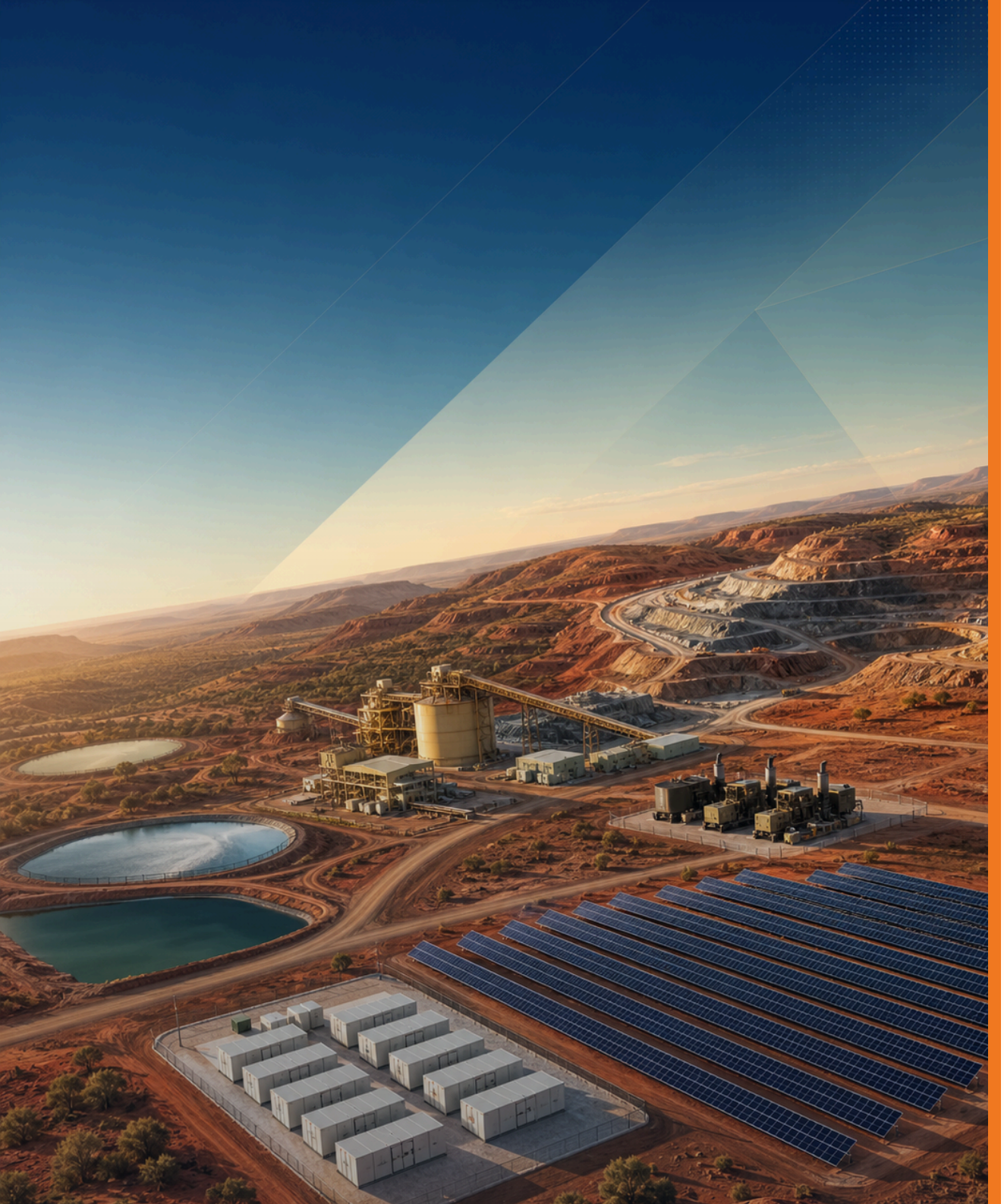


Heliovulcan
ENERGY ADVISORS

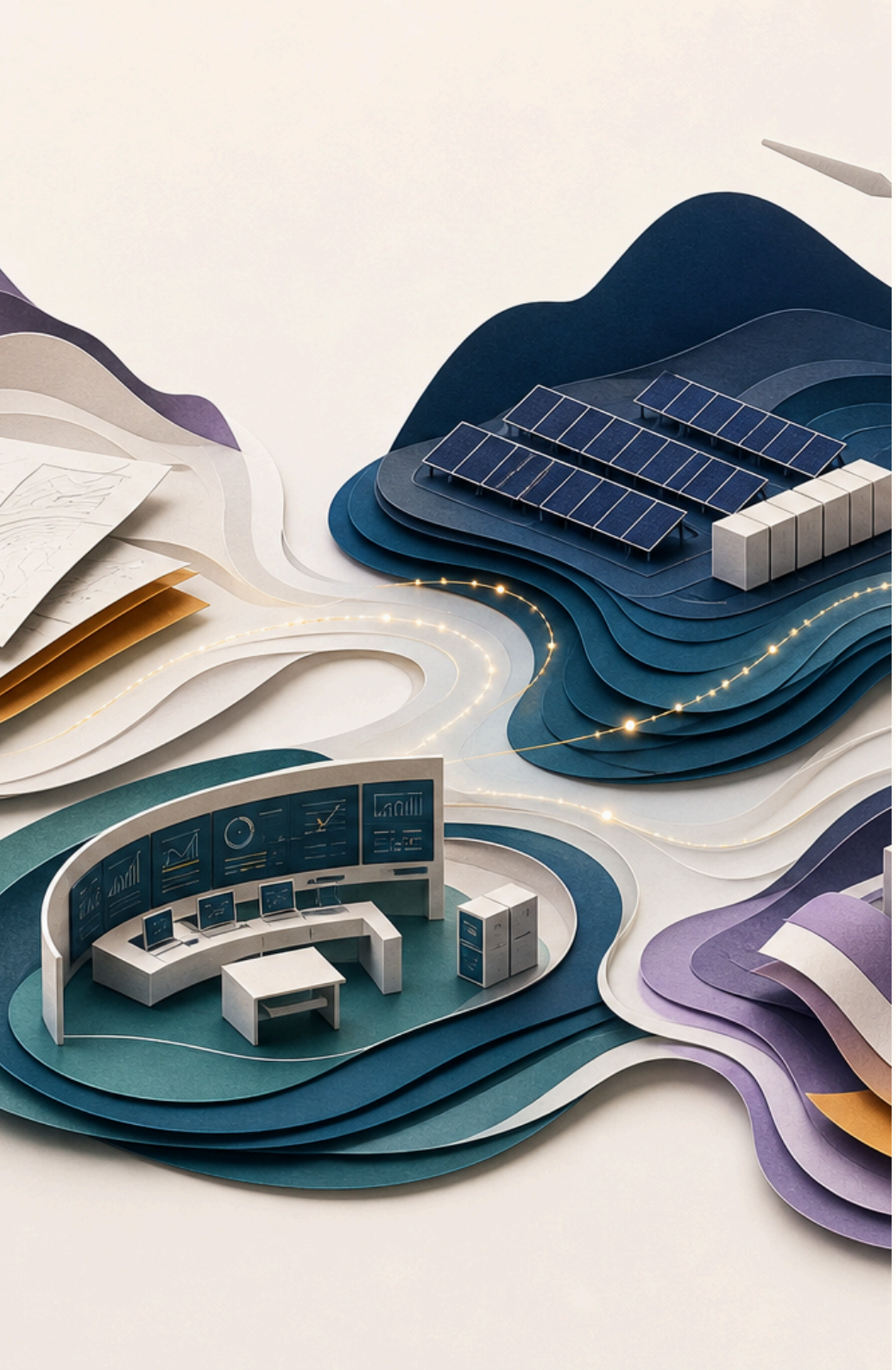
OWNER-FACING PRELIMINARY SCREENING REPORT

Fountain Head Hybrid Energy Financeability Review

Why a 60% renewable hybrid case appears more financeable than both the short-life diesel replacement case and a 100% renewable screen

Independent early-stage screening note

10 June 2026



REPORT MAP

Contents

PREPARED FOR	Early discussion with Fountain Head mine owner / project sponsor
MODEL BASIS	Public-data desktop reconstruction plus indicative hybrid energy financeability model
STATUS	Preliminary screening — not an EPC design, bankable feasibility study or financing offer

Reading rule. Annual tariff saving is not the deciding metric. The owner-side test is true lifecycle saving after the buy-out required to support SPV economics.

