield

Gabon Overview

Vaalco has been producing from Etame for over 22 years

Material Position Across 3 Blocks

- Etame Marin Block
  - Vaalco (Op, 58.81%)
  - Continuous block under single Etame Marin PSC after 2021 renegotiation
- Niosi and Guduma Exploration Licenses
  - BWE (Op.), Vaalco (37.5% WI)

Strong Production Base

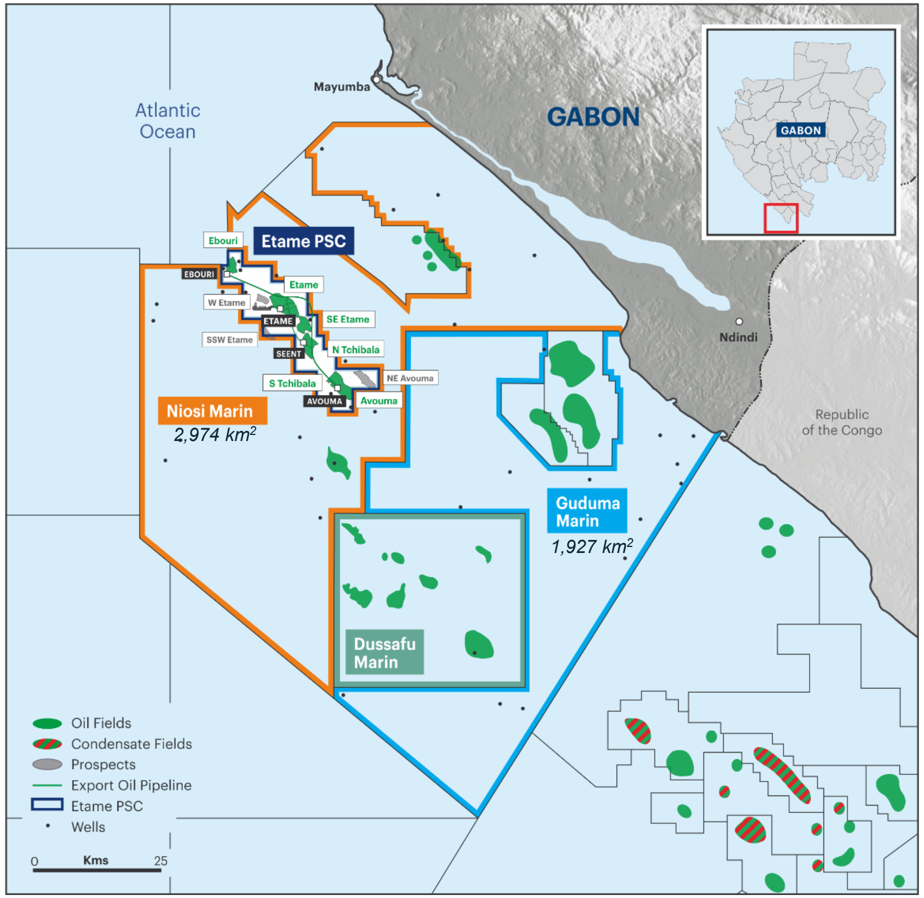
- Production from 5 fields on Etame Marin, largely from the Gamba formation
- > 140 MMBO extracted to date
- Currently producing ~ 15,000 BOEPD (gross)

Near Term Production Growth

- Phase 3 development campaign with first oil expected late 2025
- Phase 3 2P volumes > 10 MMBO with incremental IP increase of 16,000 BOEPD
- Monetizing Ebouri resource through crude sweetening

Upside Opportunities

- Significant trend exploration potential in Niosi, Guduma
- Phase 4 Etame drilling campaign



		SEC Proved	CPR 2P	CPR 3P	1C	2C	3C
Etame	WI (MMBBLS)[1]	12.7	17.1	23.9	10.9	14.0	20.4
	NRI (MMBBLS)[1]	11.1	12.7	17.1			

1. Reserves/Resources estimates as of December 31,2024 based on NSAI

Côte d'Ivoire Overview

Opportunity for growth under favorable investment terms

Cash Generative Material Asset Base with Significant Upside

- CI-40 Baobab and Kossipo gross 2P 85.9 MMBOE(1) and 2C 166.4 MMBOE(2)
- Low recovery factor ~14% with potential to increase to +30% (3)

Baobab Continued Development and Optimization

- Efficient, high uptime production facility
- FPSO refurbishment project ongoing
- Awarded license extension to 2038

