

7 June 2023

Rafael a game changer

NEED TO KNOW

- The 2021 Rafael gas discovery is transformational, and added to new ventures and free-carried exploration generates an unrisksed upside of ~\$1.62/sh.
- New ventures in carbon capture and storage (CCS) and Hydrogen opens up low-carbon opportunities.
- \$14M cash, nil debt, production cashflow and operational skills to execute growth plans.

Buru's 2021 conventional gas and condensate discovery at the Rafael#1 well, in the onshore Canning Basin W.A. transforms Buru. Development concepts for a small scale FLNG project generates an un-risked NAV of A\$1.62. A 3D seismic survey in 2023, appraisal drilling in 2024 in parallel with commercial work, partner selection, financing and eventual development are de-risking events and if met, provide substantial upside.

Buru has options for a low carbon world and has set-up subsidiaries GeoVault for carbon capture & storage (CCS) in the Canning & Carnarvon Basin, and 2H Resources to explore for natural hydrogen in South Australia.

Oil production provides funds for business costs, there is nil debt and \$14M cash. Other significant events are a two-well free carried exploration program in the Carnarvon Basin planned in 2024.

Investment Thesis

The Rafael conventional condensate-rich, low CO2 gas discovery justifies a significant re-rating. The resource has been independently assessed at 260 Bcf (2C) and up to 1Tcf of gas and 20 million barrels of condensate at the 3C level. The share price discounts the value of in-situ resource and gives no value to commercial potential, in our view.

GeoVault and 2H Resources new ventures differentiate Buru from peers and would have significant value as stand-alone entities. We expect these initiatives will gain momentum in a de-carbonising world and in time.

There is significant commercial and technical work to fully exploit Rafael, and other exploration activities planned in 2024, but Buru has extensive in-house capability to manage what could become a very large and valuable enterprise.

Valuation: Core value A\$0.40. Un-risked upside \$1.62

MST's valuation method is a combination of a risked DCF of a Rafael gas project and equity market peers active in natural hydrogen, CCS and exploration. We value the core E&P assets at A\$0.40, with Rafael risked due to its pre-development status. Major de-risking milestones and the value implications are documented in this report, and lead to an un-risked upside of \$1.62.

Risks

Buru will require additional capital to advance its projects, and this may not be available. Rafael appraisal may result in lower resources, and development options are reliant on WA and export gas markets, which are competitive and where prices are volatile. As a fossil fuel producer Buru faces societal pressure. Plans to exploit Hydrogen and CCS may not be feasible.

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Energy

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Buru Energy is an oil producer and explores for oil and gas in WA's Canning and Carnarvon Basin and is participating in the new energy economy through initiatives in natural Hydrogen, and carbon, capture and storage.

<https://www.buruenergy.com.au>

Valuation	A\$0.40
Current price	A\$0.09
Market cap	A\$54M
Cash on hand	A\$14M

Upcoming Catalysts and News flow

Period	
3Q CY23	Ungani crude exports resume
2H CY23	Rafael 3D, commercial studies
CY24	Rafael farm-out and appraisal drilling
CY24	Two carried wells in Carnarvon Basin WA

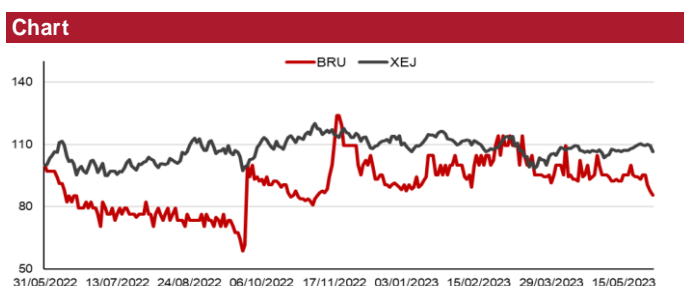
Share Price (A\$)



Source: FactSet, MST Access

Figure 1: Financial summary

Market Data	Y/E Dec 31	A\$	Lo	Hi
Share price	A\$/sh	0.090		
52 week range	A\$/sh		0.08	0.21
Shares on issue	M	596		
Perf shrs + Options	M	0.00		
Market Cap	A\$M	54		
Net Cash	A\$M	14		
Enterprise Value	A\$M	40		



Valuation multiples	2021A	2022A	2023	2024	2024
EPS (us cents)	NM	NM	NM	NM	NM
PE	-	-	-	-	-
DPS (US cents)	-	-	-	-	-
Yield-%	-	-	-	-	-
EBITDAX/sh (US cents)	-	-	-	-	-
P/FCF	-	-	-	-	-
EV/EBITDAX	-	-	-	-	-
EV/(2P+2C)- A\$/ GJ	-	0.04	-	-	-
Revenue/MM boe	-	-	-	-	-
EBITDAX/Sales-%	-	-	-	-	-
Net cash (US\$M)	23.7	17.9	12.2	4.6	1.4
ND/(ND+E)	-	-	-	-	-

Realised prices	2021A	2022A	2023	2024	2025
Gas- A\$/ GJ	0.00	0.00	0.00	0.00	0.00
Oil-US\$/bbl	67.95	0.00	0.00	0.00	0.00
A\$/US\$ rate metrics	0.73	0.7	0.7	0.7	0.7

Production (Net)	2021A	2022A	2023	2024	2025
Gas- Bcf	0.00	0.00	0.00	0.00	0.00
Liquids (MMbbl)	0.13	0.10	0.06	0.07	0.06
MMboe	0.1	0.1	0.1	0.1	0.1
% liquids	-	-	-	-	-

Reserves (MM boe)	2P	1C	2C	3C
Gas- PJ	0	380	974	2291
Liquids	0.2	11	30	68
Total Mmboe	0	74	193	450
% oil		14%	16%	15%

SoP Valuation	Unrisked	Risk	Risked	cps	
Ungani 2P		1	100%	1	0.00
Rafael -2C gas & Cond.		911	20%	182	0.31
Yulleroo & tight gas		10		10	0.02
GeoVault CCS		11		11	0.02
2H Resources		12		12	0.02
Exploration- WA		10		10	0.02
Other					
Core E&P Assets		956		226	0.38
Cash		14		14	0.02
Debt		0		0	0.00
Other		0		0	0
Total equity value		970		240	0.40
Shares FD		596			596
Value Per share		1.62			0.40

Income statement	2021A	2022A	2023	2024	2025
Gas Revenue	0.0	0.0	0.0	0.0	0.0
Oil Revenue	9.6	13.9	6.1	7.6	6.4
Total Revenue	9.8	14.1	6.1	7.6	6.4
Production costs	6.5	7.3	6.5	4.8	4.0
Corporate costs	3.3	3.9	3.7	3.4	3.4
Other	-1.5	0.7	0.0	0.0	0.0
EBITDAX	1.4	2.2	-4.1	-0.6	-1.0
Exploration exp.	9.2	7.0	1.8	2.0	2.0
Depreciation	2.9	2.7	1.5	1.7	1.4
EBIT u/l	-10.8	-7.5	-7.3	-4.3	-4.4
Finance charges	0.0	0.0	0.0	0.0	0.0
Tax	0.0	0.0	0.0	0.0	0.0
NPAT-underlying	-10.8	-7.5	-7.3	-4.3	-4.4
Impairments	0.0	-25.2	0.0	0.0	0.0
Reported NPAT	-10.8	-32.8	-7.3	-4.3	-4.4
Share cout at EOP (M)	538	596	596	746	746

Cash flow	2021A	2022A	2023	2024	2025
Receipts	9.6	13.9	6.1	7.6	6.4
Payments	-8.7	-10.2	-10.2	-8.2	-7.4
Payments for E&A	-7.0	-8.5	0.0	0.0	0.0
Interest & other	0.2	-1.1	-1.8	-5.3	-4.9
Net cash from ops.	-5.9	-5.9	-5.9	-5.9	-5.9
Exp & Devb capex	-5.8	-9.0	-1.7	-22.0	-2.2
Acquisitions / other	0.0	0.0	0.0	0.0	0.0
Net investing	-5.8	-9.0	-1.7	-22.0	-2.2
Equity issuance	15.0	9.1	0.0	15.0	0.0
Debt Issue /(repay)	0.0	0.0	0.0	0.0	0.0
Lease Pmnts	-1.2	-1.3	0.0	0.0	0.0
Net cash Finaning	13.8	7.8	0.0	15.0	0.0
Increase in cash	2.3	-5.8	-5.8	-7.6	-3.2
Cash at EOP	23.7	17.9	12.2	4.6	1.4

Balance sheet	2021A	2022A	2023	2024	2025
Cash	23.7	17.9	12.2	4.6	1.4
Rcvbls / Inventory	3.0	2.2	2.5	2.5	2.5
Exploration /Eval	9.5	10.2	8.6	26.9	25.7
Oil/gas properties	22.0	0.0	0.0	0.0	0.0
other	3.3	3.8	3.8	3.8	3.8
Total Assets	61.6	34.1	27.1	37.7	33.3
Payables	9.0	2.0	1.9	1.7	1.5
Debt	0.0	0.0	0.0	0.0	0.0
Other	9.1	12.3	12.7	12.5	12.3
Total liabilities	18.1	14.4	14.7	14.3	13.9
Total equity	43.5	19.8	12.4	23.5	19.5

