

Parex Resources

High-Potential Foothills Trend

April 23, 2024



Positioned for the next growth chapter

*Minimizing risk & maximizing reward as Parex expands into
the country's most prolific area*





Progressing Foothills Opportunity within Existing Capital Allocation

Partnered with Ecopetrol & Government

- PXT operator of trend
- Vote of confidence on operating capability from Ecopetrol

Available Infrastructure Access to Markets

- Accelerate development through existing, underutilized infrastructure
- Attractive market; projected supply & demand imbalance⁽³⁾

World-Class Resource

- Area has cumulative production of >1.4B bbls oil and ~4 TCF of gas⁽¹⁾
- Proven analogs⁽²⁾

High-Grades Portfolio

- Profundo well⁽⁴⁾ one of PXT's highest ranking exploration prospects
- Created an AMI⁽⁵⁾ that includes the Niscota exploration area

As announced, April 11, 2024, Parex and its strategic partner Ecopetrol entered into definitive agreements to consolidate their position along the Llanos Foothills trend in alignment with current Colombian government objectives to secure gas supply and support energy transition initiatives.

See "Forward-Looking Statements" advisory.

(1) Source: IHS – S&P Global. (2) See "Analogous Information" advisory. (3) See slide #5. (4) Parex receives 50% participating share in future exploration; Ecopetrol retains 100% W.I. and operatorship of current production, with 50% participating share in future exploration; subject to government approval; see "Oil & Gas" advisory.

(5) Area of mutual interest whereby if either party acquires the rights within an area, each party has the right to acquire a 50% W.I. of the acquired area; excludes the extension of the existing discoveries from the Piedemonte Convenio, where Ecopetrol will keep 100% rights over such area; subject to government approval.

Framework

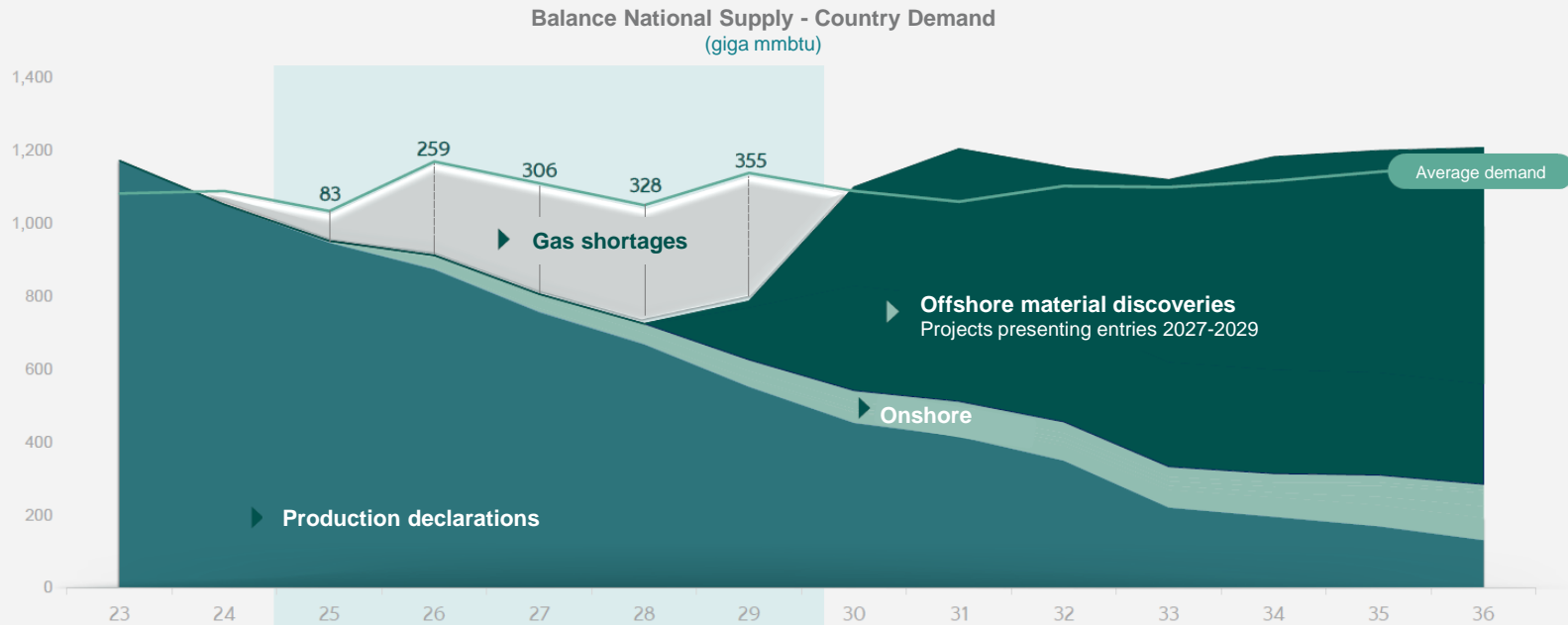




Slide as Presented by Ecopetrol at Arpel-Naturgas Conference⁽¹⁾

The development of gas potential is essential for energy sovereignty

Will require momentum and support from all actors to achieve timely entry



Projected Gas Shortfall



Part of the Solution

See "Forward-Looking Statements" advisory.

(1) As presented April 11, 2024; source: Ecopetrol (production profile as declared by third parties to the Ministry of Mines and Energy of Colombia; average demand based on Colombia's Mining and Energy Planning Unit 2024-2036 Scenario (actual data for 2023)).