Near Term Production Growth With Baobab Phase 5 Program

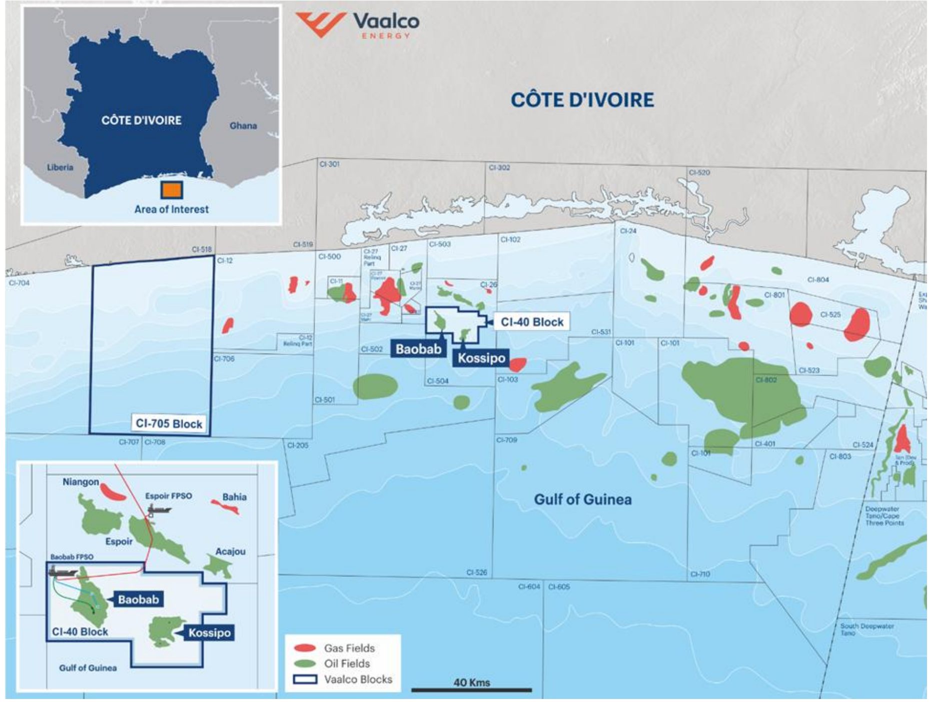
- All major contracts placed; First oil 2H26
- Phase 5 gross reserves of 32.7 MMBOE(1) with production peaking at 27,000 BOEPD

Growth Via Development of Kossipo and Further Baobab Development

- Kossipo gross 2C resource of 89.9 MMBOE(2)
  - Planned as a subsea tie-back to the Baobab FPSO, first oil 2030
- Baobab Phase 6: 2C gross resources of 76.5 MMBOE(1)

Rapid Expansion in Côte d'Ivoire

- 2Q24: Vaalco entered CDI through acquisition of Svenska Petroleum Exploration
- 2025: Acquired 70% operated interest in CI-705
- Continuing to evaluate opportunities for growth in CDI



1. Reserves/Resources estimates as of December 31,2024 based on NSAI
2. Estimates based on Management's assumptions
3. Based on Stock Tank Original Oil in Place at YE24

Equatorial Guinea Block P Overview

Near term first production for Vaalco in Equatorial Guinea

Excellent Oil Quality in a Proven Reservoir

- Block P, 30 km NW of the City of Bata, Equatorial Guinea
- Two discoveries on block in proven but underexplored Rio Muni oil basin
- Vaalco as operator holds 60% interest in Block P and 96% economic interest from first oil until carry is repaid.
- Venus P-2 Discovery well in 2005 encountered 50 m gross, 46 m net of excellent quality oil-bearing sands
  - Venus P-2ST Appraisal well encountered the field OWC
- Direct analogues to the producing Ceiba and Okume complex

Additional Prospectivity on Block

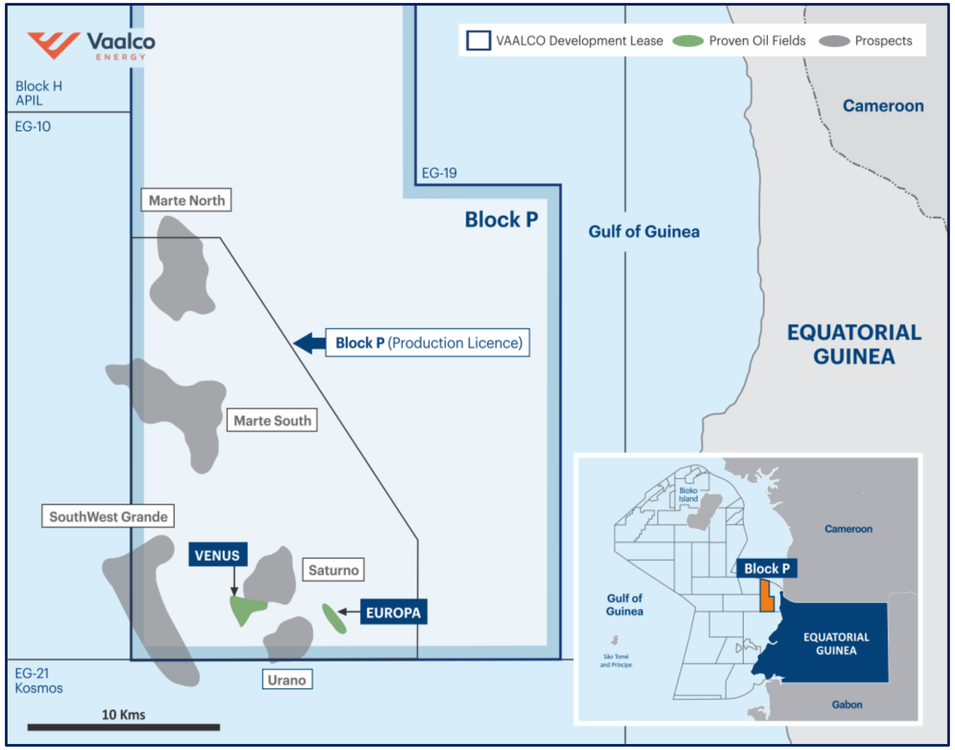
- Additional leads/prospects identified on block
  - Post-Rift: Marte South, Marte North, Urano and SW Grande
  - Pre-Rift: Saturno