Source: MST Access

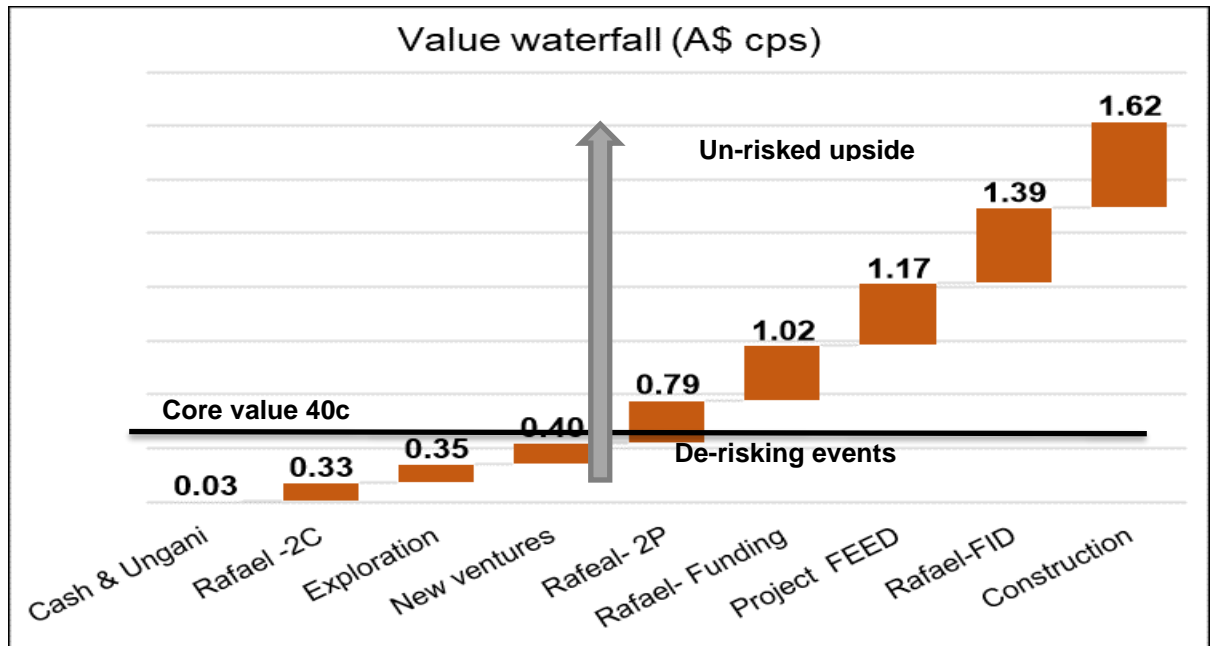
Rafael gas discovery alone could transform Buru

Buru's industry leading understanding and decades of experience in WA's Canning Basin has culminated in a major discovery at the Rafael conventional gas and condensate discovery. This potentially ~1 Tcf gas field, if successfully progressed to commercial production is transformational for Buru.

Proving up Rafael reserves and pursuing commercial development are key strategic objectives and if Buru is successful then the upside potential is substantial, as shown in the waterfall chart in figure 2. As it is, we estimate core value for Buru's E&P and new venture activities, plus the Rafael 2C resources is worth A\$0.40 cps, with Rafael heavily risked to account for its pre-development status.

Buru's market value heavily discounts the Rafael resource and new venture opportunities. Our core valuation and un-risked upside opportunity are detailed in the "Valuation" section of this report.

Figure 2: Value water fall chart from core value to un-risked upside (A\$/sh)



Source: MST Access.

New ventures provide other growth opportunities.

From 2020 Buru attracted new management to broaden the company's activities, and set-up new ventures while continuing to drive its Canning Basin conventional E&P activities. Key outcomes are:

- In the Canning Basin, in 2021 Buru discovered and tested the Rafael gas prospect. This is a breakthrough discovery which flowed gas on test at 7.5 mmcf/d from one of three reservoir horizons. The resource is assessed to be 260 Bcf (2C) and up to ~ 1Tcf of gas (3C). This is transformational for Buru, which has 100% ownership. 3D seismic is planned in 2023, and appraisal drilling in 2024. The discovery well and upcoming seismic survey were majority funded by Origin Energy as per an earlier farm-out.
- Exploration acreage was acquired in WA's Carnarvon Basin, which is prospective for conventional oil and gas, and Buru is planning a 2-well drilling program in 2024. This program is free-carried by Mineral Resources following a farm-out process.
- The Carnarvon and Canning Basin acreage is prospective for carbon capture and storage (CCS) and Buru created a subsidiary 'GeoVault' to pursue these opportunities. It is believed that CCS will become a growth industry as CO2 emitters seek ways to be rid of CO2 emissions.
- In South Australia, permits were applied for which are prospective for naturally occurring hydrogen, and for gas storage, and Buru set-up "2H Resources" to hold these assets. Demand for H2 as a "clean" fuel is expected to grow strongly, and in particular naturally occurring hydrogen. Successful exploration requires unique geological settings which are believed to exist in South Australia. and E&P skills required to unlock are demonstrated by Buru.

Value: large upside from conventional gas, hydrogen and CCS

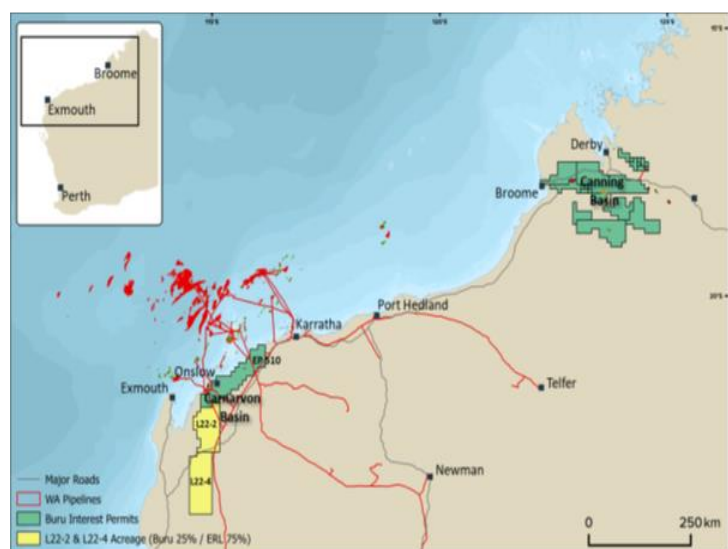
The Rafael gas resource is undervalued based on our analysis of a conceptual gas project. Rafael could underpin a small-scale floating LNG (FLNG) project generating ~\$1B p.a of revenue (100% basis), and an un-risked NPV of A\$1.822 billion, on a 100% basis. Or risked and un-risked valuations of A\$182M and A\$911M respectively, net to Buru, assume the company sells-down part of its working interest to the 50% level to facilitate funding. Appraisal and commercial activities over the outlook are to determine the ultimate size of the field and progress a project. Commercial, technical, funding, regulatory, and construction milestones are important de-risking events and drive value growth detailed in the valuation section

The Hydrogen resource potential at current market prices is worth >\$3B. This is a very large revenue opportunities in context with Buru's current market value. Hydrogen, CCS, and free carried exploration in the Carnarvon basin are growth options from 2024.

In addition, Buru's market capitalisation discounts the value of in-house capability and decades of operational experience which will be called on to execute the current strategy.

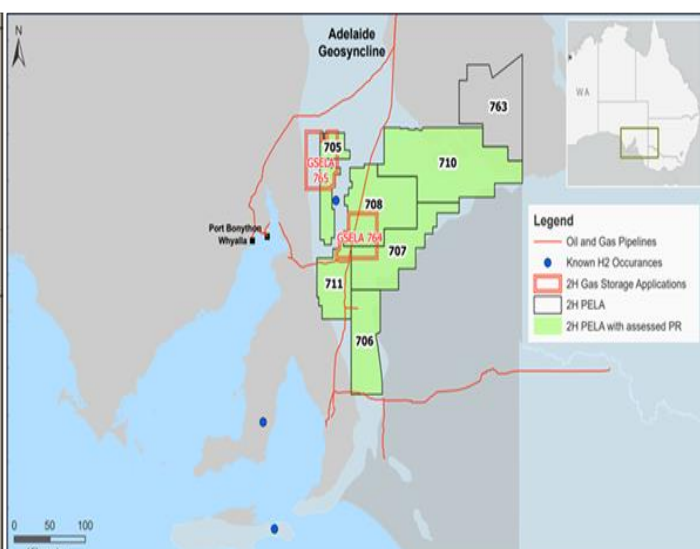
MST's estimate of value of a Rafael project alone is worth 31cps, net to Buru, suitable risked for the uncertainties that come with early-stage development. Other conventional exploration, and the Hydrogen and CCS ventures cost the company little and offer material upside in the event of success. These, and risked-Rafael under-pin \$0.40/sh of value for the base business, with very large upside from progression of any of Rafael, other exploration success, GeoVault and 2H-Resources. Figures 3 and 4 show geographic locations.

Figure 3: Location of acreage holdings in W.A.



Source: Buru Energy Corporate presentation, Sept 7, 2022

Figure 4: South Australia Hydrogen acreage



Source: Buru Energy

Strategic enablers

- Dominant acreage holder and operator in the Canning Basin which is under-explored with numerous play types and targets yet to be tested and where technology may unlock discovered tight gas resources.
- Early-stage mover into CCS and Hydrogen exploration which are areas of growth in a de-carbonising world.
- Executive team with deep knowledge and experience in all aspects of exploration & production, project management, commercial and financial management, and stakeholder engagement.
- Proven ability to attract industry partners to fund exploration, enabling Buru to participate in activities beyond its balance sheet. For example, the Rafael discovery was majority funded by Origin Energy.

Buru has the necessary skills to advance these activities, with decades of exploration and production know-how in seismic acquisition, farm-out and drilling, stake-holder engagement including traditional land-owner consents, production operations and all regulatory and ESG compliance. These are all needed in growing the business. In our observation, few peers have such a multi-faceted skill set.