Energy Security

*Secure Gas Supply
for the Future*



Support Energy Transition

*Gas Exploration
& Development*



Utilize Existing Infrastructure

*Underutilized
Pipelines & Facilities*

PXT Operatorship with High-Potential Part of Trend Captured

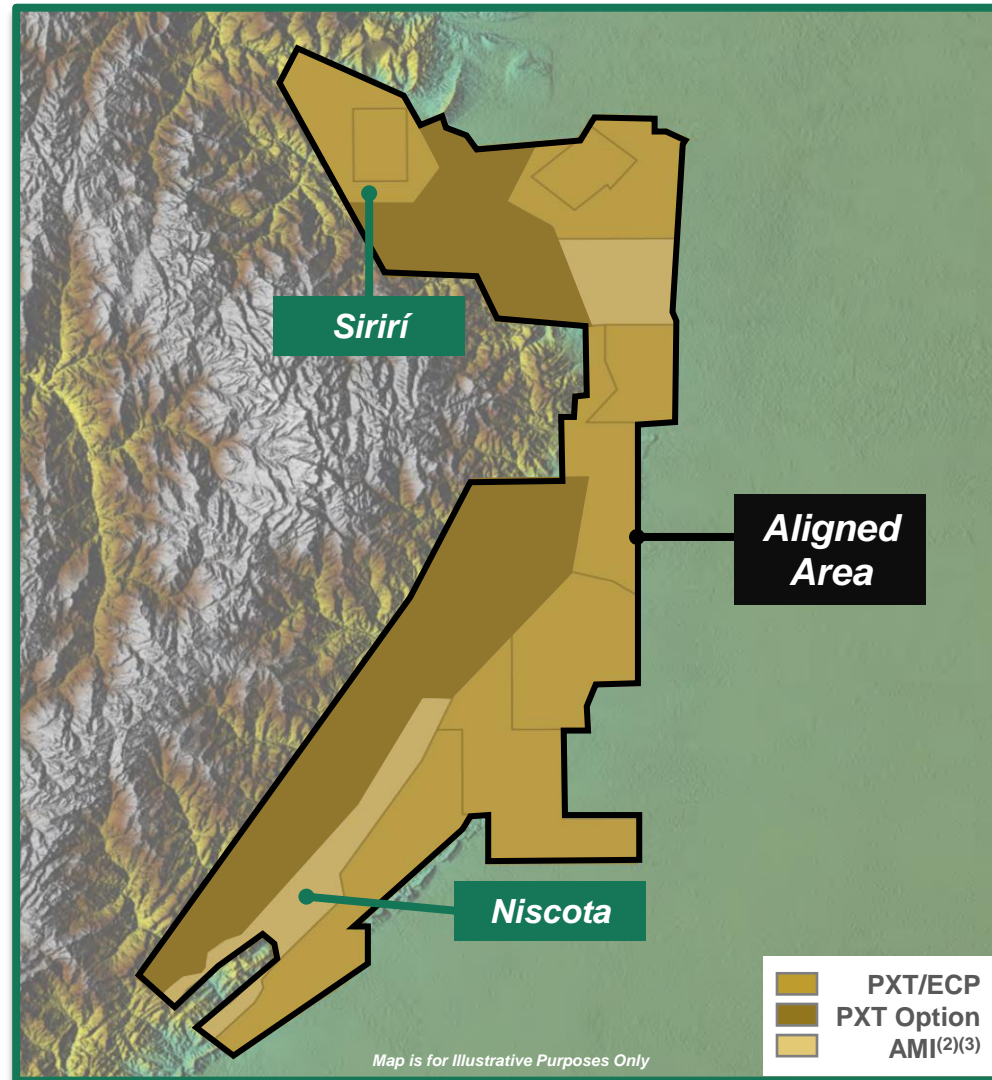


Operatorship

Highlights track record of technical expertise & stakeholder engagement

Harmonized Land

Aligned approach with 50-50 partnership⁽³⁾



Sirirí Convenio⁽¹⁾⁽³⁾

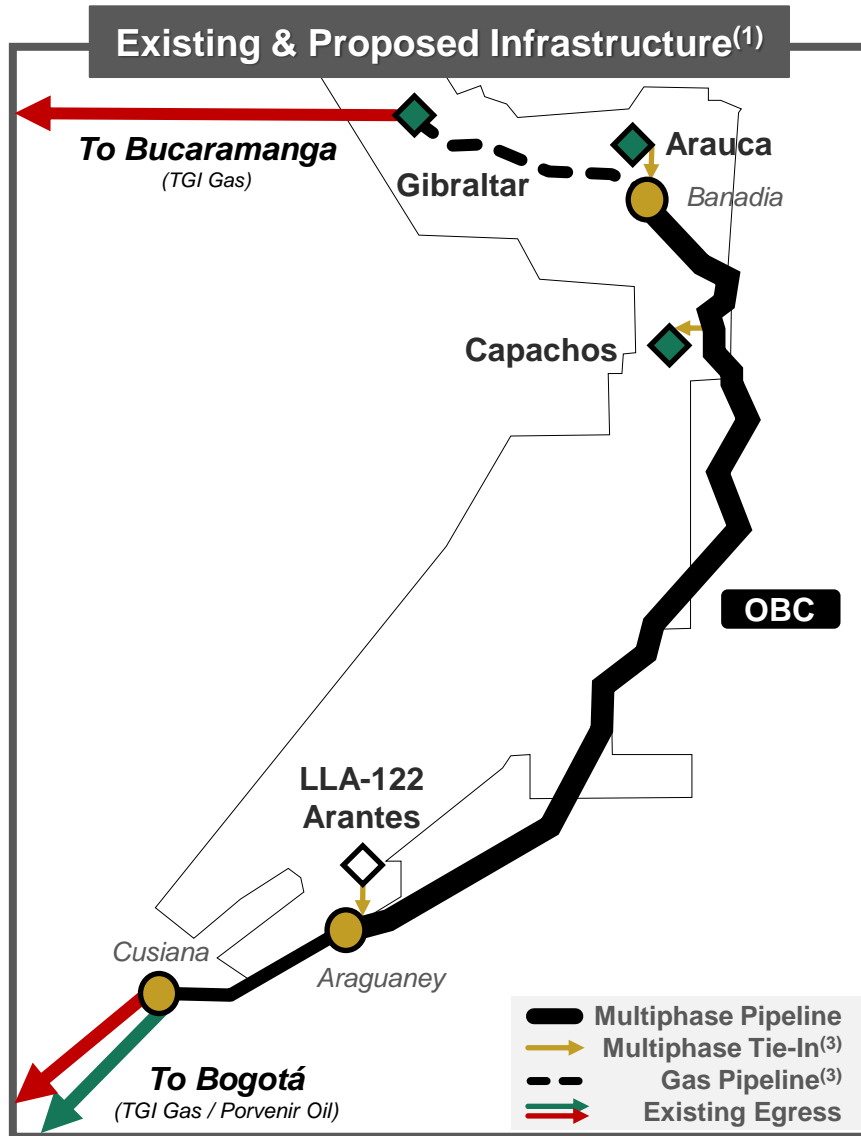
Producing area with high-ranking prospects that could be fast-tracked to market⁽⁴⁾

Area of Mutual Interest

Creates access opportunity for prolific Niscota area⁽²⁾⁽³⁾

See "Forward-Looking Statements" advisory.