Approvals in Place

- Working toward FID on approved Plan of Development

First Oil on the Way

- Development is focused on Venus, with potential Europa tieback
- FEED study nearing completion
- First oil planned by end-2028



		SEC Proved	CPR 2P	CPR 3P	1C	2C	3C
EG	WI (MMBBLS)[(1)]	6.8	13.8	19.1	1.4	5.8	12.4
	Entitlement (MMBBLS) [(1)]	8.3	14.2	18.3			

1. Reserves/Resources estimates as of December 31,2024 based on NSAI

Canada Overview

Proven Play in the WCSB

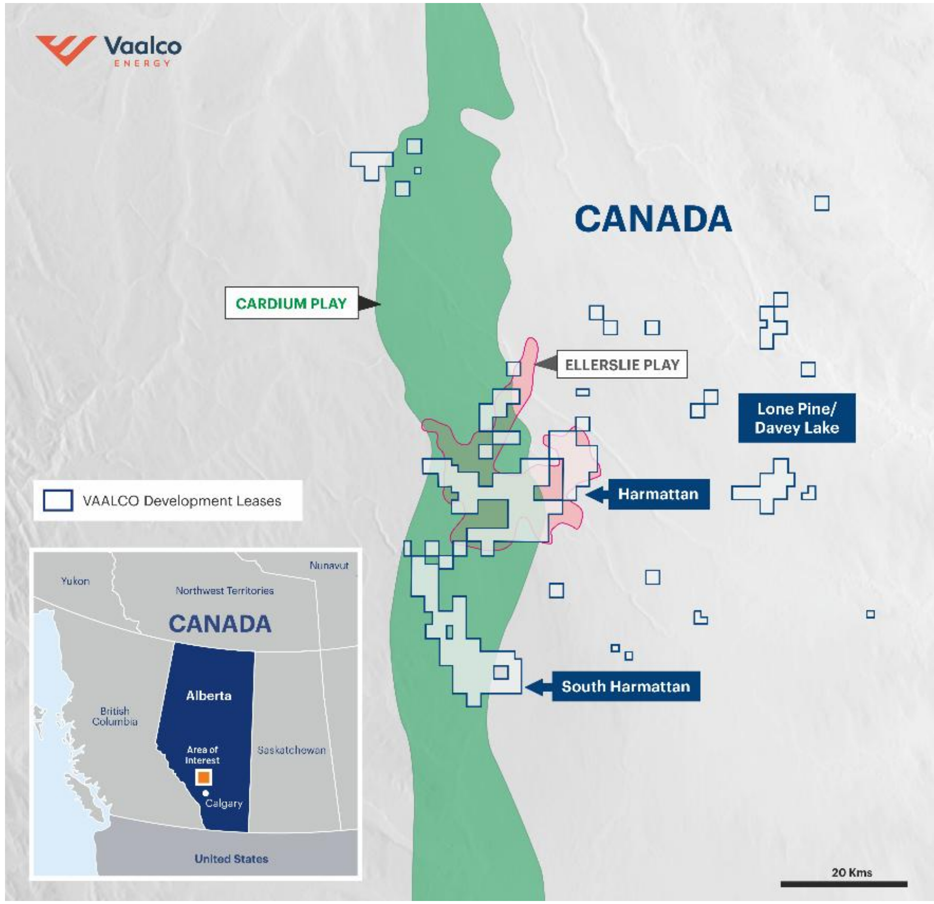
- Oil-focused natural gas exploration and production operation
- Developing the prolific Cardium formation in central Alberta's Western Canadian Sedimentary Basin
  - Newer completions techniques allow exploitation of previously under-developed Cardium Upper Shoreface section

Stable Production Base

- Current production of ~ 2,100 BOEPD (WI)
- Stable production base can be maintained with limited Capex

Significant Drilling Inventory

- 48 gross long-reach lateral locations identified
  - Most drillable from existing pad-sites
- Combination of pooled Crown and Freehold Lands
  - Most assets are at 100% WI