EXECUTIVE SUMMARY

S4 is the only current screen that aligns lender and owner economics

The energy question is not diesel versus 100% renewables; it is which hybrid structure is reliable, lower-cost and financeable.

A 60% renewable hybrid is currently the most balanced option: it passes simplified DSCR screening and preserves positive customer value after buy-out.

The short-life standalone case is not a strong third-party SPV candidate because the initial mine-life window is too short to recover the full system cost. A longer, seven-year demand horizon materially improves financeability.

The 100% renewable case can be re-geared to pass a 1.30x DSCR, but its required buy-out is too large. Passing DSCR alone does not make a proposition attractive to the customer.

Short-life standalone

Not suitable for a third-party SPV. Project life is too short and the required buy-out is too high.

Expanded hub

A seven-year energy demand horizon materially improves financeability in the post-merger regional context.

Best current screen

S4 passes DSCR and produces positive true customer saving after buy-out.

100% renewable

A useful upper-bound decarbonisation case, but not commercially preferred under current assumptions.

Recommended decision. Use S4—not S5—as the next engineering and commercial base case. Validate it through hourly dispatch, then negotiate tariff, diesel-cost allocation, buy-out, carbon benefits and ownership options.

Source: Heliovulcan screening model; indicative and rounded

PROJECT CONTEXT

Reliability, diesel logistics and contract structure make this more than a sizing exercise

A mining restart places power reliability and capital allocation directly on the project execution path.

170 km	3 years	3 × 1.5 MW	3.9 MW	7,500 kL/y	29,959 MWh/y
Approx. south of Darwin	Public original life of mine	Referenced diesel units	Total peak power reference	Operational diesel reference	Reconstructed annual demand

Public project baseline

NT EPA material described recommencement of the Fountain Head open pit with an approximately three-year life of mine. The public greenhouse assessment described onsite diesel generation as the base power solution.

The screening demand reconstructs a high-utilisation remote-mine load profile consistent with the cited diesel envelope. Owner operating data must replace this reconstruction before design or commitment.

The commercial structuring question

The owner must determine whether solar, battery and diesel assets are self-funded, supplied through EPC/vendor finance, or delivered via a third-party BOO, SPV or energy-as-a-service structure.

The answer turns on mine life, load certainty, diesel price, residual value, debt capacity and who carries diesel generator and fuel costs—not renewable percentage alone.

IMPLICATION The preferred technical system can still be the wrong commercial system if its contract horizon and residual-value mechanism do not match the mine plan.

Sources: NT EPA public register and 2021 GHG assessment [1–2]

07

POST-MERGER CONTEXT

A longer regional demand horizon changes financeability—but remains an assumption to prove

Patronus' acquisition context supports testing Fountain Head as part of a broader Pine Creek platform. It does not, by itself, establish contracted load.

SCREENING HORIZON

7 years S3 / S4 / S5 assumption

TRANSACTION

Patronus reported implementation of its merger with PNX Metals on 11 September 2024.

DISTRICT LOGIC

Fountain Head and Mt Porter sit within a broader Pine Creek resource and exploration strategy.

VALIDATION

Reconcile the seven-year case to mine plan, ore schedule, processing strategy, drilling and approvals.

Sources: Patronus Resources [3–5]

MODEL BOUNDARY

The screen tests whether owner, SPV investor and lender requirements can coexist

It is a financeability screen, not a final engineering design or financing commitment.