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In-Place Infrastructure Could Provide Egress for the High-Potential Area

Bicentenario (OBC) Pipeline Benefits

- **Significantly underutilized infrastructure:** previously built to lessen bottlenecks
- **To be converted to multi-phase:** government resolution passed in late 2023⁽²⁾
- **Sizable:** 42" diameter mainline already installed
- **Close proximity to targets:** ability to add capacity on a staged basis

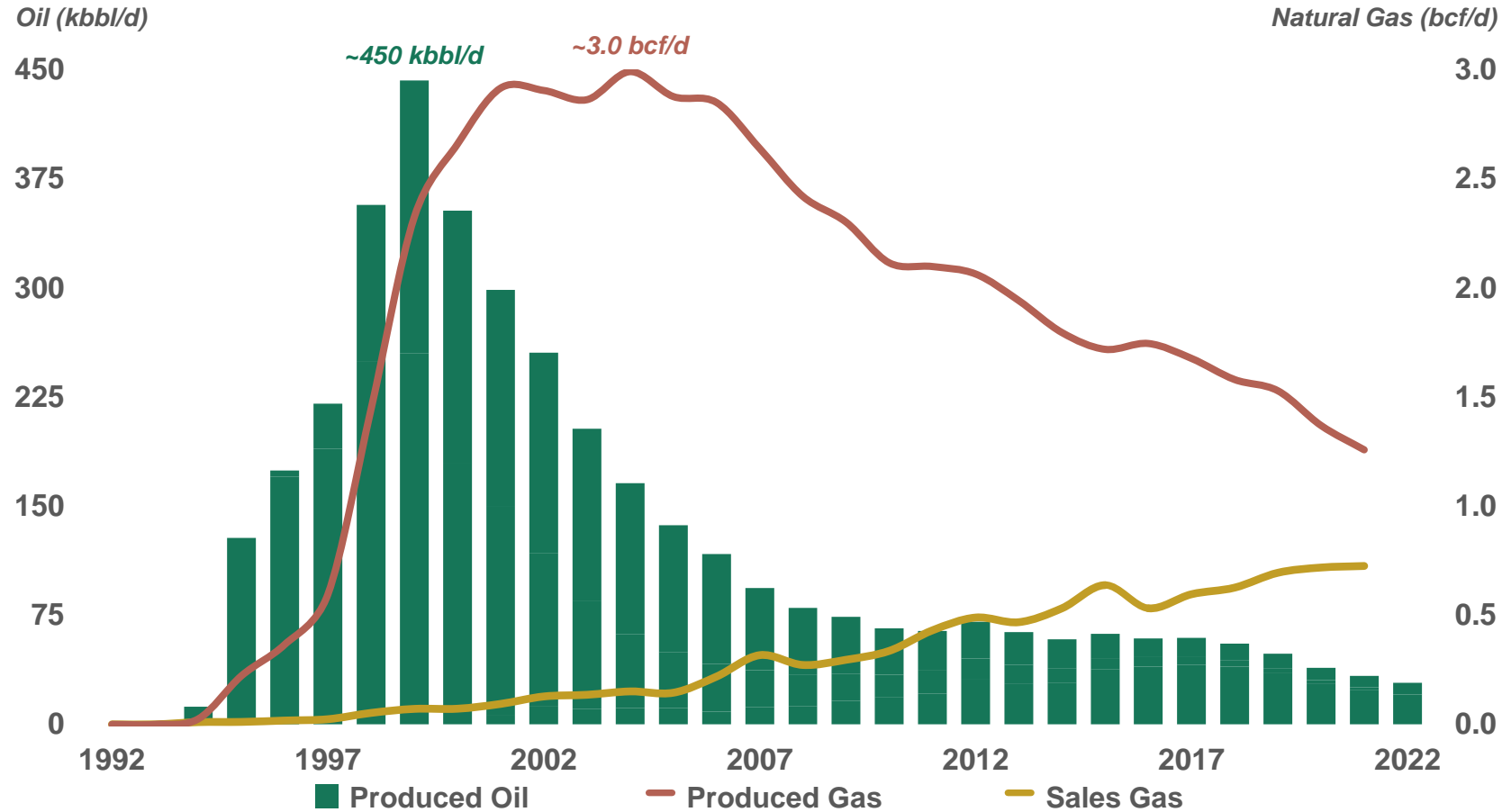
Partner & Government Support to Fast-Track Discoveries to Market