		SEC Proved	CPR 2P	CPR 3P
Canada	WI (MMBOE)[1]	9.5	19.6	24.4
	Entitlement (MMBOE)[1]	8.1	16.6	20.6

1. Reserves/Resources estimates as of December 31,2024 based on GLJ Report

Egypt Overview

Strong Production Base with Growth

- Following Vaalco's entry in 2022, consistent production growth through drilling programs and recompletion campaigns
  - Currently producing ~11,000 BOEPD (gross)
- Active drilling program targets further production gains

Maintaining Asset Longevity

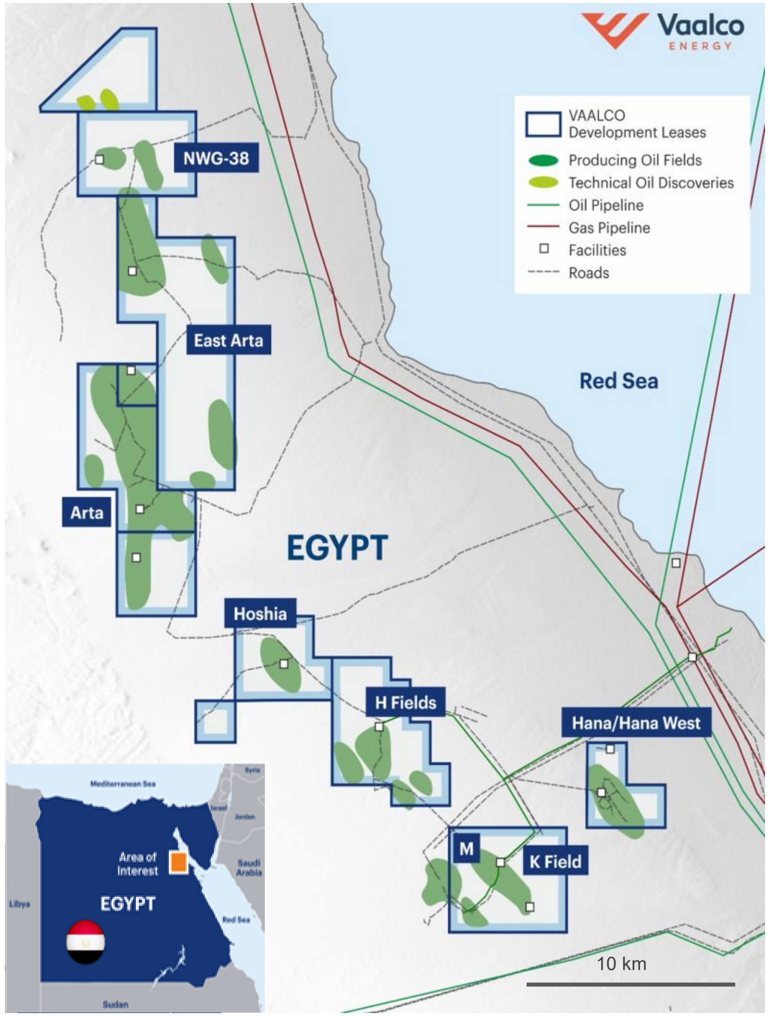
- Near field exploration to bring on new production at minimal facilities capex
- Pursuing all behind pipe opportunities
- Optimizing secondary and tertiary recovery

Operational Excellence

- Reduced drilling times by 66% and dramatically improved production hook-up pace
- Applying new technology to enhance operational efficiency
  - Enhanced well surveillance and diagnostics
  - Improved water flood efficiency
- Improving strong safety culture with over 5.5-million-man hours without a lost time incident since 2024

Upside Opportunities

- Exploration program in Northwest Gharib (Eastern Desert) and in South Ghazalat acreage in Abu Gharadig Basin (Western Desert)
- Evaluation of contractual terms for our Western Desert assets



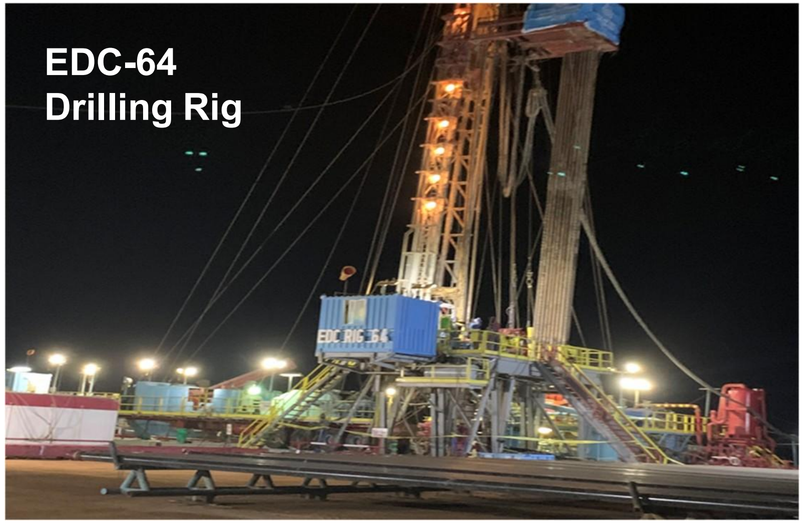
		SEC Proved	CPR 2P	CPR 3P	1C	2C	3C
Egypt	WI (MMBBLS)[1]	16.3	22.1	29.1	15.9	27.5	51.9
	Entitlement[1] (MMBBLS)	9.4	12.9	17.0			