Key investment attributes & catalysts

- Rafael is transformational because of its potentially very large size and multiple commercial paths, with the first of these studies completed involving a small-scale floating LNG plant with a capacity of 1.6 MTPA. At current export LNG prices, such a plant would generate revenue of ~A\$1B p.a (on a 100% project basis), and an un-risked upside NPV of \$1822M, on a 100% project basis. We assume Buru farm-down its working interest to 50%, as outlined in the valuation section, with a commensurate reduction on revenues, cashflows and risked and un-risked valuation. Buru's ownership interest in a future project is to be determined in conjunction with financing and partnering strategies.
- Near term activity that has major value accretive potential with the acquisition of 3D seismic over Rafael this year, appraisal drilling in 2024, progress on development studies, partner selection and funding options.
- Conventional oil and gas drilling in 2024 in the Carnarvon Basin, free-carried by Mineral Resources (ASX: MIN).
- Very large naturally occurring Hydrogen prospective resource assessed in the South Australian acreage. Precedent peer company activity will provide early insight into 2H Resources value.
- Opportunity to advance CCS in existing license areas. There are already significant existing and planned CCS projects in Australia which will help inform GeoVault of the technologies and economics.
- Operator and majority owner of multiple permits, which allows options for asset trading or monetisation in the future.
- Buru is a fully operational company with capability in all facets of E&P activities in Australia. The Ungani oil field has resumed operations with resumption of production and trucking of crude to Wyndham, with export income from the next crude oil export expected in 3Q 202. Ungani oil production and cash reserves provide funds to maintain the base business and progress growth options.
- Large ownership positions in acreage and resources, including 100% of Rafael, provide options for Buru to farm-out or trade acreage for cash or carried work programs.

Risks

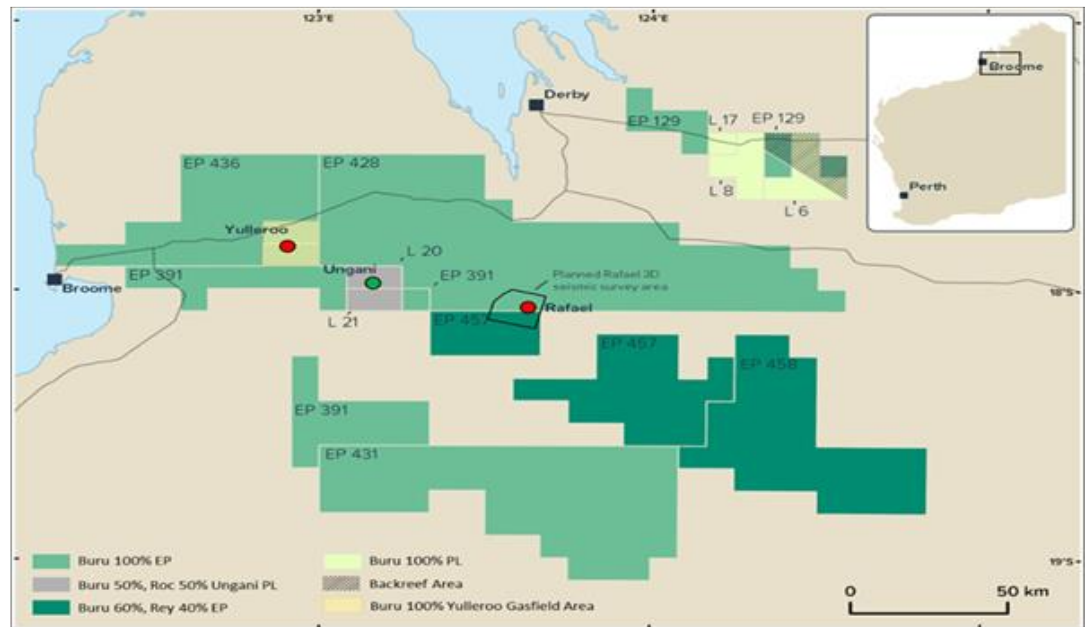
- Access to funds is a risk. Buru will require additional capital to advance any of its assets into large scale development, and funding could come from a combination of bank debt, equity issuance, or asset trade and we make no assumption as to the likelihood.
- Appraisal drilling at Rafael may result in low-side resource outcomes, which would impact development scenarios and asset value
- Commercialisation of Rafael would require market opportunities to sell the gas, or any derivative gas-liquids, and prices are volatile.
- Buru and fossil fuel producers in general, face increasing pressure from sections of society and Government. In recent times, there has been regulatory and pricing intervention in the Australian gas market, and this poses risk of adverse fiscal terms or other taxes, and future regulatory interference.
- Legislation governing future CO2 sequestration and pricing, and regulations to apply in WA. are in formative stage, and legislative delays may impede activity.
- Hydrogen prices and markets may change materially, given the dynamic nature of these industries and the growth in corporates targeting these commodities. Buru's acreage is un-drilled for Hydrogen, so there is frontier exploration risk.

Assets

The Canning Basin: where it all began

Buru has a commanding acreage position in the Canning basin, approximating 22,000 km², built up over decades of activity by Buru and precedent companies. Figure 5 shows the acreage location and significant wells or fields (Ungani, Yulleroo and Rafael). Working interests vary from 50% (in the Ungani oil field) to 100% in many exploration blocks, including the commercially significant Rafael conventional gas and condensate and the very extensive tight gas discovered resources.

Figure 5: Acreage in WA Canning basin



Source: Buru Energy

The Canning Basin has been a magnet for oil and gas explorers for 50 years, attracted by its large resource potential, confirmed by oil and gas shows from >280 wells testing various geological settings but mostly drilled on poor quality geological and geophysical data. The area is the size of Texas which has >300,000 active production wells, so the region is seriously under-explored in comparison. Figure 6 is a schematic of the regional geology,

The Canning basin has many attributes which exploration companies seek

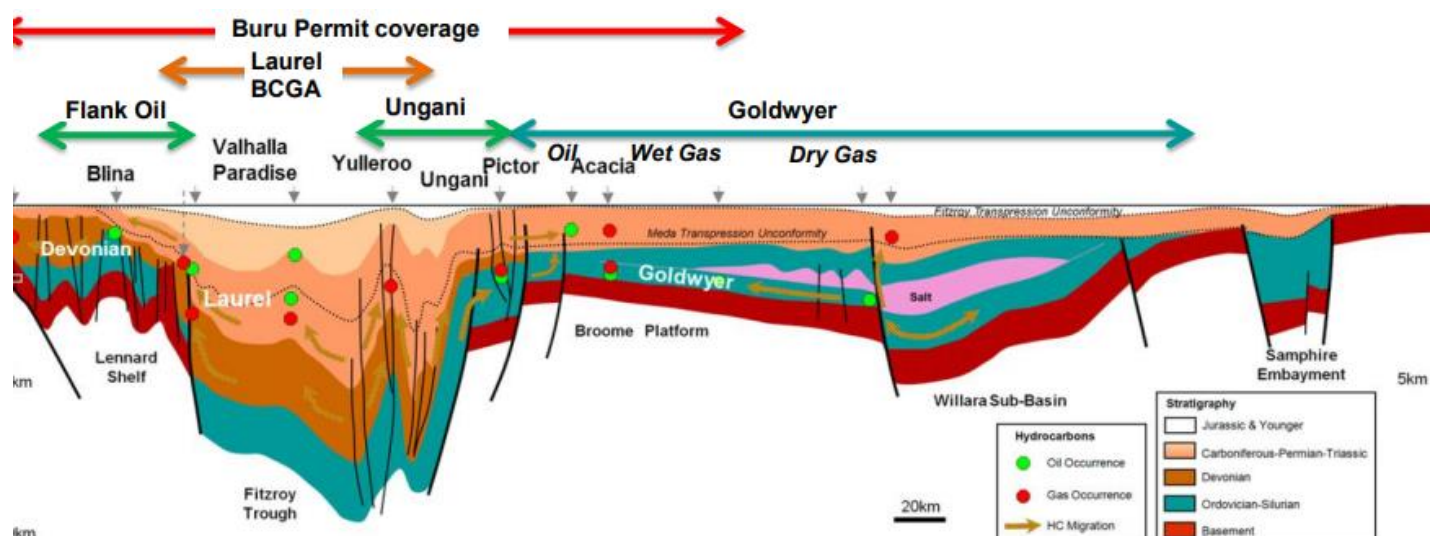
In a world where there are very few under-explored frontiers remaining, in developed world locations, the Canning Basin has a lot of positives

- It's the largest sedimentary basin in WA but vastness, remoteness & cost have inhibited exploration.
- There are multiple geological settings, in conventional sandstone and dolomitic reservoirs, to tight gas and basin-centred gas, in a proven petroleum province.
- Numerous exploration wells have intersected oil and gas in multiple reservoirs, and diverse geological setting, confirming the existence of oil and gas over a vast region.
- In-situ resources in low permeability reservoirs is interpreted to be very large but requires cutting edge completion techniques to unlock. These are routine in the USA, but expensive to mobilise to remote parts of Australia.

Since 2008, Buru has conducted many farm-outs to larger companies to substantially fund >\$300M in aggregate capex into ~29 exploration wells. Partners included Apache Energy, Roc Oil, Mitsubishi, and Origin Energy. Despite the geological attraction, commercial outcomes have been elusive, with only the Ungani oil field currently in production, and now potentially Rafael and a number of smaller fields which have been produced to depletion. Many wells also found hydrocarbons in low permeability reservoirs and could be exploited with the latest completion techniques which are routine in tight rocks in other parts of the world, and notably, now in the Northern Territory Beetaloo Basin.