Llanos Foothills

Llanos Foothills – The Most Prolific Area in all of Colombia



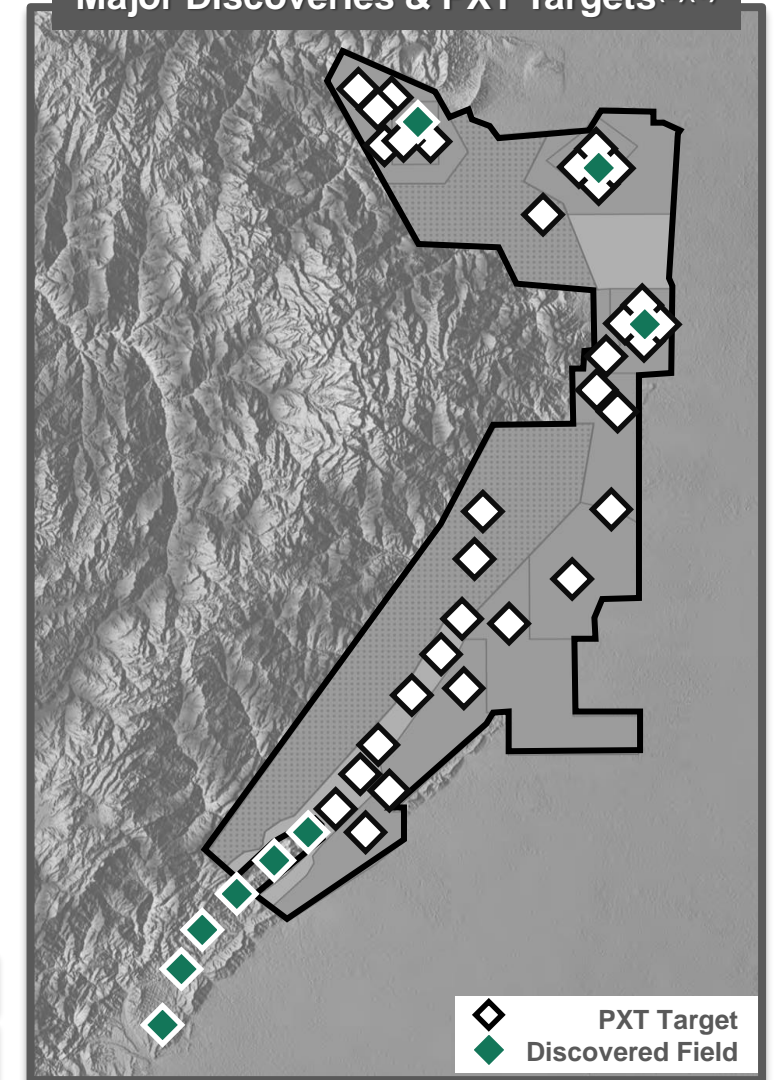
LLANOS FOOTHILLS HISTORICAL AVERAGE PRODUCTION⁽¹⁾



Peak Oil Production ~450 kbbbl/d (1999)

Peak Gas Production ~3.0 bcf/d (2004)

Major Discoveries & PXT Targets⁽²⁾⁽³⁾



(1) Source: IHS – S&P Global. (2) Map is for illustrative purposes only. (3) See "Forward-Looking Statements" advisory.

Llanos Foothills – Historical Timeline



What Paused Exploration?