1. Reserves/Resources estimates as of December 31,2024 based on NSAI

Egypt Operations

Efficient low-cost well operations

- 25 wells have been drilled by Vaalco to Q1 2025
- Fully compliant with environmental regulations
- Increased efficiency of rig move process, reducing cost and accelerating production growth
- Delivering 2 wells/month & optimizing performance to deliver 2.5 wells/month



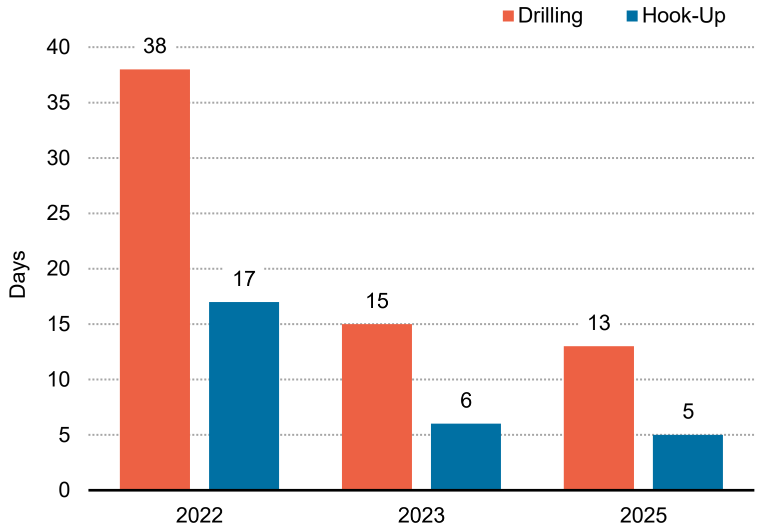
Vaalco Has Optimized the Efficiency of the Egyptian Operations

2022: Average drilling time was 38 days

2023: Reduced to under 15 days

2025: (Ongoing Program): Further improved to 13 days

Quick Production Hook up:
Rig-release to Production Hook-up Reduced to Less Than 6 Days



