

NorthStar Energy Corporation

Balancing Growth and Shareholder Returns: Selecting the Next Core Asset

Introduction

With NorthStar Energy Corporation's annual Investor Day just weeks away, Chief Executive Officer Diane Calloway knows exactly which question will dominate the room. For more than two decades, NorthStar has raised its dividend every single year, weathering commodity downturns, industry consolidation, and shifting energy policy. Investors have come to prize the company as one of the most dependable dividend-growth names in the sector. That reputation is now both an asset and a constraint. NorthStar's board has approved a single major growth investment for the coming cycle, and management must choose one of three mutually exclusive opportunities without compromising the dividend promise that defines the company.

The three candidates could hardly be more different: a short-cycle shale development at home in Frontera, an international shale play in the North African republic of Tassili, and a large offshore discovery off Amazonia in South America. Each sit in a different country, under a different fiscal and political regime, and carries a distinct risk, return, capital, and emissions profile. Calloway has asked your team to cut through the noise and recommend the option that best maximizes long-term shareholder value while protecting NorthStar's dividend-growth identity and advancing its carbon-intensity ambition.

NorthStar Energy Corporation

NorthStar Energy Corporation is a publicly traded, mid-cap independent engaged in the exploration and production of crude oil, natural gas, and natural gas liquids (NGLs). Headquartered in Frontera, a large and stable federal republic with the world's deepest capital markets, the company has built its franchise on capital discipline, operational reliability, and a consistent return of cash to shareholders. The heart of the portfolio is a set of domestic Fronteran unconventional (shale) assets. These are the company's core engine, generating steady free cash flow at modest sustaining capital and funding the dividend. Its footprint is otherwise focused and largely domestic, complemented by two international positions built over the years: one operated offshore development in West Africa that gives NorthStar hands-on deepwater operating capability, and a small non-operated interest in an onshore gas development in the Middle East led by a national oil company (NOC). Between them, these positions have given the company real experience running offshore projects and working alongside national oil companies, even if the Fronteran shale base still drives most of the production and cash flow today. NorthStar has also completed exploration and appraisal work in both Amazonia and Tassili in prior years but has never brought either to development, so it currently has no active production in either country.

What sets NorthStar apart from many peers has less to do with its size than with its identity. The company has raised its dividend for more than twenty consecutive years, and much of its shareholder base, including income-oriented institutions and long-term retail holders, owns the stock precisely for that reliability. Inside the company, the annual increase is treated as a promise

the business must fund, and every major capital decision is screened against its impact on dividend capacity.

The Decision

NorthStar's Corporate Development team has narrowed the field to three growth investments. Because of capital constraints and the company's commitment to uninterrupted dividend growth, only one project can move forward. The three candidates are:

- **Project Bison** — an onshore shale development in NorthStar's home country of Frontera.
- **Project Fennec** — an onshore shale development in the North African republic of Tassili.
- **Project Puma** — an offshore development off Amazonia, in South America.

Each option is described in detail in the sections that follow, and the full economic assumptions for all three are provided in the accompanying case exhibits. The options differ sharply in return potential, capital requirement, timing, risk, and emissions profile. Your team should evaluate all three on their own merits, build the comparison yourselves from the exhibits, and determine which project best serves NorthStar's shareholders and strategic priorities.

Capital Allocation and Strategic Priorities

NorthStar evaluates every major investment against three enduring priorities. The first two are firm, non-negotiable constraints that any recommendation must satisfy every year: continued dividend growth and a firm leverage ceiling. The third, improving carbon intensity, is a core strategic objective to be weighed. Your recommendation will be judged on how well it honors all three:

- **Grow the dividend (a hard requirement).** Uninterrupted annual dividend growth is a firm commitment to shareholders, not an aspiration. The selected project must allow NorthStar to increase its total annual cash dividend spend by 5% each year, regardless of any changes in shares outstanding; an option that would force the company to freeze the dividend, cut it, or issue new equity to fund it is disqualifying, regardless of its standalone value.
- **Protect the balance sheet (a hard ceiling).** Net Debt/Adjusted EBITDA must not exceed 1.75x in any year. This is a firm cap set by the CEO and CFO to protect NorthStar's credit rating, not a soft target. With crude prices below recent historical averages, the company must preserve this buffer and retain financial flexibility. Over the past three years, NorthStar has deliberately reduced net leverage from roughly 1.9x to under 1.6x Net Debt/Adjusted EBITDA, building the balance-sheet headroom this investment now requires.
- **Improve carbon intensity (a strategic objective).** Management has set an ambition to lower portfolio greenhouse-gas emissions intensity from roughly 18 kg CO₂e/boe today toward 15 kg CO₂e/boe by 2035. To reflect this in capital allocation, NorthStar applies an internal carbon price of \$75 per metric ton of CO₂e when screening major development

opportunities. Each project's emissions profile therefore affects both its economics (through the carbon price) and, directionally, the portfolio's progress toward that ambition.