**Uneconomic Contracts
with 100% X-Factor**



**Technical &
Surface Access**



**Oversupplied
Market**



Today's Environment

Competitive Contracts

ECONOMIC CONTRACTS, WITH DOMINANT LAND POSITION & IN-PLACE INFRASTRUCTURE

Technology & Access

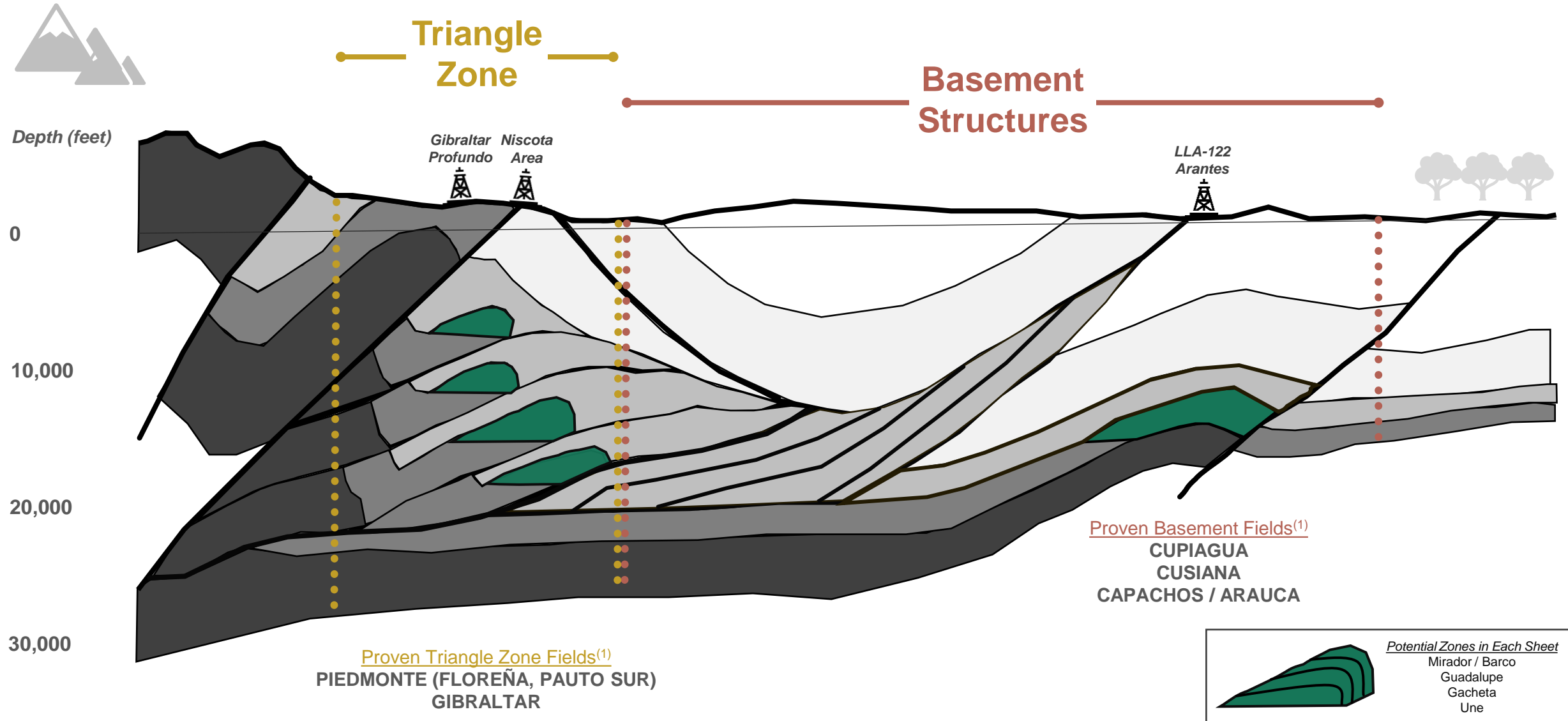
PROVEN OPERATING CAPABILITY AND ABILITY TO ACCESS COMPLEX ENVIRONMENTS

Attractive Gas Market

GAS UNDERSUPPLIED WITH SUPPORT FROM GOVERNMENT FOR DEVELOPMENT

All Critical Items have Converged to Create Today's Opportunity

Llanos Foothills – Illustrative Structural Trends

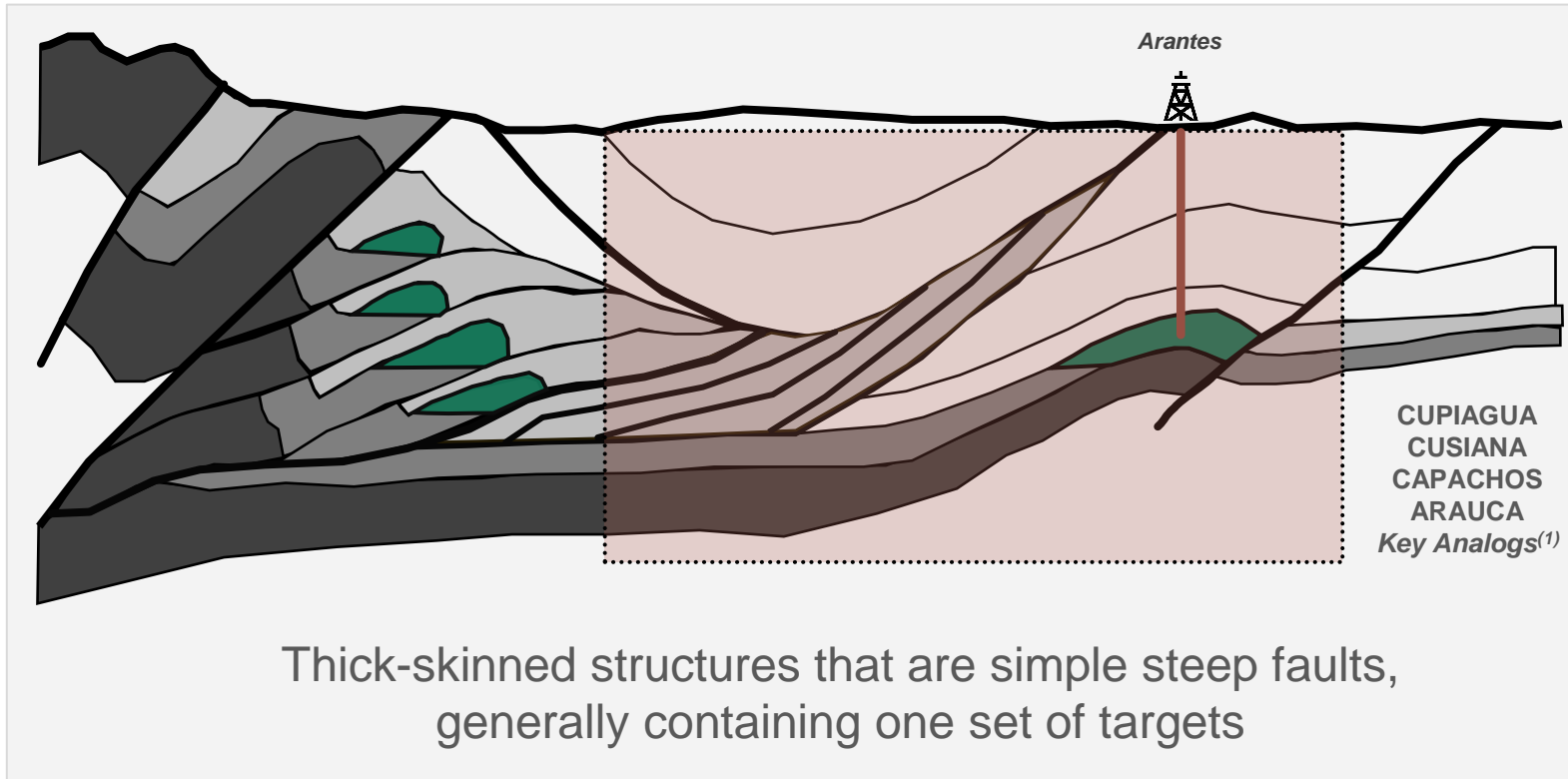


See "Oil & Gas" advisory.
 (1) See "Analogous Information" advisory.