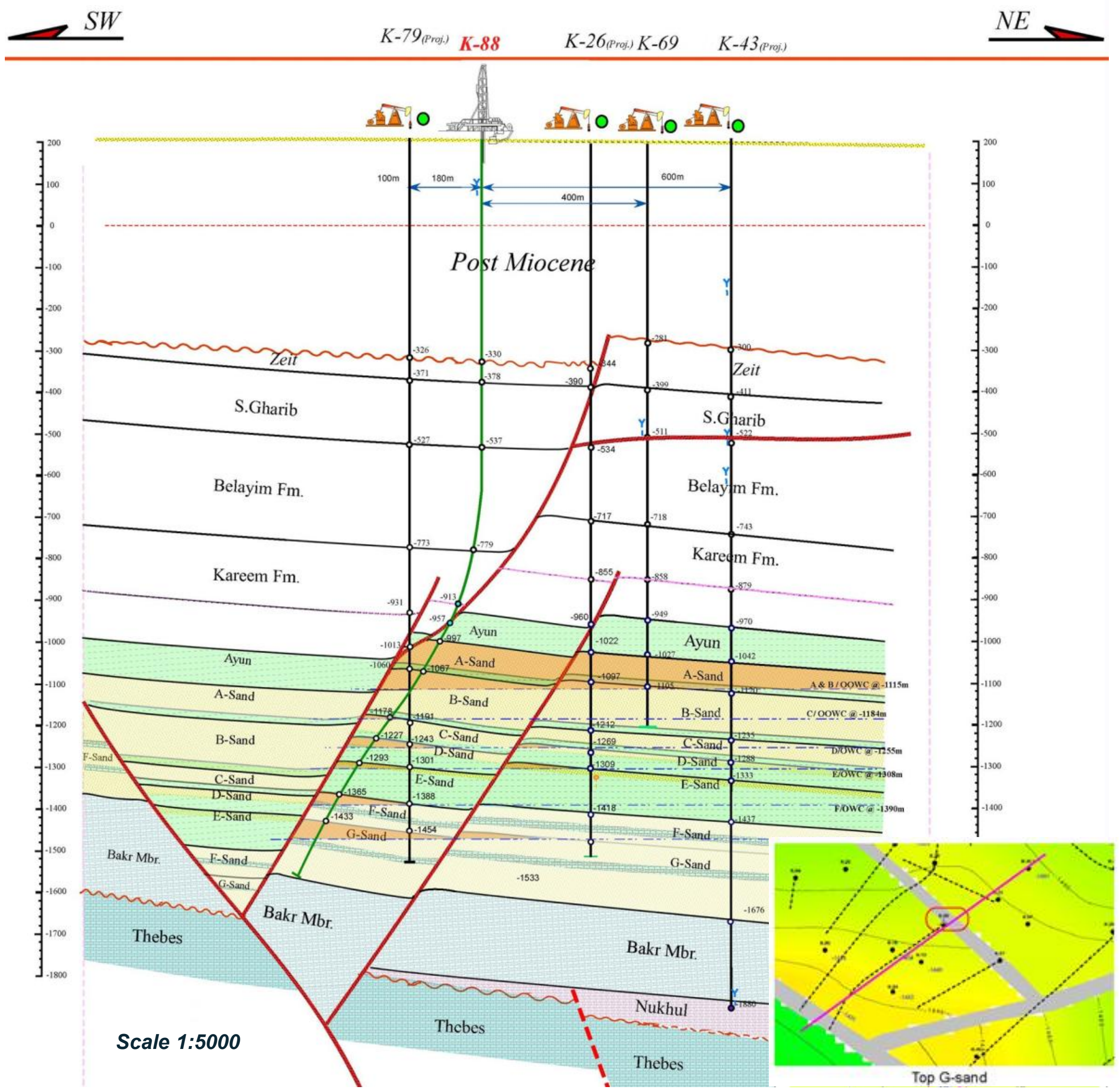
Eastern Desert Brown Field Development

Enhancing performance and unlocking potential

- Using improved well design and new technology to drill multi-target deviated wells
- Evaluating the deep targets in existing fields
- Utilizing new interpretation and evaluation technology to discover new reservoirs

Key Achievements: An Example from the K-Field

2023:	Proved deeper potential in the ASL-G
2025:	Discovered deeper pay in the Bakr sand
2025:	Drilled K-88, first deviated multi-target well since 1980, penetrating 7 reservoirs -Reinforcing ASL-G as a promising horizon -Excellent IP Rate: Tested at 408 BOPD in Feb-25