These priorities will not always point in the same direction, and part of your task is to determine where they conflict for each option. A project's standalone value does not by itself make it admissible. Any recommendation must first satisfy both firm constraints (continued dividend growth and the 1.75x leverage ceiling) before weighing the remaining tradeoffs across returns, risk, capital discipline, and carbon intensity. Defend a single recommendation that clears both hard constraints.

Option 1: Project Bison — Onshore Shale, Frontera

The Country

Frontera is NorthStar's home country: a large federal constitutional republic and the world's largest economy, with deep and liquid capital markets, a freely convertible reserve currency, and an independent exploration-and-production sector that has operated for well over a century. Frontera industrialized early on the back of domestic oil and gas, and its shale revolution over the past two decades turned it from a large importer into one of the world's leading producers. Unusually among global jurisdictions, Fronteran law grants private ownership of subsurface mineral rights, so operators negotiate leases and royalties directly with private and mineral owners rather than with the state. Regulation is layered across federal and state authorities, contract enforcement is predictable, and a deep oilfield-services market and extensive existing midstream network make Frontera one of the lowest-friction places in the world to develop unconventional resources.

Frontera's risk profile is dominated by regulatory and market factors rather than sovereign ones. Political and expropriation risk is very low and government take is comparatively modest, but operators face state permitting timelines, tightening rules on water disposal and methane emissions, and periodic shifts in federal energy policy between administrations. They are also exposed to service-cost inflation during activity upcycles and to commodity-price volatility at domestic benchmarks.

The Project

Project Bison is an unconventional shale development on acreage NorthStar already controls in a mature Fronteran basin. The play sits toward the edge of the established shale fairway, giving it a gassier production profile than the basin's core, but it benefits from a deep service market, available personnel, and extensive existing infrastructure. A competitive third-party midstream market means gathering and processing capacity can be secured cheaply, with no significant midstream capital required from NorthStar. Crude is sold into the domestic market referenced to WTI, and natural gas is marketed into the highly competitive domestic market at Henry Hub. Project Bison's development requires primarily drilling and completions spending, with an expected reserve life of ten years. Because the acreage is already held and infrastructure is in place, production can begin approximately one year after sanctioning. A modest private/mineral-owner royalty applies, reflecting NorthStar's ownership of a portion of the underlying mineral rights.

Option 2: Project Fennec — Onshore Shale, Tassili

The Country

Tassili is a large North African republic whose economy is heavily dependent on hydrocarbons, which account for the large majority of exports and government revenue. Tassili won its independence from a European colonial power after a protracted mid-twentieth-century war of liberation. That experience forged a strong national tradition of state control over natural resources. For decades, a single national oil company (NOC) held primacy over exploration and production, and the state remains the dominant economic actor. More recently, Tassili has revised its hydrocarbons law to attract foreign capital and technology, offering more competitive terms while retaining significant state participation and NOC partnership requirements. A network of trans-Mediterranean pipelines gives Tassili direct access to European gas and crude markets, making it a strategically important supplier to the continent.

Tassili carries elevated sovereign, fiscal, and security risk. Government take is high, and the fiscal regime has historically been subject to change, including contract renegotiation and evolving production-sharing terms. Foreign operators must navigate lengthy permitting and bureaucratic processes, currency-convertibility and profit-repatriation constraints, and local-content and workforce requirements. Security risk is meaningful in some interior and border regions and raises the cost of protecting remote operations and infrastructure.

The Project

Project Fennec is an onshore shale development located in the Tassilian interior, with pipeline routes to the Mediterranean coast and onward to Europe. Because gas can move to European buyers directly by pipeline, Tassili avoids the cost and complexity of liquefaction and LNG shipping, giving it unusually easy, low-cost export access to premium European markets. Crude is priced off Brent, and gas is exported into European markets referenced to TTF. The basin is prospective but early in its development, so surface infrastructure and the local service ecosystem are far less mature than in Frontera. Project Fennec is heavily gas-weighted and offers a reserve life of roughly fifteen years. However, regional infrastructure is limited. NorthStar generally prefers not to own and operate midstream, but no viable third-party solution exists in Tassili, so the company must fund its own gathering, processing, and storage, which raises both capital requirements and midstream cost. Remote operations, a smaller service ecosystem, and greater logistics complexity increase operating costs, overhead costs, and the development timeline. Project Fennec carries a comparatively high carbon intensity, driven by new-build infrastructure, longer transport distances, and less efficient regional systems.