However, the 2021 Rafael gas discovery could be a game-changing well, informing new geological models for future evaluation, as well as potentially being stand-alone commercial.

Figure 6: Schematic representation of Canning geology



Source: Buru Energy

Successful history of frontier exploration attests to capability

The following documents Buru's history since its ASX debut in 2008

- 2008: Previous acreage owner ARC Energy taken over by AWE, Canning Basins assets spun-off into special purpose vehicle, Buru Energy, with carry-over management team. Buru commenced trading on the ASX on 1 September 2008
- 2010: Permits farmout out to Mitsubishi (~A\$150M cash & work program carry for 50%)
- 2011: Drilling and frac program as Laurel Formation defines a world class tight gas resource
- 2011-12: Discovered and appraised the Ungani oil field, the first significant commercial oil discovery in 30 years. Commercial production commences in 2015
- Share price peaks following Ungani and tight gas delineation. Buru is admitted to the ASX200 Index.
- 2013: Farm-out to Apache Energy to fund \$25M for 4 wells
- 2017: Mitsubishi interest re-acquired giving BRU 100% of Ungani and other acreage.
- 2018: 50% of production assets and acreage sold to ROC Oil for \$64M cash and \$20M of carried expenditure in additional wells. Ungani production peaks at ~1300 bopd (gross) in September 2018
- 2020: Farm-out to Origin Energy for exploration program of 2 wells plus seismic (50% for ~\$20M). Subsequently acquired 990 Km of 2D seismic, drilled 2 exploration wells including the Rafael well,
- 2021: acquired Carnarvon Basin acreage and subsequent farm-out to MinRes for two free carried wells in 2024.
- 2021: Drilled and tested Rafael #1, large conventional gas discovery.
- 2022/23: Origin Energy exits E&P activities nationally; Buru re-acquires Origin's Canning Basin interests resulting in Buru gaining 100% of Rafael.

In total, over its history Buru has acquired 4400 Km of 2D seismic, 1300 Sq Km of 3D seismic, drilled 29 exploration wells and 8 development wells. Over \$300M has been invested by Buru and partners.

Key oil & gas fields

Buru and its various JV partners have identified numerous prospective geologies from the ~15 years of exploration, with the Ungani oil field discovered and now in production, the Rafael gas discovery which could be a game changer, and "tight" gas discoveries at Yulleroo and other wells which could be unlocked by application of technologies that are now available.

Ungani oil field: BRU 50% and operator, ROC Oil 50%.

Ungani oil production provides meaningful revenue from oil sales on the international market, which are sufficient to fund production costs, overheads and a modest amount of discretionary investment into new ventures.

Forward plans are to optimise existing wells to maximise ultimate economic recovery, but end-of-life looks likely over the outlook. We assume production operations cease in 2025.

- Discovered in 2011 & commercial production commenced in 2015.
- Early production in 2012 saw field rate peak at 1750 bopd. Full field production rates moderated to 1200-1300 bopd in 2018
- Current production 500-600 bopd from 6 wells. Cumulative production to date ~2 MMbbls
- Carrying value written down to nil at 31 Dec 2022, end-of-field life likely in 2-3 years

The Ungani oil field was discovered in 2011 and placed on extended production testing in 2012 and reached flow rates of ~1750 bopd from 2 wells. Full field development followed in 2015 with initial production of ~1200 bopd.

High costs and the 2015 oil price collapse caused the field to be shut-in for most of CY 2016. In 2018, Buru sold half the field to ROC Oil for ~\$65M and a rebound in oil prices in 2017 drove a re-start in production and new wells in 2018 resulted in an uptick in production.

In early 2023 production rate were ~550 bpd but in January 2023 the field was shut in due to storm damage to roads leading to the export terminal at Wyndham. Repairs to roads have been completed, production has resumed, and export loadings are expected from 3Q 2023.

Gas: conventional and unconventional

The region has potential multiple Tcf's of gas identified.

Numerous wells have found gas, but in tight and /or unconventional geologies. Gas markets, and new technologies may converge to unlock tight gas resources. More importantly, the Rafael gas discovery completely changes the regions perspective.

The Rafael#1 discovery well was drilled in 2021 and is the first major conventional gas discovery in the Basin and is a game-changer for Buru for a number of reasons outlined in more detail in the following sections of this report.

Rafael: game changing large conventional gas and condensate discovery

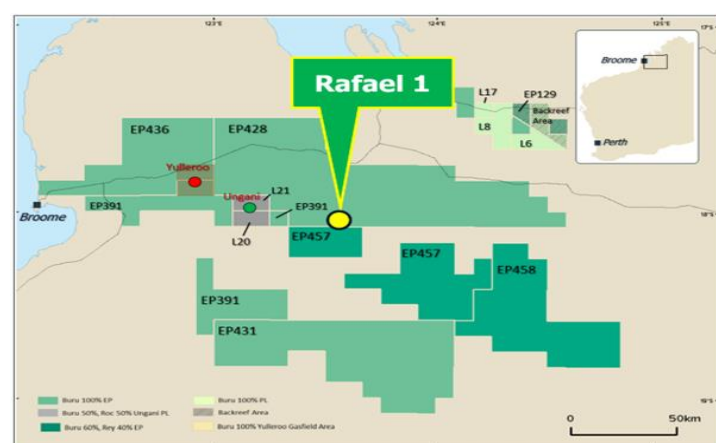
- Working interest 100% following Origin Energy's divestment of its 50% interest to Buru in 2022.
- A potential ~ 1Tcf conventional gas resource, with multiple commercial options being worked.
- Initial commercial concept a 1.6 MTPA Floating LNG plant. Revenue opportunity ~\$1B p.a, and indicative NPV of A\$1822M, un-risked, on a 100% project basis. Buru's net interest on a risked and un-risked basis will depend on the company's eventual level of ownership, which currently is 100% but we assume falls to 50% following funding and partnering strategies.
- A game changer for two reasons. First, it confirms long-held theories the basin can host large conventional oil and gas fields, and it may catalyse a new wave of exploration.
- Second, it's almost certainly standalone commercial even at this very early stage.

The Rafael prospect was identified in 2019 following earlier seismic surveying. Although a relatively deep prospect at ~3800m, the geological model was compelling for this to be drilled (along with one other) as part of the Origin Energy farm-in. In 2018 Origin agreed to fund \$16M for 2 wells, plus \$6M for seismic to earn 50%, Figure 7 shows the well and permit location.

The structure is large, with 450 Sq Km of closure and well defined on high quality seismic. Pre-drill expectation was for oil in Devonian carbonate reefs, sourced from rocks known to have generated oil in other fields, at depths between 3600-3800m.

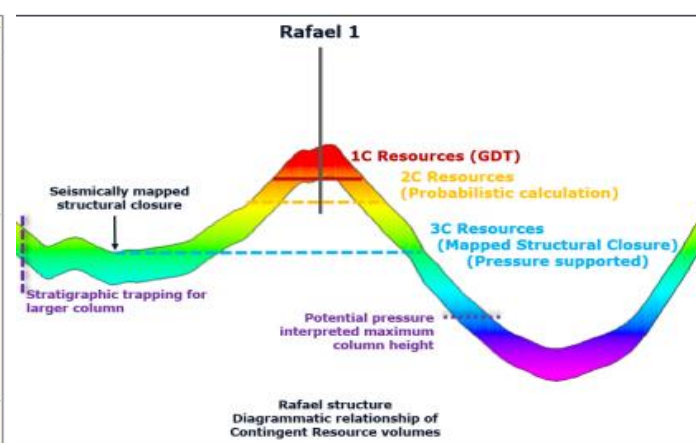
Rafael was the second well in a two-well program, with the first, (Currajong#1), drilled in early 2021. Currajong failed to encounter hydrocarbons in the target zones.

Figure 7: Rafael permit location, Canning Basin



Source: Buru Energy

Figure 8: Rafael structural schematic cross section



Source: Buru Energy

Rafael#1 commenced drilling in August 2021 and reached a total depth In November 2021 of 4141m and intersected 120m of gross reservoir pay which was identified as gas bearing. Figure 8 shows a cross section of the reservoir sequence and relation to resource definition.

Production tests were carried out in the following months. Testing over an extended period in 1Q CY2022 delivered gas flow rates of 7.6 mmcf/d accompanied by condensate of approximately 40 bbls/mmcf. The gas quality is good with CO₂ content measured in test gas at <2% CO₂.

In an ASX release 22/03/2022, Buru noted that the flow test did not access all the reservoir section which had gas shows with a portion of the Ungani carbonate reservoir not tested because it is behind casing. The test results come from only the lower part of the Ungani sequence. No water was produced on test, and there was no evidence of reservoir boundaries. The initial reservoir pressure was ~6200 psi (very high) and no depletion was observed during the test period.

These results point to a substantial resource and has been independently assessed by ERCE as follows:

- 1C: 59 Bcf and 1.2 mmbbls of oil and condensate base on the gas see in the well
- 2C: 260 Bcf and 5.3 mmbbls of oil & condensate, a probabilistic assessment
- 3C: 1024 Bcf and 20.5 mmbbls of oil and condensate, based on inferred gas in the structural closure, and backed by pressure data.

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Figure 9: Rafael well site during drilling.



Source: Buru ASX release, 17 November 2021

Figure 10: Rafael: Gas flow test



Source: Buru Energy.

The next steps in proving the ultimate size of the resource are 3D seismic in 2023, followed by appraisal drilling in 2024.

Funding of up to \$4m for the 3D seismic program is coming from Origin Energy as part of its previous farm-in agreement, where-by Origin had committed to this funding. This activity is planned in 2H CY2023. Results of this will determine the location and objectives of appraisal in 2024.