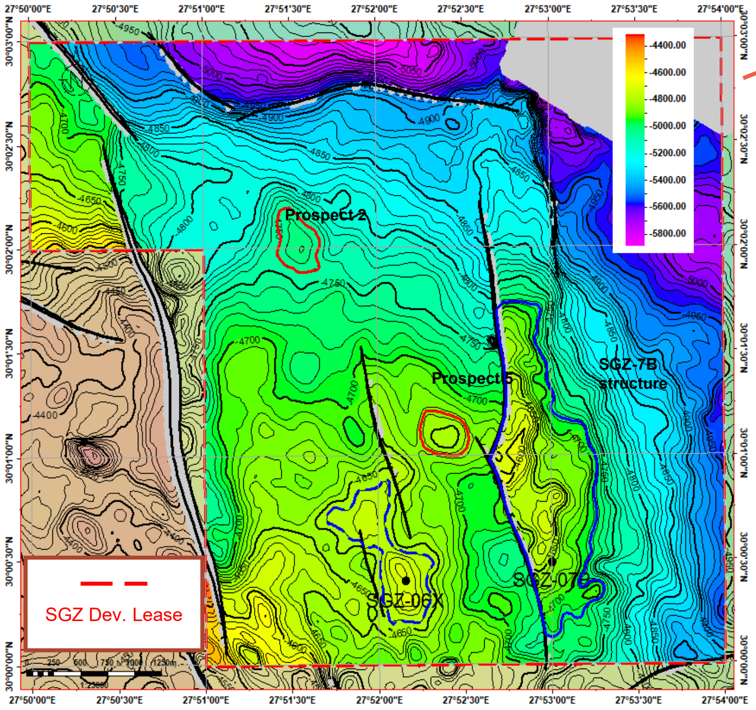


Egypt Upside Potential

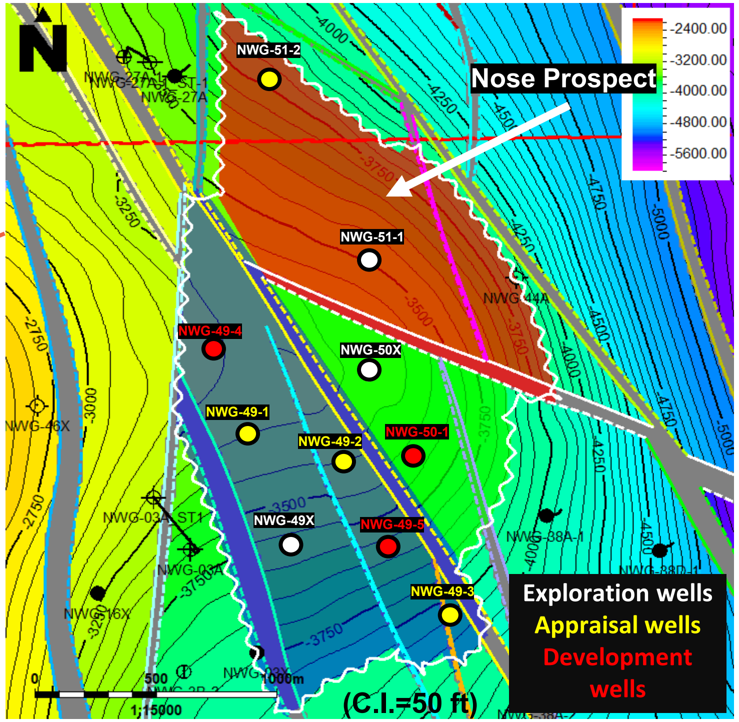
South Ghazalat and North West Gharib

- Seismic re-interpretation using seismic spectral decomposition
- Identified upside potential at SGZ-7B structure in addition to two new prospects
- Plan to drill 1 appraisal well in 2025

South Ghazalat – Top Red Beds Depth Map



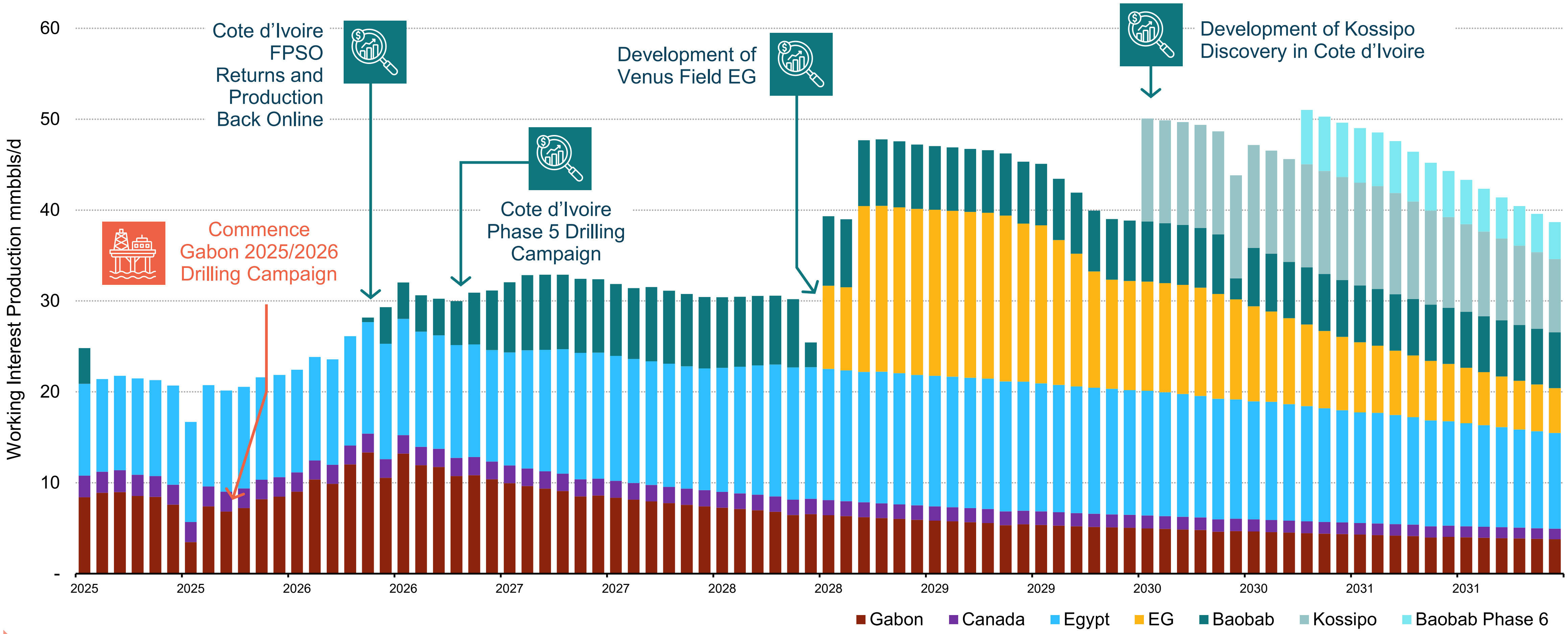
NW Gharib - Near Top Nukhul Depth Map



- New structural mapping in NWG identified upside potential in three different segments (red, green and blue on map)
- Successful NWG-49x test proved extension of field
- Further plan to drill 3 exploration wells, one in each segment and 4 appraisal wells

Anticipated Material Organic Production Growth

Planned growth driven by proven reserves base and discovered resource



Planned Production to Increase by 250% Through 2030[(1)]