INCLUDED IN THE SCREEN

Integrated system and commercial cash flow

- PV, BESS, diesel generation and integration infrastructure
- Diesel fuel, fixed and variable O&M
- Tariff revenue, debt sizing and simplified DSCR
- Required residual / buy-out and customer true saving
- Indicative investor return and contract horizon

BOUNDARY CHOICE

Diesel generation sits inside the SPV case

A provider expected to supply reliable mine power cannot be assessed only on PV and BESS CAPEX while ignoring diesel generation and residual fuel cost.

If the owner retains diesel assets and fuel-price risk while the SPV supplies only PV/BESS, that is a different commercial case and should be modelled separately.

OWNER

Cost

Delivered tariff, lifecycle saving, reliability and buy-out exposure.

SPV INVESTOR

Return

Contract cash flow, residual value, CAPEX and operating risks.

LENDER

1.30×

Simplified downside DSCR and supportable debt quantum.

DECISION METRIC

True saving

Gross contract saving less the buy-out required for SPV economics.

KEY DISTINCTION

Headline tariff savings can look similar while lifecycle economics diverge. Renewable share changes diesel exposure, CAPEX, debt capacity and required buy-out behind the tariff.

Source: financeability model methodology

SCENARIO COMPARISON

S4 alone combines a DSCR pass with positive customer true saving

All values are indicative and rounded; renewable shares are annual-energy screens, not reliability proof.

SCENARIO	HORIZON	RENEWABLE	FINANCEABILITY READING	BUY-OUT	TRUE SAVING	OWNER READING
S1 — Short-life rebuild	3–4 years	c. 28%	Pass DSCR only with very low debt; fails owner economics	$27.3m	−$20.1m	Sanity check
S3 — Expanded hub, same sizing	7 years	c. 28%	Pass after commercial repair; owner economics remain weak	$14.5m	−$5.36m	Longer life helps
PREFERRED **S4 — Hybrid**	7 years	60%	Pass DSCR and positive customer true saving	$4.49m	**+$4.63m**	Base case
S5 — Annual renewable screen	7 years	100%	Pass after re-gearing; fails owner economics	$24.51m	−$15.39m	Upper bound

S1 BUY-OUT

$27.3m

Short contracted cash flow shifts value into residual payment.

S3 LESSON

Life ≠ fit

Longer life is necessary, but unchanged low-renewable sizing remains costly.

S4 TRUE SAVING

+$4.63m

Balanced diesel reduction and capital intensity.

S5 TRUE SAVING

−$15.39m

Debt can be reduced to pass DSCR, but owner value still fails.

SCENARIO STORIES · S1 / S3

A longer horizon repairs debt capacity, but low renewable penetration still leaves weak owner economics

Mine-life extension is necessary for an SPV structure; system re-sizing is also required.

S1 · SHORT-LIFE PUBLIC-DATA REBUILD

The contract is too short to recover integrated system cost

S1 is a useful baseline, but not a bankable third-party energy proposition. Even if very low debt forces the case above 1.30x DSCR, equity still needs a large residual or buy-out to reach its target return.

That payment wipes out owner value. If Fountain Head is only a short standalone restart, owner-funded diesel optimisation or a limited EPC package may fit better than full BOO/SPV energy-as-a-service.

−$20.1m

Customer true saving after buy-out

S3 · EXPANDED HUB, SAME SIZING

Seven years helps bankability—but diesel exposure remains too high

The longer horizon materially improves debt capacity. However, the system's renewable penetration remains low and the SPV continues to carry substantial diesel fuel cost.

The required buy-out therefore remains too high relative to owner lifecycle savings. The system must be resized to cut diesel exposure without over-sizing BESS.

−$5.36m

Customer true saving after buy-out

S1	CONTRACT HORIZON **3–4 years** Too little contracted cash flow to recover the integrated asset base.	DEBT RESPONSE **Very low debt** DSCR can be protected only by pushing funding toward equity.	RESIDUAL RESPONSE **$27.3m buy-out** Value recovery shifts beyond the operating contract.	OWNER OUTCOME **Economics fail** Residual payment exceeds gross contract-period benefit.
S3	CONTRACT HORIZON **7 years** Longer cash flow materially improves supportable debt.	OPERATING EXPOSURE **c. 28% renewable** Unchanged sizing leaves substantial diesel cost in the SPV.	RESIDUAL RESPONSE **$14.5m buy-out** Better than S1, but still too large for the saving created.	OWNER OUTCOME **Still negative** Longer life repairs bankability, not lifecycle value.