Rafael appraisal well costs are likely to be significant (+/- \$20M) which exceeds Buru's balance sheet capacity, so Buru will need to examine funding options. These may include any or all of (1) raising equity capital (2) farming-down a working interest for a carried expenditure (3) resource pre-sale or pre-payments (4) monetisation by way of sale or IPO of new venture interests.

Buru regained 100% ownership in early 2023, as part of a strategy by Origin Energy to exit upstream E&P. Origin Energy re-assigned its 50% earn-in to Buru, in return for Buru paying up to \$34M in future success payments in the event commercial milestones are reached, including Buru being granted a production license (\$9M), taking FID on a >25 TJ/d project (\$5M), and commencing production on a >50 TJ/d project (\$20M).

Commercial options.

The field is potentially large enough to underpin several medium to large scale stand-alone integrated gas developments, which Buru describe conceptually in recent investor presentational material, including:

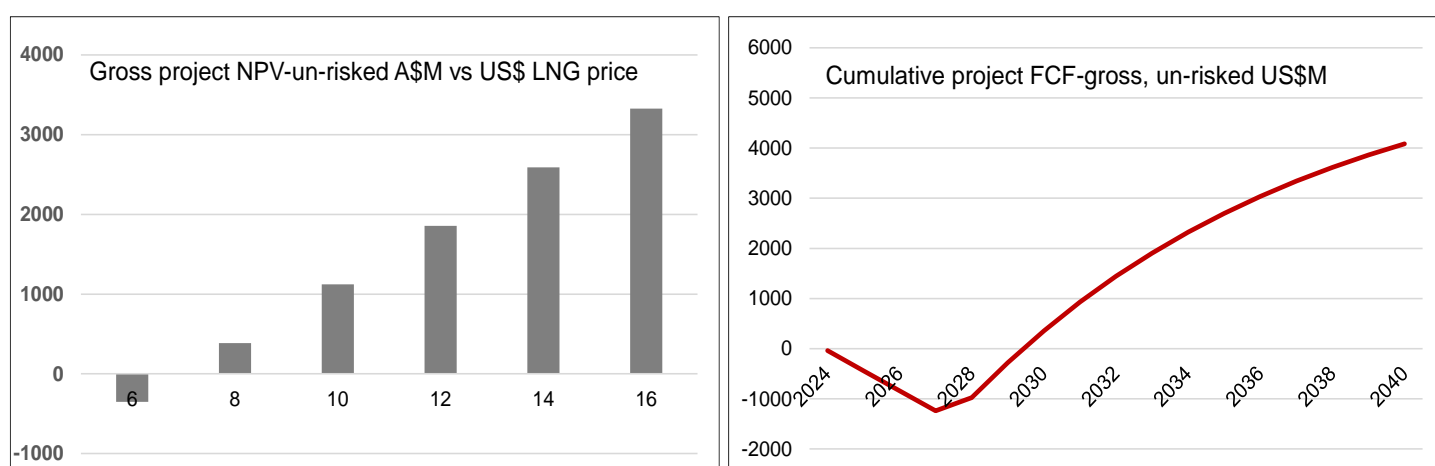
- Export via the Woodside operated LNG facilities at Karratha. There is ullage and access via tolling arrangements is possible. This option would enable Buru to capture export LNG prices. Pipeline costings and route, would need to be determined, as would access arrangements. That would likely be a complex undertaking but there are precedents.
- WA domestic gas markets. There are large mine-site related gas consumers in the Pilbara and Kimberly region, fed by various fields offshore. Buru's Canning basin fields are geographically well located to access this market. Historically, these consumers have paid prices which are far lower than export prices, the offset being that delivery infrastructure would be less capital intensive. WA domestic gas market dynamics are changed, with opportunities for new suppliers and prices are trending higher. We review the WA domestic gas market dynamics in Appendix 2.
- Local markets in north-western W.A. where industrial users and power generators are currently supplied by LNG trucked from the Pilbara region.
- In Situ value-added gas processing, including production of Urea (>1.4 MTPA), Methanol (>1.7 MTPA), and Ammonia (>1.5 MTPA)
- Small-scale FLNG (Floating LNG). On 18 April 2023, Buru announced the result of a pre-feasibility study, conducted in conjunction with Transborders Energy and Technip Energies, for a compact, 1.6MTPA floating LNG facility. Collaboration partners include Kyushu Electric Power, Mitsui O.S.K Lines, Technip, SBM Offshore, and Add Energy (part of ABL Group ASA). The concept is to mount a modular LNG plant on a shallow water barge or platform and with gas pre-treatment, LPG and condensate processing taking place onshore. The study concludes such a project is economically feasible. At current North-Western Australia export LNG prices of ~US\$600/T (~US\$12/mcf), a plant of this size could provide a revenue stream in the order of +/- US\$1 B p.a.

Figures 11 and 12 are indicative of what a theoretical project could generate in terms of cumulative free -cashflow (figure 11) with LNG prices a key variable (figure 10). We show them here for context, to inform the scale of the opportunity. These are gross figures for 100% of a project and are un-risked.

We set out our assumptions and discussion in the Valuation section, and in particular we note that in applying our model results, cash flow forecasts need to be appropriately risked. In addition, while Buru currently has a 100% working interest, this will fall when other partners are brought into the project, to provide capital and expertise. For forecasting and valuation, we assume Buru retains a 50% working interest in a future project.

The magnitude of the resource justifies a large and valuable project, but there is significant commercial and technical work ahead to lock-in the up-side as detailed in the Valuation section.

Figure 11: Indicated NPV Vs LNG price (gross, unrised)- A\$M. Figure 12: Cumulative project FCF-gross, unrisked, US\$M



Source: MST Access

Source: MST Access.

Other gas resources: Yulleroo (permits EP391 & EP436: 100% interest)

- Several discovered gas resources with large in situ-gas volumes, but in low permeability reservoirs.
- Demonstrated success with small, early fracs.
- 100% ownership.

Gas exploration in the Canning dates back 50 years, driven by a view that in-place gas reserves are potentially very large (multi-tens of Tcf), but hampered by high cost, remote operations and lack of gas markets at the time.

Yulleroo#1 was drilled in 1967 and tested gas at low rates from a substantial gas column in shales and thins sands. Buru's predecessor ARC Energy drilled Yulleroo#2 in 2007 and encountered gas shows in the same sequence as Yulleroo#1 but wasn't tested due to equipment issues.

In 2010, Buru returned and undertook a small frac at the Yulleroo#2 vertical well to stimulate flow. The frac resulted in gas flows to surface of high-quality gas with substantial condensate and LPG yields and low CO2. The result demonstrated the reservoir could be successfully stimulated. Follow-up wells Yulleroo#3 and #4 were drilled in 2012 and 2013 and were not tested due to hole conditions, but broadly confirmed a very large gas-bearing structure.

Also, in 2011 and 2012, Buru discovered large gas columns in Valhalla#2, Valhalla North#1, and Paradise#1 wells. The vertical Valhalla North well and another well Asgard#1 were fraced in 2015 and demonstrated strong flows of high-quality gas. Buru no longer has an interest in these wells; however the historic activity confirms geological models and the basin's prospects for large in-situ, liquids-rich gas volumes in unconventional and low permeability reservoirs.

In 2017, independent reservoir assessor RISC Operations Pty Ltd was commissioned to re-evaluate the Yulleroo resource encompassing all of the Yulleroo well and seismic survey data. The results were reported to the ASX on 18/01/2018 as follows:

- 1C: 321 PJ of sales gas and 9.5 MMbbls of associated liquids
- 2C: 714 PJ of sales gas and 24.9 MMbbls of associated liquids
- 3C: 1267 PJ of sales gas and 47.6 MMbbls of associated liquids

Carnarvon Basin EP 510: BRU 25%, Mineral Resources (MIN) operator, 75%

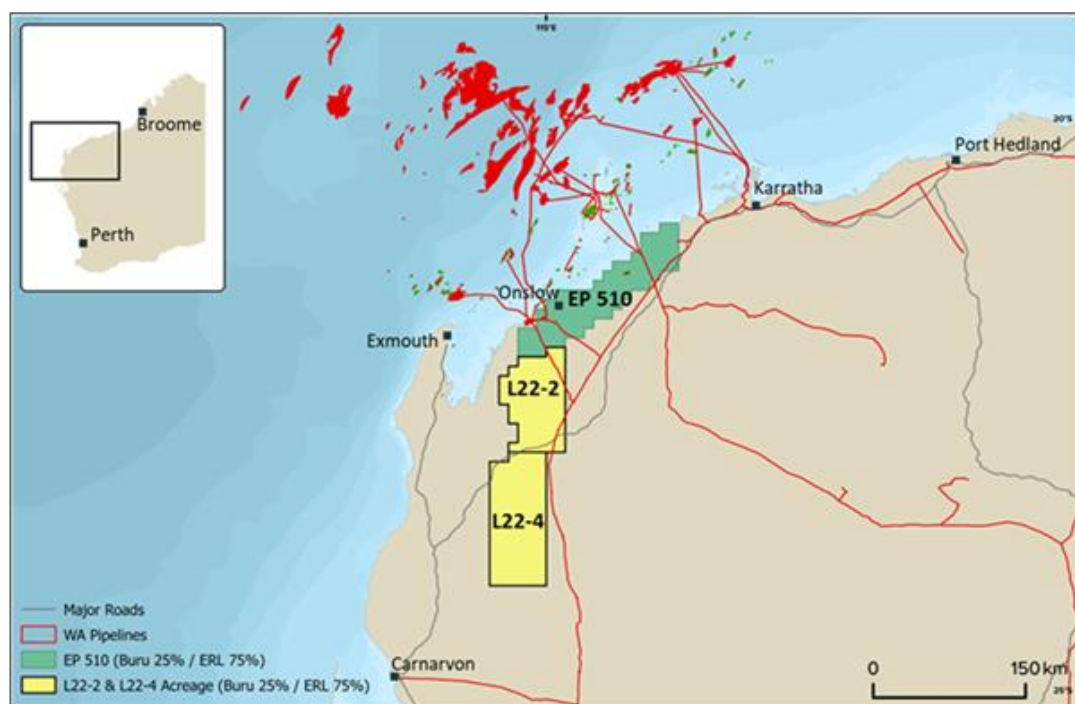
- Buru fully carried through two exploration wells by Min Res, planned for drilling in 2024

In October 2020 Buru in JV with Energy Resources Ltd, a wholly owned subsidiary of Mineral Resources Ltd (ASX: MIN, aka “MinRes”), applied for acreage in the onshore Canning Basin released by the State Government. The acreage was awarded to the 50/50 JV in July 2022 and is now designated as EP510. In 2022, Buru and MinRes were confirmed as winners of two further exploration areas, L22-2 and L22-4.