Option 3: Project Puma — Offshore, Amazonia

The Country

Amazonia is a large South American federal republic and a major emerging-market economy. A series of giant offshore discoveries in deep, pre-salt waters over the past two decades transformed the country into a significant crude producer and drew large-scale international investment into its deepwater sector. A partially state-owned national oil company plays a central

role, and major offshore block leases include local-content frameworks that channel work to domestic suppliers and shipyards. Amazonia is a functioning democracy with world-class deepwater engineering expertise, but its recent history also includes episodes of political and economic volatility, commodity-linked boom-and-bust cycles, and high-profile governance and corruption investigations that have periodically reshaped the sector and its regulatory terms.

Amazonia's risk profile is shaped mainly by fiscal and regulatory factors: complex and shifting tax rules, production-sharing terms, and local-content mandates that can raise cost and lengthen schedules. Sovereign and expropriation risk exists but is tempered by an established legal framework and a long track record of foreign deepwater investment. Currency volatility and macro-economic cycles add uncertainty, and deepwater execution carries its own long-lead, high-complexity risk. Offshore environmental permitting is rigorous.

The Project

Project Puma is a large offshore conventional discovery in Amazonia's deepwater province. The field offers a substantial, oil-weighted reserve base with long-plateau potential. Operating expense and carbon intensity are low thanks to high production rates concentrated across a small number of facilities. Third-party developers construct and operate the offshore export pipelines and associated facilities, but offshore distance and complexity increase midstream costs. Associated gas can be marketed locally at Henry Hub pricing, and crude is sold at Brent pricing. Project Puma is the largest opportunity by reserve base, with a reserve life of roughly twenty-five years and high peak. At the same time, development requires significant CAPEX. First production is expected to begin five years after sanction. Government take is competitive, as the country is trying to attract large-scale offshore investment.

Emissions and the Internal Carbon Price

NorthStar brings emissions directly into its investment economics through an internal carbon price of \$75 per metric ton of CO₂e, applied to every major development it screens. Each project's carbon intensity (kg CO₂e/boe) and production profile are provided in the exhibits. The carbon price is not an actual cash expense and is not tax-deductible but should be considered when building each project's free cash flow for valuation so that it penalizes higher-intensity barrels relative to lower-intensity ones.

Separately, NorthStar's board has set an ambition to lower the emissions intensity of its overall portfolio from roughly 18 kg CO₂e/boe today toward 15 kg CO₂e/boe by 2035. You are not expected to recompute a blended portfolio intensity; instead, use each project's intensity as a directional screen. You are welcome to propose ways NorthStar could advance its 2035 ambition regardless of which project you recommend. This is especially relevant if your chosen option would raise the portfolio's intensity, but any team may put forward decarbonization ideas as part of a stronger strategy. You are encouraged to think more broadly across operational, technological, commercial, and portfolio-level options, and to put forward whatever approaches you find most compelling. You will not be given a menu of specific decarbonization options; instead, reason qualitatively about each lever's likely costs, feasibility, timeline, execution risk, and reputational risk. Make a clear, defensible case for the path you would pursue and why.

Investor Expectations

NorthStar's Investor Relations team recently completed an assessment of shareholder feedback and engagement activity to understand what matters most to the company's owners. The results, summarized below, reinforce why capital discipline and the dividend cannot be treated as secondary considerations: dividend growth and risk-adjusted returns together account for the large majority of what investors weigh when they judge a capital-allocation decision.

Top Shareholder Priorities

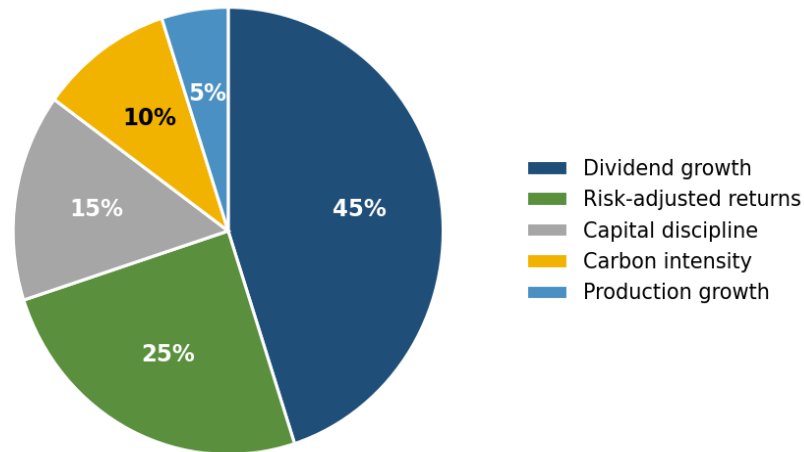


Exhibit: Top shareholder priorities, from NorthStar Investor Relations shareholder engagement survey.