COMMERCIAL LESSON

Contract life unlocks financeability only when the asset mix also creates enough operating-cost advantage.

OWNER HEADLINE

Do not confuse a longer demand horizon with a complete commercial repair.

Source: S1 and S3 model screens

SCENARIO STORIES · S4 / S5

The practical middle outperforms the 100% annual-renewable boundary case

S4 reduces diesel materially without letting BESS and residual value overwhelm the commercial proposition.

S4 · 60% RENEWABLE HYBRID

The first case with a credible owner and SPV story

The system is large enough to materially reduce diesel fuel exposure, but not so large that BESS CAPEX overwhelms economics. The result is a lower required buy-out, stronger debt capacity and positive true customer saving.

It does not rely on an unvalidated 100% renewable claim and provides a defendable reference for hourly modelling, EPC pricing and lender discussion.

+$4.63m

Positive owner-side lifecycle economics

S5 · 100% ANNUAL RENEWABLE SCREEN

Passing DSCR after re-gearing does not repair owner value

S5 is valuable as a boundary case. Reducing debt until cash flow passes 1.30x DSCR shows supportable gearing—not an attractive customer proposition.

The larger PV/BESS system raises investment cost and residual value. Diesel exposure falls, but lifecycle savings cannot absorb the $24.51m buy-out.

−$15.39m

Customer true saving after buy-out

S4 · DIESEL EXPOSURE

Materially lower

Renewable sizing is sufficient to reduce fuel exposure without pursuing an absolute annual-energy target.

S4 · CAPITAL INTENSITY

Balanced

PV and BESS cost remains proportionate to the seven-year contracted value pool.

S5 · DEBT RESPONSE

c. 56.8% gearing

Debt is reduced until the case clears the simplified 1.30x DSCR threshold.

S5 · RESIDUAL BURDEN

$24.51m buy-out

The owner is left funding value that tariff savings cannot absorb.

BASE CASE

Validate S4 through hourly dispatch and site-specific pricing.

BOUNDARY CASE

Retain S5 for board and ESG discussion, clearly labelled as an upper-bound screen.

Source: S4 and S5 model screens

05

RECOMMENDED OWNER PATHWAY

Move from annual-energy screening to an owner-validated, hourly and bankable structure

S4 is a reference design for diligence—not a commitment to a renewable target.

FIRST

Prove the demand horizon and operating load with owner information.

THEN

Prove hourly reliability, wet-season performance and reserve margins.

FINALLY

Price, allocate commercial risks and convert the screen into lender-grade analysis.

NEXT STEPS

Five validations separate the preferred screen from an investable proposition

The work now moves from comparative screening to data, dispatch, pricing, risk allocation and bankability.

01
Confirm demand horizon

Test the seven-year hub assumption against mine plan, ore schedule, processing strategy and regional resources.

02
Validate hourly dispatch

Model solar, load, state of charge, wet season, backup, outages and reserve margins.