The acreage covers ~17,600 Km². It is located near established gas production infrastructure including the Tubridgi gas storage field, and the Wheatstone LNG plant and pipelines. Rationale for the entry is the regions geology for conventional gas, good reservoirs with numerous offshore analogues, shallow target horizon (700m-1500m), and deeper horizons largely not explored.

In May 2022, Buru farmed-out another 25% of its working interest to MinRes in return for a free carry through two exploration wells in EP510. MinRes agreed to match Buru’s funding contribution to the CCS initiative, with the outcome that MinRes will own 75% of the conventional oil & gas and CCS project on these permits, with Buru owning 25%. Figure 13.

Figure 13: Carnarvon basin acreage



Source: Buru Energy

Lennard Shelf, and legacy fields being de-commissioned, & other acreage

- Buru’s permits in the northern Canning Basin contain depleted oil fields which are being decommissioned.
- Continued tenure is a low-cost option on future activities.

The Lennard shelf south of Derby in WA contains the Blina, Sundown and West Terrace oil fields developed by other companies in the 1980’s and now depleted. Buru is in the process of de-commissioning all the historic production sites. Expenditures are not onerous.

What remains of value is geological knowledge, and latent attraction in the 100% owned acreage position which in the future, may yield new play types in the event of fresh thinking. Any new discoveries will require the installation of new production facilities

Elsewhere, Buru has interests in permits EP457 and EP 458 in the central part of the Canning Basin, in joint venture with ASX-listed Rey Resources (ASX:REY). The EP457 permit potentially contains part of the Rafael resource, and the Rafael 3D seismic survey is planned to include acquisition of data in this permit. There are additional leads and prospects in these permits and 2D seismic data acquired in 2021 is currently being interpreted in order to assess future exploration potential.

New Ventures

In 2020, Buru broadened its strategic direction, to leverage its E&P skills in new areas

Buru set up in-house business units to evaluate opportunities in activities related to delivering solutions in a de-carboning world. These are:

1. **GeoVault.** This business targets the capture and sequestration of CO₂ into geological reservoirs in the Canning and Carnarvon basins. There are several sub-surface reservoirs that have potential to store large volumes of CO₂. Buru's knowledge of the geology and on-ground operational experience is a strong competitive advantage
2. **2H Resources.** This business houses a number of exploration licenses in South Australia which are prospective for Hydrogen, Helium and gas storage.

These subsidiaries are in the early phase of evaluating commercial opportunities, however in time, it's possible that independent financing could be sought with either of these companies floated separately. We note the ASX (and other markets such as AIM in London and Toronto TSX) host pure-play companies active in CCS, and Hydrogen exploration and manufacture, including in Australia, PH2, Hexagon, and Pilot Energy, and Gold Hydrogen. There is capital available for these early proponents and some of these companies already have capitalisations greater than Buru.

GeoVault: focused on carbon capture and storage

GeoVault was created to evaluate Carbon, Capture and Storage (CCS) opportunities, at prospective sites in Buru's acreage in the Canning and Carnarvon basins. The Canning Basin permits may provide significant storage potential for both domestic and international CO₂ emissions. In the Carnarvon Basin, the permit areas are strategically located in an area where there are approximately 13.8 MTPA of CO₂ emissions from offshore gas fields, industrial users and mine sites.

Conceptual development of CCS is to inject CO₂ into saline reservoirs, and feasibility studies underway aim to confirm concepts, costs and infrastructure needed to bring CO₂ on site.

Over the outlook period, GeoVault's objective is to (1) consolidate the geological knowledge and (2) undertake a demonstration plant to gain internal experience and (3) gain JV and stake-holder alignment before scale-up. It is early days, but already in Australia and around the world there are numerous projects and the economic and technical requirements for success are being refined. Refer to Appendix 3 for more background on this opportunity.

2H Resources: Natural Hydrogen & Helium

- Acreage in South Australia is highly prospective for naturally occurring Hydrogen.
- Naturally occurring hydrogen has had little exploration and Australia (and Mali) may be globally unique in hosting large volumes.

Exploration for naturally occurring hydrogen is a recent trend driven by demand, but the skills needed to find and produce it are the same as for conventional oil and gas exploration and production, consistent with Buru's core skills.

In January 2023, 2H Resources was confirmed as the preferred applicant for the grant of six South Australian Petroleum Exploration Licenses (PEL's) for Hydrogen exploration covering 30,000 sq. km, and in addition two additional applications for Gas Storage Exploration Licenses (GSEL's) covering 5700 sq.km.

Granting of licenses is subject to executing a land access agreement with native title holders. Refer to figure 14 for PELA locations.

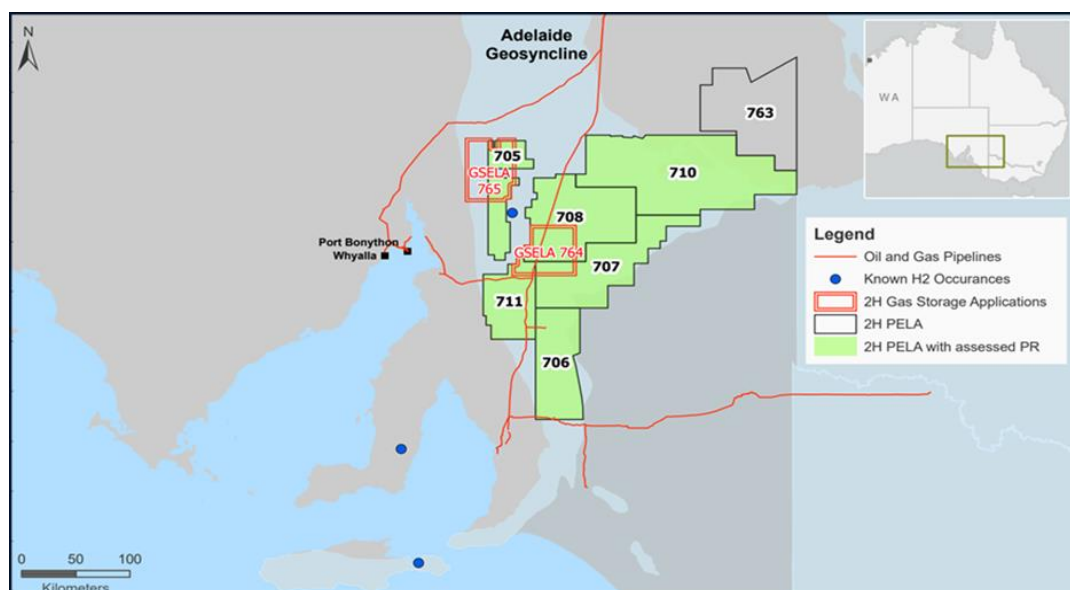
Hydrogen is a source of energy, and when combusted emits zero carbon gases, so Hydrogen is emerging as a sought-after fuel for transportation and power generation in a world pursuing "net zero". Demand for hydrogen is growing rapidly. In its 2021 "Global Hydrogen Review", the IEA estimates Hydrogen demand will grow 5-fold between 2020 and 2050.

Approximately 95% of Hydrogen is produced from reforming hydrocarbons and is not low carbon when the greenhouse emissions from the fossil fuels combusted to create it are taken into account. The remaining 5% of Hydrogen production is from electrolysis of water, which is very expensive and is only low carbon if the electricity required is sourced from renewables.

Hydrogen is generated naturally in the earth, and in unique geological settings can be trapped in sub-surface reservoirs along with other gases such as methane, nitrogen, helium, and other gases.

The convergence of geological settings to trap hydrogen in concentrations high enough to justify commercial evaluation is globally rare. At this time, there are no wells producing hydrogen commercially, and the only locations in the world with oil or gas wells, or water bores which have recorded high Hydrogen concentrations (>50%) are in Mail, South Australia, and parts of the USA.

Figure 14: 2H Resources South Australia exploration and gas storage license applications



Source: Buru Energy

The Resource and geological background

2H Resources’ licenses are geologically on trend with legacy hydrogen discoveries. There is extensive background material published by South Australia’s Department of Energy and Mining. Hydrogen has been detected in wells in the Cooper Basin, Otway basin, Kangaroo Island and Southern York Peninsula. Significant results reported are:

- American Beach#1, drilled in 1921 on Kangaroo Island, reported Hydrogen in core samples 50-68% with the balance nitrogen; Robe#1, onshore Otway Basin, 1915 Hydrogen concentration 25%, the balance methane and nitrogen; Ramsay Oil Bore#1, 1931 drilled onshore the Yorke Peninsula

RISC Advisory were engaged by 2H Resources to evaluate the potential for Hydrogen, with risked and un-risked estimates shown in Figure 15.