Llanos Foothills – Basement Structures



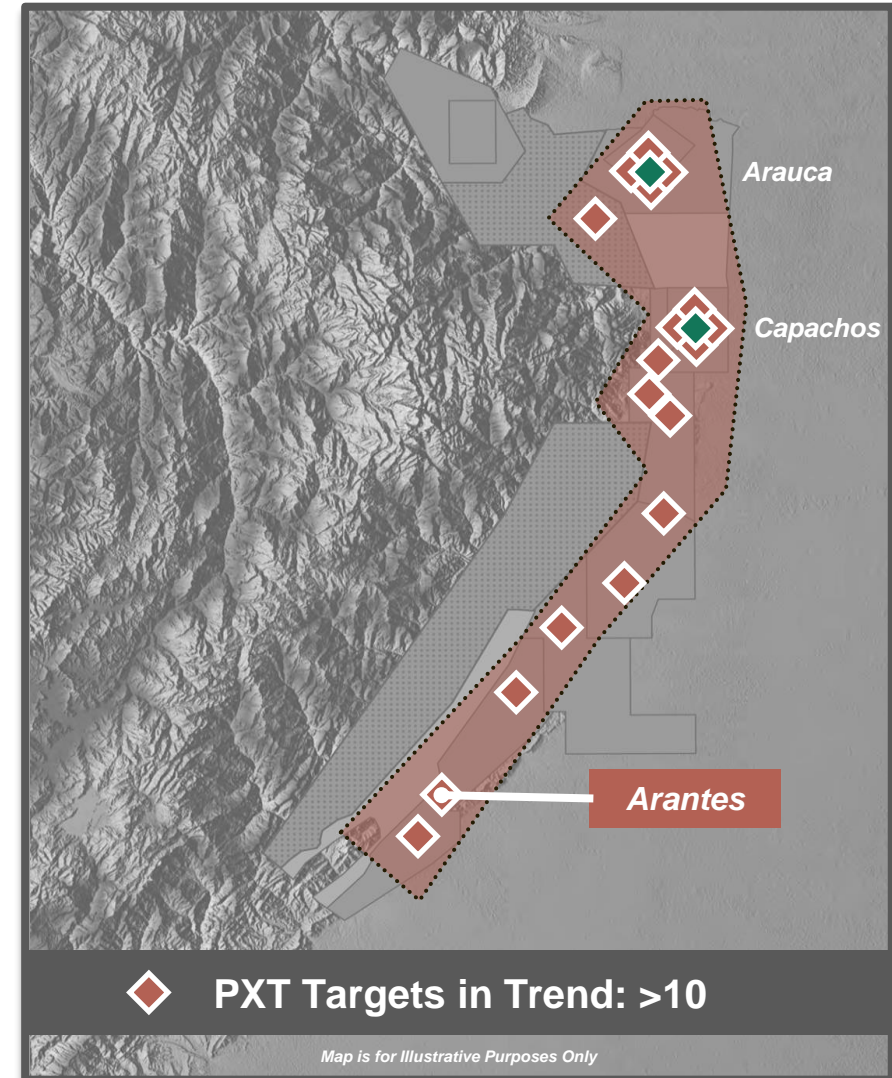
Simpler, Single Sheet Structures



LLA-122 – Arantes
Key Prospect



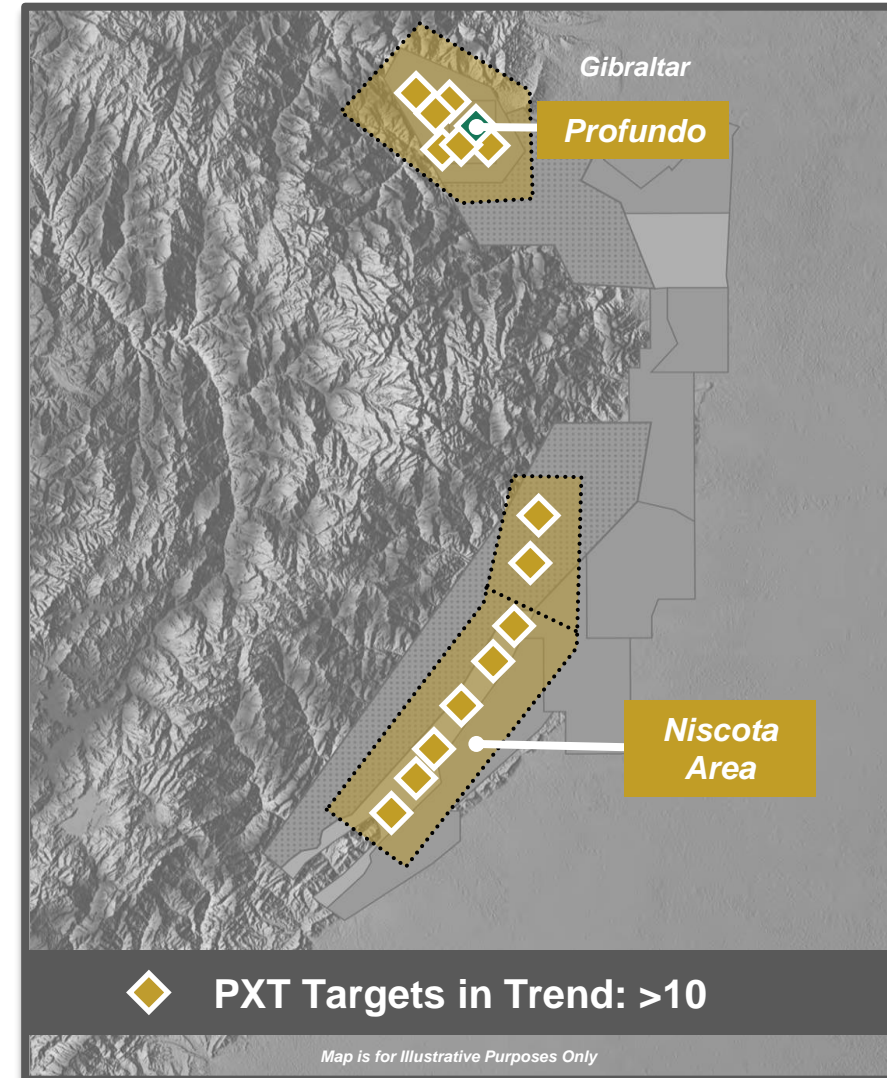
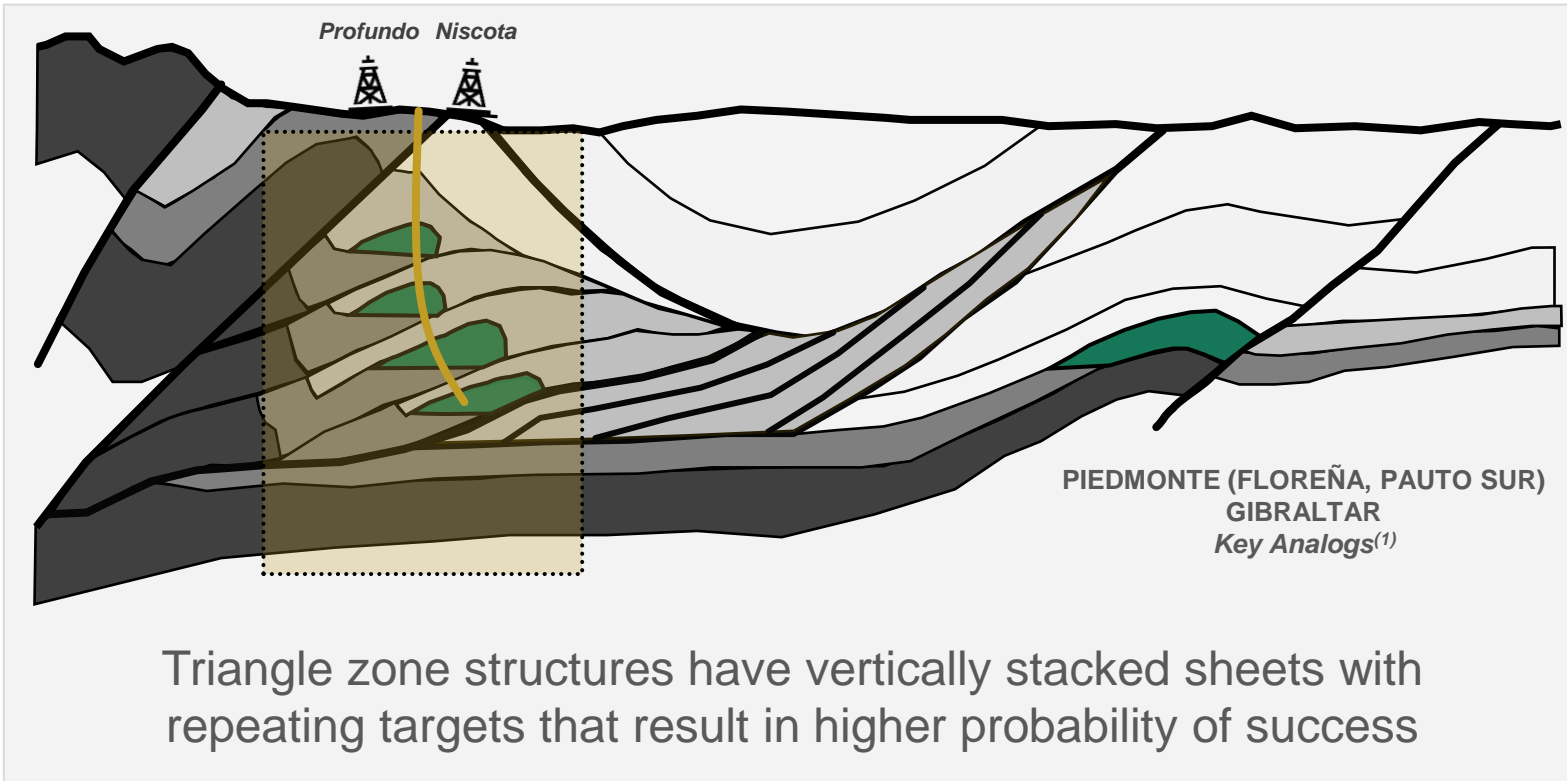
~10-30%
Probability of
Success⁽²⁾