Your Task

You are part of a cross-functional team of Finance and Corporate Strategy analysts, and CEO Diane Calloway has asked you to recommend NorthStar's next core asset to the Board of Directors. Your recommendation must be grounded in rigorous economics and must explicitly address the company's dividend commitment, balance-sheet limits, and carbon objectives. Develop a presentation that supports a single, defensible recommendation and addresses the following:

1. **Which project should NorthStar pursue, and why?** Build discounted-cash-flow models for all three projects and present NPV, IRR, free cash flow, and other relevant financial metrics. Calculate a project-specific WACC for each option using CAPM and the appropriate geographic risk premium. Recommend one project for board approval and explain your reasoning.
2. **Can NorthStar fund the project while growing the dividend?** Treat continued dividend growth and the net Debt/Adjusted EBITDA $\leq 1.75x$ ceiling as firm constraints that your recommended project must satisfy in every year, not as targets to optimize against. Evaluate each option against both, show the effect on dividend coverage and year-by-year leverage, and explain your reasoning. A project that cannot clear both constraints

cannot be recommended, no matter how high its standalone value. A template for the year-by-year leverage check is provided in the exhibits.

3. **How do the projects affect the company's carbon goals?** Apply the \$75 per metric ton internal carbon price to each project's emissions and include the resulting non-cash cost in your model. Discuss, directionally, whether each option moves NorthStar toward or away from its 2035 carbon-intensity ambition. If you wish, propose one or more ways NorthStar could advance that ambition, reasoning qualitatively about each lever's likely cost, feasibility, and trade-offs rather than relying on a provided price tag.
4. **What are the risks, and how would you mitigate them?** Assess country, fiscal, regulatory, and execution risk for each option, and determine whether the incremental return of a higher-risk option justifies the additional risk and emissions of exposure. Support your view with sensitivity or scenario analysis on the assumptions that matter most (e.g., commodity prices, discount rate, capital and cost estimates) and anticipate the questions you would receive from investors.

Modeling Guidelines and Simplifying Assumptions

All project-specific inputs (production, pricing differentials, costs, capital phasing, carbon intensity, royalties, and cost-of-capital components) are provided in the accompanying case exhibits. To keep the analysis focused, apply the following ground rules.

- **Treat dividend growth and the 1.75x leverage ceiling as binding constraints.** Your recommended project must sustain 5% annual growth in NorthStar's total cash dividend spend and keep net Debt/Adjusted EBITDA at or below 1.75x in every year. Fund any cash shortfall with debt; do not assume new equity.
- **Assume each project is wholly owned and self-funded.** A development of this scale would often be shared with one or more partners through a joint venture to spread the capital and risk, but NorthStar has not secured any partners for these opportunities at this stage. For your evaluation, assume the company takes the final investment decision on its own and funds and develops the chosen project on a wholly owned basis. Stakes cannot be sold to form joint ventures.
- Start your financial model on January 1, 2027.
- Model in real terms and ignore inflation.
- Treat working-capital requirements as immaterial.
- Assume no salvage value at the end of field life.
- Keep in mind that the internal carbon price is only used for internal valuation. It is not tax-deductible and does not affect real cash flow for your leverage analysis.
- Realized commodity prices differ by product and by regional market; use the region-specific price curves in the exhibits for each project.
- Depreciate development capital straight-line over each project's producing life, beginning in the first year of production and ending in the final production year.

- Assume asset-retirement costs are incurred in the final year of project life, are not included in the depreciation base, and are not tax deductible.
- Apply only corporate income tax rate of 21% and the applicable production royalty and government take; ignore state and other taxes. All government take and royalty costs are combined and shown as a single “Production Royalty and Government Take” percentage in Exhibit 1. The Production Royalty and Government Take expense is tax-deductible.
- Note that each project produces crude oil, natural gas, and natural gas liquids (NGLs).