Figure 15: Hydrogen Prospective resources

Hydrogen	Gross Unrisked			Gross risked		
	1U	2U	3U	1U	2U	3U
Bcf	246	1713	6567	21	148	566
Million Metric tonnes	0.57	3.98	15.25	0.05	0.343	1.313

Source: Buru ASX release: 23 January, 2023

Hydrogen pricing is opaque, and production costs vary by method. There are no widely referenced hydrogen price series but there are anecdotes of prices to consumers in the range US\$8-15/Kg, however these prices embed significant transportation, storage and logistic costs which are location specific. As an indication of the market value of ~343 million kg, which is the 2U figure, at say, US\$10/kg, is ~US\$3.4 billion. Prices to incentivise displacement of fossil fuels, would have to be significantly lower, at <\$8/Kg to displace diesel, and <\$4/Kg for power generation.

Next steps

Engagement with key Native Title owners is underway and is required before granting of licenses and access to the licenses for field work. In parallel, 2H Resources is undertaking geological and geophysical studies to understand hydrogen trapping mechanisms and perspective, with field activity planned as soon as practicable after the PEL’s are awarded.

Finances

P&L, cashflow and the balance sheet

Figure 16 shows an extended history of key financial elements.

Historically Buru financed activities by selling down equity in key acreage (aka “farm-out”) to in-coming partners for a combination of cash and investment into future activity.

Farm-outs have been a key success factor in Buru being able to participate in meaningful exploration activity since 2008, having conducted five major farm-out or sales programs. These transactions enabled Buru to participate in ~29 exploration well, for a total gross capex of >\$300m, substantially funded by joint venture partners.

Buru derives revenue and cashflow from the Ungani oil field production. It is a high-cost operation, for a number of factors related to small production volumes and remote operations. At 31 December 2022, Buru fully impaired the balance sheet value of Ungani.

The balance sheet has been cleansed of historic investments lacking line of sight to commerciality, and now is very simple and lacking in any complexity.

- There is nil bank debt, and no future onerous commitments. Cash at 31 March 2023 ~\$14M.
- Production assets have been impaired to nil, and gas exploration is carried at ~\$10M, predominantly the investment to date in Rafael.
- Provisions for rehabilitation total ~\$6M, with expenditures beyond the outlook period.

Capex outlook & funding

Over the outlook, we anticipate:

- \$20M capex for drilling at Rafael in 2024. This quantum is planned to be mitigated by Buru attracting a farm-in partner.
- No material investment at Ungani other than for essential maintenance and safe operations.
- Two wells in the Carnarvon (carried by MinRes), at nil cost to Buru.
- Geological and desk-top studies into CCS and Hydrogen which are unlikely to be large at this time.

In our view, the biggest financial challenge over the next 2 years will be for Buru to manage its exposure to Rafael appraisal, and after that, development. For the remainder of CY 2023, the planned 3D seismic survey is partially covered by Origin Energy, for \$4M of carry. Any overs are at Buru’ expense and mostly relates to the portion of 3D seismic in EP457.

Buru’s 50-100% working interest in multiple large acreage areas give it options to farm-out or sell down, or engage in acreage swaps, as it has done successfully in the past.

Figure 16: History of key financial and production statistics.

A\$M	2009	2010	2011	2012	2013	2H 13	2014	2015	2016	2017	2018	2019	2020	2021	2022	1H 23
Net Production (M bbls)	0				101		351	132	0	172	217	186	184	139	95	
Sales Revenue	0.0	0.0	1.5	2.0	5.4	0.0	15.1	3.5	0.2	7.9	19.9	13.8	11.3	9.6	13.9	6.8
Other income	3.2	2.6	2.4	2.7	2.6	5.6	4.1	5.6								
EBITDAX	-45.9	-7.1	-12.7	-10.1	-17.7	-16.6	-7.9	-9.0	-7.1	-2.6	9.5	0.9	2.8	1.4	2.2	-3.3
NPAT	-42.8	-4.3	-10.3	-5.5	-22.7	-15.0	-32.6	-40.9	-35.1	-6.2	29.7	-27.5	-28.8	-10.8	-32.8	-6.7
Cash from operations	-1.5	-4.0	1.5	-6.7	-8.2	-12.6	-25.6	-9.0	-10.8	-4.3	-1.2	-13.3	-1.9	-5.9	-4.5	-3.3
Net investing cash flows	-25.1	-14.1	-15.0	-32.3	-48.3	-11.4	-4.9	-2.1	10.5	-8.5	51.9	-13.9	-5.7	-5.8	-9.0	-1.7
Equity raised		0.6	0.0	74.5	39.3	38.8	30.1		0.0	13.6	0.0	0.0	0.0	15.0	9.1	0.0
Debt raised (repaid)..Incl \$40M Alcoa	40.0							-15.0	-12.5	-5.0	-2.9	-4.3	-2.1	0.0	0.0	0.0
Cash proceeds	85.0	0.0														
NET CHANGE IN CASH	58.3	-17.5	-13.4	35.6	-16.9	14.8	-0.5	-26.1	-12.8	-4.2	47.1	-31.4	-11.0	2.2	0.1	
Cash at end of FY	58.3	40.7	26.8	62.4	45.4	60.2	59.9	33.9	21.0	16.8	64.0	32.4	21.4	23.7	23.8	
Debt at EOFY	40.0	40.0	40.0	40.0	40.0	40.0	40.0	21.5	11.0	7.5	0.0					

Source: Buru Energy financial reports

Reserves and resources

Figure 17 shows reserves and resources for conventional oil and gas in the Canning basin, as well as prospective Hydrogen resources in the South Australian acreage.

Figure 17: Oil & gas reserves & resources & Hydrogen prospective resources

Asset	W.I.-%	Block	1P	2P	3P	1C	2C	3C
OIL & NGL								
Ungani	50	L20-21	0.0	0.2	0	0	0	0
Yulleroo- cond	100	EP 436				10	25	48
Rafael- Condensate	100	EP 428	0	0	0	1	5	21
Total Liquids- MMbbls			0	0	0	11	30	68
Gas								
Rafael	100	EP 428	0	0		59	260	1024
Yulleroo	100	EP 428	0	0	1	321	714	1267
Total Gas- PJ			0	0	1	380	974	2291
Total MMboe			0	0	0	74	193	450
			Un-Risked Prospective			Risked prospective		
Hydrogen (Bcf)			1U	2U	3U	1U	2U	3U
Bcf	100		246	1713	6567	21	148	566
Million Metric tonnes	100		0.57	3.977	15.249	0.05	0.343	1.313
Million Kg	100		570	3977	15259	53	343	1313

Source: Buru Energy

Valuation: Risked NAV A\$0.40, un-risked A\$1.62

Our risked NAV is a sum-of-parts capturing (1) risked value for a future Rafael gas project (2) value for new ventures based on market peers (3) value of exploration based on market peers and farm-out monetisation and (4) balance sheet cash and debt at 31 March, 2023. Refer to Figure 18.

We consider A\$0.40 a fair estimate for the core E&P assets as-is.

Figure 18: Sum-of-part valuation

Asset Value (A\$M)	Method	Unrisked	A\$M	CPS	Risk	A\$M	CPS
Core E&P assets		Unrisked NAV			Risked NAV		
Ungani 2P	DCF of oil to 2026	100%	1.1	0.00	100%	1.1	0.00
Rafael -2C gas & Cond.	DCF to 2040	100%	911	1.53	20%	182	0.31
Expln- Carnarvon	Min-Res farm-in		10	0.02		10	0.02
Net Cash	March 31/2023		14	0.02		14	0.02
Core E&P Value			937	1.57		207	0.35
New Ventures & Other							
Yulleroo tight gas	Option value		10	0.02		10	0.02
GeoVault CCS	Market Value, PGY peer		11	0.02		11	0.02
2H Resources H/ He	Market value, GHY peer		12	0.02		12	0.02
Total new Ventures			33	0.06		33	0.06
Total equity value			970	1.63		240	0.40
Shares on issue			596			596	
Value Per share				1.62			0.40

Source: MST Access.

Methodology

- We value Ungani oil production from forecast free-cashflow from future of 2P reserves over the life of the field to 2026, less stay-in-business costs and future ABEX. Nominal revenues are discounted at 10% WACC, with inflation 2.5% p.a. We assume a base Brent oil price of US\$80/bbl.
- We assess value for Rafael based on a conceptual small-scale FLNG project in line with guidance provided by Buru. Our valuation is indicative at this time, due to the very early stage of project formation, and subjectivity required by MST. Our risked valuation assumes a 20% risk factor to account for uncertainty. Over time the project progresses and is de-risked, our inputs and risk factors are likely to change.

As a secondary measure, we reference market listed exploration phase companies with contingent resources, and this informs us that even at this early stage, there is considerable value in undeveloped resources, particularly in Western Australia

- Canning Basin tight gas (Yulleroo): has been written down to nil in the balance sheet. This significant 2C contingent resource is potentially valuable if technologies, capital costs and gas markets align to enable an unlocking of value but until these elements are determined, we assign a modest but positive value.
- Carnarvon Basin exploration acreage is valued on a farm-in basis, where-by BRU is fully funded through two wells. We assume the total capital cost of the two wells are \$10M.
- CCS and Hydrogen business units are assigned value which is consistent with a small group of ASX-listed pure play companies. Our reasoning is that if either on these in-house ventures were publicly listed, they would likely attract market value.