Llanos Foothills – Triangle Zone



Focused Capital Allocation on 5+ Priority Targets



Sirirí – Profundo⁽²⁾
Key Prospect



Niscota⁽³⁾
Key Area



~40%+
Probability of
Success⁽⁴⁾

See "Forward-Looking Statements" and "Oil & Gas" advisory.

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A photograph of two men in white shirts sitting on a light-colored sofa, leaning forward to sign documents on a wooden table. They are both smiling at the camera. The man on the left is holding a black pen, and the man on the right is holding a green pen. They are wearing lanyards with ID badges. The background shows a modern lounge with a large window, a television, and other people in the distance.

Strategy & Next Steps

Executing on Strategy as Presented in 2021



Business Fundamentals



Colombia Advantage
& ESG



Asset Sustainability



Production Growth



Return of Capital to
Shareholders

Strategic Growth Levers



Utilize Exploitation & Technology

UNLOCKING EXTENSIVE LAND BASE USING GLOBALLY-PROVEN TECHNOLOGY



Capture Liquids-Rich Gas Opportunities

PURSUING ONSHORE, WORLD-CLASS GAS PLAYS THAT ARE UNDEREXPLORED



Deliver Outsized Exploration Potential

FOCUSING ON THE EXECUTION OF TRANSFORMATIONAL, HIGH-IMPACT PROSPECTS

Strategic Steps Enabled the Foothills Agreement



✓ *Strategically acquired land position*

✓ *Proven technology track record*

✓ *Strong government & partner relations*

✓ *Leader in community engagement*



**Now set to be the operator
of the Llanos Foothills,
entrusted to lead an
onshore gas solution**

Vision to Progress Foothills Opportunity



2024

LLA-122
Arantes

Drilling Today

- ✓ Preliminary results expected mid-year

2025

Sirirí Gibraltar
Profundo

Top Ranked Prospect⁽¹⁾

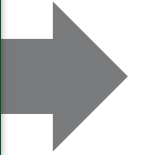
- ✓ Expected to be a part of the 2025 exploration program

2025+

Exploration Area
Niscota

Covered by AMI⁽²⁾

- ✓ Permitting and preparations subject to process and government approvals



**Long-term vision is to be continuously drilling in the region,
delivering multiple exploration wells per year**

See "Forward-Looking Statements" advisory.

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The Colombian Foothills Provides Game-Changing Company Potential at an Enhanced Risk & Reward Profile



**THREE-YEAR EXPLOITATION
PLAN UNCHANGED**



**HIGH-GRADED
EXPLORATION PORTFOLIO**

The Next LLA-34 Moment

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Certain information regarding Parex set forth in this presentation contains forward-looking statements that involve substantial known and unknown risks and uncertainties. The use of any of the words "plan", "expect", "prospective", "project", "intend", "believe", "should", "anticipate", "estimate" or other similar words, or statements that certain events or conditions "may" or "will" occur are intended to identify forward-looking statements. Such statements represent Parex's internal projections, estimates or beliefs concerning, among other things, future growth, results of operations, production, future capital and other expenditures (including the amount, nature and sources of funding thereof), plans for and results of drilling activity, business prospects and opportunities. These statements are only predictions and actual events or results may differ materially. Although the Company's management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievement since such expectations are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause Parex's actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, Parex.

In particular, forward-looking statements contained in this presentation include, but are not limited to, the Company's focus, plans, priorities and strategies and the benefits to be derived from such plans, priorities and strategies; the benefits to be derived from the Foothills Agreement; Parex's intention to accelerate development through existing, underutilized infrastructure; projections related to natural gas supply and demand imbalance; the anticipated mutual benefits for Columbia as disclosed herein, including with respect to energy security, supporting energy transition and utilizing existing infrastructure; Parex's ability to fast track Siriri Convenio to market; the expected conversion of the OBC pipeline to multiphase and the expected benefits to be derived therefrom; key prospects and blocks to be targeted in the Llanos Foothills and the estimated probabilities of success for such targets; that focused capital allocation will be used on 5+ priority targets in Llanos Foothills – Triangle Zone; Parex's execution on its strategy as presented in 2021, including unlocking extensive land base using globally proven technology, pursuing onshore, world-class gas plays that are under explored, Parex's focus on the execution of transformation, high-impact prospectus, and business fundamentals including production growth and return of capital to shareholders; that in connection with the Foothills Agreement, Parex is now set to be the operator of the Llanos Foothills and entrusted to lead an onshore gas solution; the timing of preliminary results expected from LLA-112; that Siriri Gibraltar Profundo is expected to be part of Parex's 2025 drill program; that in the Niscota exploration area ECP is progressing extension onto land with government and that once formalized, permitting and preparation can begin; Parex's long-term vision to be continuously drilling in the Llanos Foothills region and the expectation to deliver multiple exploration wells per year; that Parex's gas strategy is progressing in full alignment with Ecopetrol and government; and that the Foothills Agreement provides Parex with game-changing potential at reduced risk.