03
Re-price the system

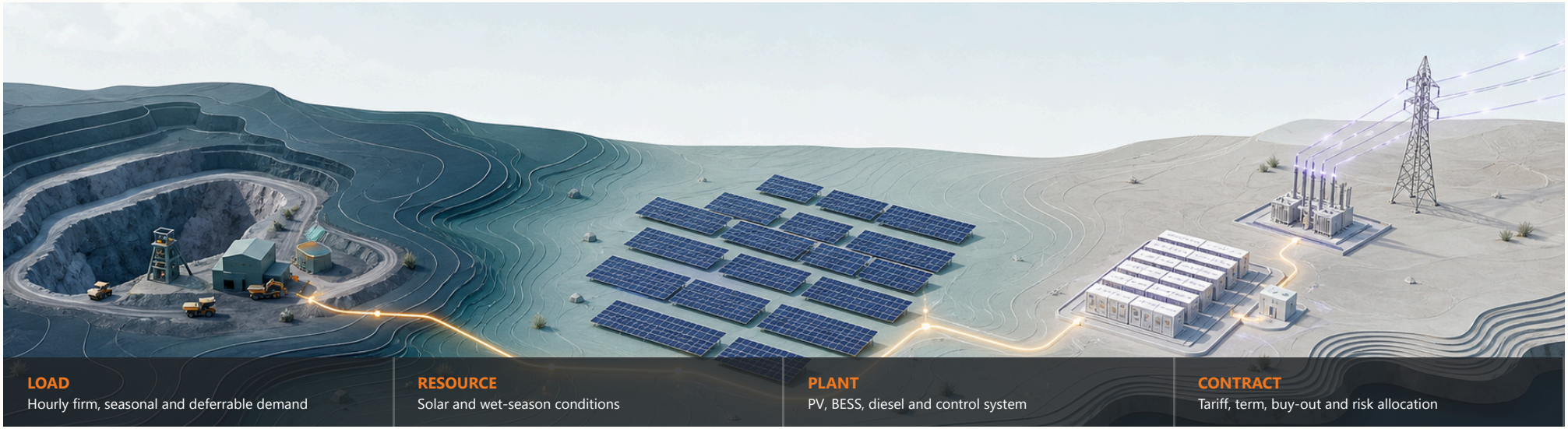
Replace screening CAPEX/OPEX with vendor quotes, EPC pricing, genset configuration and site logistics.

04
Agree the boundary

Allocate diesel ownership, fuel-price risk, buy-out mechanism and carbon benefits.

05
Make it bankable

Add debt sculpting, reserves, tax losses, augmentation, covenants and downside cases.



GATE No commercial decision should precede reconciliation of public assumptions to owner mine plans, load data, diesel records, vendor pricing and lender requirements.

Exhibit 2 · Pathway from screen to decision

OWNER IMPLICATIONS

The mine plan—not the spreadsheet—is the largest unresolved financeability variable

A regional load platform could support the energy asset; a return to a short standalone case makes the SPV much harder to justify.

Advance S4 as the diligence base case, while keeping S5 as a clearly labelled board and ESG boundary case.

S4 as a reference design does not bind the owner to a 60% target. It gives hourly modelling, vendor pricing and commercial structuring a common starting point.

S5 could become more relevant with materially longer mine life, grant funding, a higher willingness to pay or strategic ownership value in the energy infrastructure.

DEMAND OUTCOME	ENERGY IMPLICATION	LIKELY COMMERCIAL DIRECTION
Longer Fountain Head / Pine Creek hub demand is substantiated	More contracted cash flow supports debt and asset recovery	Progress S4 SPV / EaaS structure and test ownership options
Demand horizon remains uncertain	Residual-value and buy-out exposure remains material	Stage-gate development; preserve modularity and downside protection
Project reverts to short standalone mine	Integrated hybrid SPV economics deteriorate sharply	Consider owner-funded optimisation or a limited EPC scope

Critical owner question. Can Fountain Head, Glencoe, Tally Ho, Mt Porter or other Pine Creek assets support a credible longer-term energy demand platform?

APPENDIX A · MODEL SNAPSHOT

The current preferred case preserves value after the residual payment

Rounded outputs from the current screening workbook.

ITEM	VALUE	COMMENT
Annual energy demand	29,959 MWh/year	Public-data reconstruction screening assumption
Peak power reference	3.9 MW	Public assessment references 3 × 1.5 MW diesel units
S4 renewable share	60%	Current preferred screening case
S4 true saving after buy-out	**+$4.63m**	Positive owner-side lifecycle economics
S5 selected gearing	c. 56.8%	Current-case back-solve to pass DSCR
S5 true saving after buy-out	−$15.39m	Fails owner economics despite DSCR pass
Target DSCR	1.30×	Simplified lender downside screen

LIMITATION S4 and S5 are annual-energy cases. They do not prove operational reliability; hourly dispatch and owner data remain mandatory.