1. Estimates based on Vaalco's assumptions

Highly Generative Cashflow

Anticipated near-term free cash flow for equity exceeds current valuation

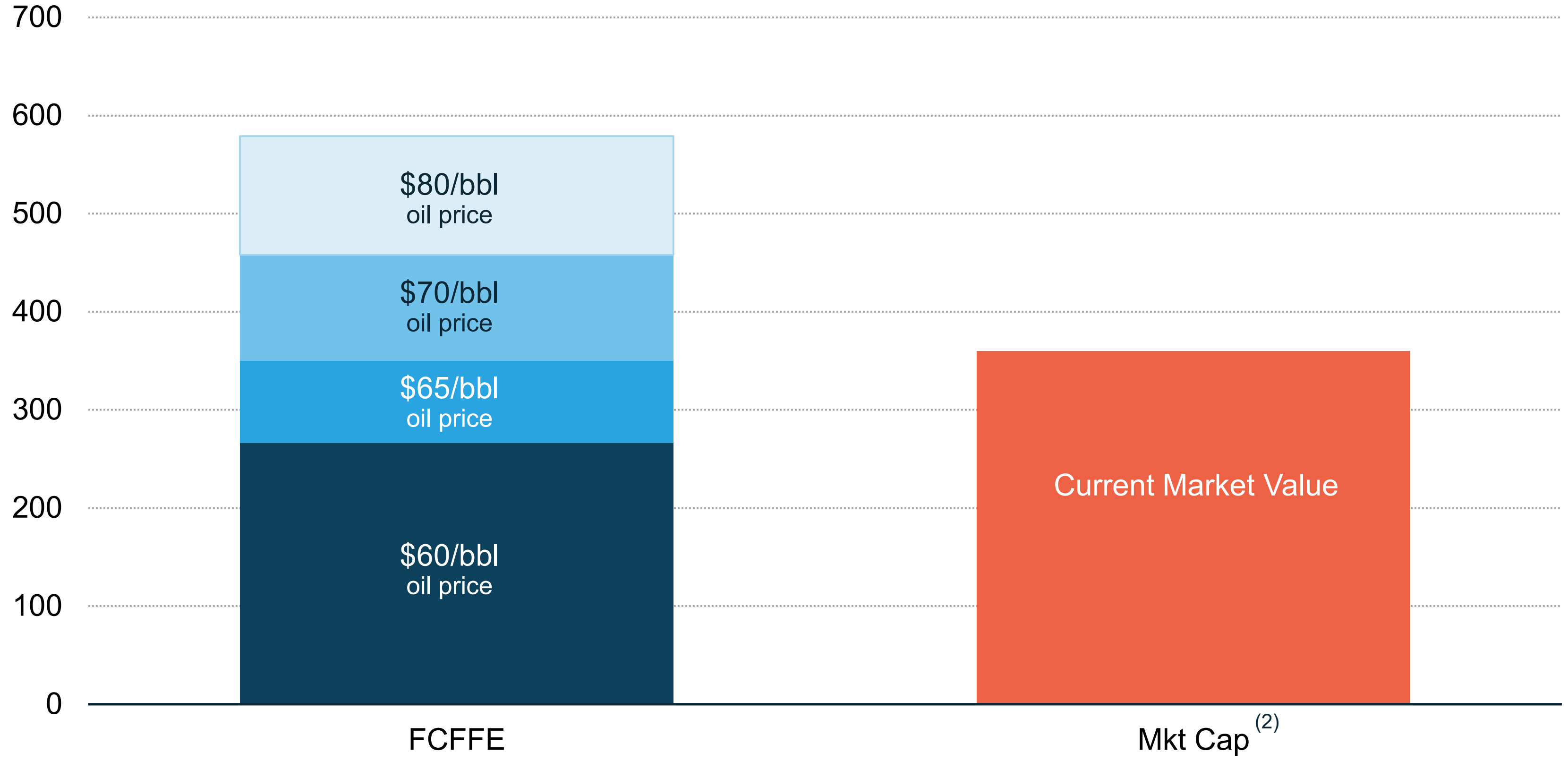
HIGHLIGHTS

High free cash flow generation anticipated following CDI, Gabon and Egypt 2025/2026 investment

Expected free cash flow for Equity at modest commodity prices **exceeds current market valuation over four years**

Free Cash Flow[1] Generation (mid-2026 to mid-2030)

USD Million, cumulative



Disciplined Capital Allocation Approach to Balance Reinvestment With Shareholder Returns

1. Free Cashflow is based on Vaalco's internal asset assumptions. It is net of anticipated operational costs, capex, debt service and G&A costs
2. Market Cap as of close of business on May 13th, 2025.

Key Takeaways

- Highly successful, proven management team and operator
- Diversified, lower risk portfolio of organic development opportunities under favorable PSCs
- Peer group leading balance sheet and fully funded 2025/2026 development campaign on three assets
- Planned production to increase by 50% by second half 2026 and 250% by 2030, with multiple near-term catalyst and expected reserves upgrades
- Meaningful sustainable dividend with anticipated material future FCF from 2026

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