Although the forward-looking statements contained in this presentation are based upon assumptions which management believes to be reasonable, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. With respect to forward-looking statements contained in this presentation, Parex has made assumptions regarding, among other things: current commodity prices and royalty regimes; availability of skilled labour; timing and amount of capital expenditures; future exchange rates; the price of oil; the impact of increasing competition; conditions in general economic and financial markets; availability of drilling and related equipment; effects of regulation by governmental agencies; receipt of partner, regulatory and community approvals; royalty rates; future operating costs; effects of regulation by governmental agencies; uninterrupted access to areas of Parex's operations and infrastructure; recoverability of reserves and future production rates; the status of litigation; timing of drilling and completion of wells; on-stream timing of production from successful exploration wells; operational performance of non-operated producing fields; pipeline capacity; that Parex will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Parex's conduct and results of operations will be consistent with its expectations; that Parex will have the ability to develop its oil and gas properties in the manner currently contemplated; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; that the estimates of Parex's reserves volumes and the assumptions related thereto (including commodity prices and development costs) are accurate in all material respects; that Parex will be able to obtain contract extensions or fulfill the contractual obligations required to retain its rights to explore, develop and exploit any of its undeveloped properties; that Parex will have sufficient financial resources in the future to execute on shareholder returns; that Parex will realize the expected benefits from the Foothills Agreement; that expected supply and demand imbalances as disclosed herein will materialize; that Parex's expectations with respect to utilizing existing infrastructure as disclosed herein will materialize; receipt of all required regulatory approvals in respect of the Foothills Agreement; and other matters.

These forward-looking statements are subject to numerous risks and uncertainties, including but not limited to, the impact of general economic conditions in Canada and Colombia; industry conditions including changes in laws and regulations including adoption of new environmental laws and regulations, and changes in how they are interpreted and enforced, in Canada and Colombia; competition; lack of availability of qualified personnel; the results of exploration and development drilling and related activities; risks related to obtaining required approvals of regulatory authorities, in Canada and Colombia and partner and community approvals in Colombia; risks associated with negotiating with foreign governments as well as country risk associated with conducting international activities; volatility in market prices for oil; fluctuations in foreign exchange or interest rates; environmental risks; changes in income tax laws, tax rates and/or incentive programs relating to the oil industry; changes to pipeline capacity; ability to access sufficient capital from internal and external sources; failure of counterparties to perform under the terms of their contracts; risk that Parex's evaluation of its existing portfolio of assets and exploration and development opportunities is not consistent with its expectations; the risk that Parex may not unlock an extensive land base, capitalize on onshore gas opportunities or deliver on exploration potential; the risk that Parex may have greater cost inflation exposure than anticipated; the risk that Parex may not have the technology or the people in place to execute on its strategy; the risk that Parex may not be successful in executing its business plans and strategy; the risk that Parex may not have sufficient financial resources in the future to fund shareholder returns; the risk Parex will not realize the anticipated benefits from the Foothills Agreement; the risk that expected supply and demand imbalances as disclosed herein will not materialize; the risk that Parex will not be able to utilize existing infrastructure as expected; risks related to the receipt of required regulatory approvals in connection with the Foothills Agreement; and other factors, many of which are beyond the control of the Company. Readers are cautioned that the foregoing list of factors is not exhaustive. Additional information on these and other factors that could affect Parex's operations and financial results are included in reports on file with Canadian securities regulatory authorities and may be accessed through the SEDAR+ website (www.sedarplus.ca).

Management has included the above summary of assumptions and risks related to forward-looking information provided in this presentation in order to provide shareholders with a more complete perspective on Parex's current and future operations and such information may not be appropriate for other purposes. Parex's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what benefits Parex will derive. These forward-looking statements are made as of the date of this presentation and Parex disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws. The forward-looking statements contained in this presentation are expressly qualified by this cautionary statement.

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Oil & Gas Advisory

This presentation discloses drilling targets in the category of unbooked locations. Unbooked locations are internal estimates based on our prospective acreage and an assumption as to the number of wells that can be drilled per section based on industry practice and internal review. Unbooked locations do not have attributed reserves or resources. Unbooked locations consist of drilling locations that have been identified by management as an estimation of our multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. There is no certainty that we will drill all of these drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas reserves, resources or production. The drilling locations on which we drill wells will ultimately depend upon the availability of capital, regulatory approvals, oil and natural gas prices, costs, actual drilling results, additional reservoir information that is obtained and other factors. While certain of the unbooked drilling locations have been de-risked by existing wells in relative close proximity to such unbooked drilling locations, other unbooked drilling locations are farther away from existing wells where management has less information about the characteristics of the reservoir and therefore there is more uncertainty whether wells will be drilled in such locations and if drilled there is more uncertainty that such wells will result in additional oil and gas reserves, resources or production.

Analogous Information

Certain information in this press release may constitute "analogous information" as defined in National Instrument 51-101. Such information includes production estimates and other information retrieved from publicly available sources. Management of Parex believes the information is relevant as it may help to define the reservoir characteristics and production profile of lands in which Parex may hold an interest. Parex is unable to confirm that the analogous information was prepared by a qualified reserves evaluator or auditor and is unable to confirm that the analogous information was prepared in accordance with the COGE Handbook or with National Instrument 51-101. Such information is not an estimate of the production, reserves or resources attributable to lands held or to be held by Parex and there is no certainty that the production, reserves or resources data and economic information for the lands held or to be held by Parex will be similar to the information presented herein. The reader is cautioned that the data relied upon by Parex may be in error and/or may not be analogous to such lands held or to be held by Parex.