APPENDIX B · SOURCES

Public project statements anchor the context; model outputs remain indicative

Source information has not been independently verified and may change.

01 **NT EPA public register — Fountain Head Gold Project.**

https://ntepa.nt.gov.au/your-business/public-registers/environmental-impact-assessments-register/completed-assessments/register/fountain-head-gold-project

02 **Katestone / ERIAS, Fountain Head Gold Project Air Quality and Greenhouse Gas Assessment, 30 March 2021.**

https://ntepa.nt.gov.au/_resources/documents/eia/pnx-metals-limited/draft-environmental-impact-statement-eis/appendices/1-air-quality-and-greenhouse-gas-assessment.pdf

03 **Patronus Resources, Northern Territory project page.**

https://www.patronusresources.com.au/northern-territory

04 **Patronus Resources September 2024 Quarterly Activities Report, 23 October 2024.**

https://announcements.asx.com.au/asxpdf/20241023/pdf/069g6qx86vg461.pdf

05 **Patronus Resources, Key Mining Approval Received for Fountain Head Gold Project, 4 November 2024.**

https://clients3.weblink.com.au/Clients/JuniorMining/headline.aspx?id=61235883

Internal model source. Fountain Head Two Scenario Financeability v4.1 clean workbook. Financial outputs are indicative and require validation against owner, vendor, EPC and lender inputs.

APPENDIX C · OWNER DISCUSSION

Six questions will determine whether the preferred screen can become a credible transaction

The first owner conversation should resolve objectives and unlock the data needed for the next model.

01 Does the owner support a seven-year energy demand horizon for Fountain Head / Pine Creek hub planning, or should the model retain a shorter contracted case?

02 Which loads are firm, deferrable or seasonal, and what hourly load data can be provided for dispatch validation?

03 Should diesel generators be owned by the owner or included inside the SPV boundary?

04 Is the owner willing to accept a buy-out mechanism, and should it be fixed, formula-based or optional?

05 Who should retain carbon, Safeguard Mechanism or ESG benefits from diesel displacement?

06 Is the owner seeking lowest delivered energy cost, maximum renewable share, lower upfront capital or a bankable energy-services structure?

PROPOSED OUTCOME **Agree the owner objective, S4 reference boundary and data request.** Then commission hourly dispatch and site-specific commercial re-pricing.

DISCLAIMER AND SCOPE

This is an independent preliminary screen—not a design, offer or investment recommendation

All outputs require owner-side, technical, legal, regulatory, tax and financing validation.

This report is prepared for discussion using public information, indicative assumptions, desktop analysis and simplified financial modelling. It frames questions relevant to a hybrid solar, battery and diesel solution for Fountain Head.

It is not an engineering or EPC proposal, feasibility study, investment recommendation, financing offer, valuation, legal, tax, accounting or environmental advice, or formal technical due diligence. It must not be the sole basis for any investment, financing, procurement, mine-planning or contractual decision.

Outputs depend on assumptions for mine life, energy demand, peak load, diesel cost and configuration, PV/BESS sizing, renewable penetration, costs, financing, tariff, discount, residual value, tax and investor return. These have not been verified against owner data, vendor quotations, EPC pricing, lender terms, permitting or detailed mine plans.

The 60% and 100% renewable cases are annual-energy screens and do not prove reliability. Hourly modelling must cover resource, load, night demand, wet season, state of charge, degradation, outages, diesel minimum loading, reserve and ramping.

SPV, BOO, EaaS, tariff, buy-out, residual value, debt sizing and DSCR discussion is illustrative only and is not a financing commitment or preferred legal structure.

Carbon, emissions and decarbonisation outcomes are indicative. Safeguard Mechanism, ACCU/SMC value, reporting and ESG claims require separate assessment against applicable law and project data.

No confidential owner data has been used unless separately provided and identified. Public information has not been independently verified. The author accepts no responsibility for errors, omissions or subsequent changes in sources, project status, mine plan, markets, costs, policy or regulation.