Rafael risked DCF

We have constructed discounted cashflow models for a conceptual Rafael field development delivering gas to and exporting from a 1.6 MTPA-nameplate small-scale FLNG plant, in line with Buru's guidance. Key variables determining this project's value are to be determined and at this time, there is commercial and technical uncertainty therefore we risk our DCF value at 20%

Key assumptions are:

- Nameplate 1.6 MTPA operating at 90% capacity over 15 years from 2028, as a base case, with size and project life to be determined after quantification of the field's ultimate economic recovery.
- Export LNG prices a key variable, with inputs from US\$6/mmBtu to US\$16/mmBtu. We adopt US\$12/mmBtu as a base case, which reflects an oil price parity of US\$60/bbl.

- Condensate price of US\$80/bbl in real terms
- Gross capex of US\$1.6 B, or ~US\$1000/T of installed capacity.
- Operating costs including royalties and taxes of US\$3.0/mmBtu
- US\$ cashflows discounted at a real pre-tax WACC of 11% and converted to AUD at a rate of 67c.

The gross un-risked project NPV calculates to be A\$1.822 billion, on a 100% basis. However, we make two critical adjustments.

The first is to risk the cashflow at 20%. Reserves, project configuration, capital and operating costs, timing and method of funding are to be determined. As these elements are informed, risks would dissipate, and value will accrue.

The second relates to finance. The gross project value is theoretically independent of how it is financed, but in reality, Buru would need a combination of debt, equity issuance and asset sell down to bring in capital and development expertise. In our analysis, we assume that Buru's working interest is reduced to 50% in order to facilitate the project.

Reserves are a key variable and need to be established. The 2C resource is a probabilistic measure and does not reflect the reservoir column encountered but not tested, but appraisal success in 2024 is required to firm up and potentially increase this figure.

Upside from Rafael progress and de-risking

Our core \$0.40 valuation assumes a 20% risk factor for a Rafael project given its present pre-development status. The fully de-risked upside is \$1.62 but to achieve that, Buru needs to meet a number of engineering and commercial milestones. The outcomes Buru needs to deliver, and value uplift are:

- Reserves and resource resolution. We risk this at 25% in our "waterfall". At this time, there are contingent resources from a single well. Additional drilling is required to de-risk the resource and firm up marketable proven reserves.
- Engineering is risked 25%. Progression through all that is required to scope a project is to be resolved, including progress through pre-feasibility studies and FEED.
- Post FEED activities and commercial outcomes to sell the gas and attract development capital are risked at 15%.
- At the point of FID (Final investment decision), when the Board and all stakeholders commit to a project, our risk factor is up to 85%. The remaining 15% post FID is 15% for construction risk and potential for over-runs and delays.

Peer Group & secondary checks

Figure 19 lists gas-focused companies we use to gauge value for Buru's in-situ gas resources. This group is distilled from 52 ASX-listed small gas exploration companies. For relevance to Buru, we have not included corporates which have (1) gas assets overseas which are subject to different gas market conditions and fiscal regimes (2) unconventional resources including CSG, which have different capital investment profiles (3) production operations, which attracts higher market multiples.

The volume weighted average value per GJ is A\$0.45, for 2C resources. If we apply this to Buru's independently assessed 2C resource of 260 Bcf (276 PJ) for Rafael, the result would be \$124M. We have not assessed and EV/3C figure, as this data is not available across the peer group. Our DCF-based valuation is higher than this, with a key reason being that Rafael is liquids rich and the condensate by-product has material net present value in addition to the gas.

Figure 19: ASX listed peer group of exploration phase gas companies in WA / NT

Company	Ticker	EV	2P	EV/2P	2C	EV/(2P+2C)
Warrego	WGO	420.9	211	1.995	15	1.862
Strike Energy	STX	891.6	368	2.423	610	0.912
Talon Energy	TPD	79.7	24	3.279	464	0.163
Empire Energy	EEG	99.6	0	0.000	587	0.170
Tamboran Res.	TBN	222.2	0	0.000	1576	0.141
Triangle Energy	TEG	20.0	0	0.000	0	0.000
Total		1734	603		3252	0.450

Source: MST Access.

Hydrogen peers.

The peer group of pure play companies in this space is small

We have reviewed the following ASX-listed companies:

- “Gold Hydrogen” (ASX: GHY). Current market capitalisation is A\$45M. Exploration acreage in South Australia for naturally occurring Hydrogen, comparable to Buru’s applications.
- “PH2” (ASX:PH2). Current market cap \$60M. Plans to produce Hydrogen & graphite
- Hazer group (ASX: HZR). Current market cap. Plans to produce Hydrogen and graphite
- Pilot Energy: (ASX: PGY). Market cap \$11M. Pure play WA CCS proponent, in JV with Tringle Energy for small project in the Perth Basin.

The only peer of relevance from this very small set, is “Gold Hydrogen” as it is exploring for naturally occurring Hydrogen, as is Buru, in South Australia. The other companies mentioned here are engaged in manufacture, or distribution activities and are not relevant peers We use the GHY market value as a proxy for 2H resources, adjusted for differences in 2U prospective hydrogen resources.

ESG considerations.

Buru is one of a hand-full of small companies undertaking comprehensive sustainability policies, which are detailed in its ‘Sustainability Report’ found on the Buru website and published to the ASX on 18 March 2022 for the year ended 2021. We refer readers to that report, which encompasses Buru’ strategies and policies in the broad areas of:

- Climate
- Environment
- People, Culture and Community
- Governance
- Asset integrity and critical risk management

Corporate capability

Key Board members and executives have a long association with Buru's area of operations, some dating back >20 years at precedent companies (ARC Energy, Discovery Petroleum). Senior executive appointments in 2020 and 2021 bring new skills and experience in important areas of commercial and development operations, including perspectives on low-carbon initiatives. The Board has a collective 130 year's oil and gas industry experience and are highly credentialed. The executive team is qualified and experienced in all aspects of running an exploration and production company, encompassing exploration, production operations, project management, commercial, financial and stakeholder engagement

Board

Eric Streitberg, Non-Executive Chair. (Appointed 16 April 2008)

Eric is a Fellow of the Australian Institute of Mining and Metallurgy, and the Australian Institute of Company Directors, and Member of the Society of Exploration Geophysicists, Petroleum Exploration Society of Australia, and the American Association of Petroleum Geologists. He is a certified Petroleum Geologist and Geophysicist and holds a Bachelor of Science (App Geoph) from the University of Queensland.

Eric has more than 40 years' experience in Petroleum geology and geophysics oil and gas exploration and oil and gas company management.

He was a founding shareholder and managing Director of ARC Energy Ltd, which was transformed from a junior exploration company into a mid-size oil and gas producer. He was also a founding shareholder and managing Director of Discovery Petroleum, which was a key participant in the renaissance of the Perth basin as a significant gas producer until the takeover of that company in 1996. Prior to that he held various international exploration roles with Occidental Petroleum, and BP. He was a founding shareholder and non-Executive Director of Adelphi Ltd from 2005 until its takeover in 2010.

Eric was previously Director and Chair of the Australian Petroleum Production and Exploration Association (APPEA) and also chaired APPEA's Exploration and Environment Committees. He is also a past Chair of the Marine Parks and Reserves Authority of WA.

At Buru, Eric has been a Director since April 2008, and was the Executive Chairman from May 2014 to December 2022.

Robert Wiles, Independent non-Executive Director, appointed July 2014

Robert is a graduate of the Australian Institute of Company Directors, and a Member of the Association of International Petroleum Negotiators. He holds an Honours Degree in Geography from Durham University in the UK and has completed Executive development programs at Harvard Business School and Cambridge University

Robert has over 30 years of experience in the oil and gas industry covering senior commercial and leadership positions with BP, as well as ASX and Government board roles. His BP career included exploration and production, gas and power and global M&A roles with responsibility for numerous complex deals such as divestments, farm-ins, asset swaps, new acreage bids, unitisations, gas and LNG sales.

A former Managing Director of Challenger Energy Ltd and CEO of Eureka Energy Ltd, Robert is also a Director of the Mid-West Port Authority and has served on a number of boards including APPEA, and Northwest Shelf Gas, North West Shelf LNG, North West Shelf shipping and North West Shelf Liaison committees. He also served on the board of Carbon Reduction Ventures Pty Ltd, and the Perth Centre for Photography.

Robert Chairs Buru's Audit and Risk Committee, and is a member of the Remuneration and Nominations committee

Joanne Kendrick. Independent Non-Executive Director

Joanne is a Petroleum / Reservoir Engineer holding a Bachelor of Engineering (Hons) from the University of Adelaide and is a member of the Australian Institute of Company Directors.

Joanne is an experienced industry professional with more than 25 years' experience in technical and executive roles with Woodside Petroleum, Newfield Exploration, Gulf Canada, Clyde Petroleum and Nido Petroleum

Joanne has been directly responsible for managing production operations, drilling operations, development projects, capital raisings, asset transactions, and joint venture interests throughout here career including as Managing Director of ASX listed Nido Petroleum for seven years.

Joanne I currently a Non-executive Director at 88 Energy Ltd. She was previously Managing Director at Blue Star Helium focused on Helium activities in North America

Malcolm King, Independent Non-executive Directors, appointed February 2021

Malcolm has a Bachelor of Applied Science (Geology) from the University of Southern Queensland and a Master of Science (Petroleum Geology) from the University of Aberdeen, Scotland. He is a member of the Australian Institute of company Directors and a Graduate of the Australian Institute of Company Directors

Malcolm has 35 years of upstream oil and gas experience, mostly with Shell in technical, commercial and leadership roles across Asia and Australia. His Shell experience spans exploration and production and gas and power business, participating in leading exploration and M&S campaigns, and working extensively in LNG operations, business development and market development. More recently Malcolm led Senex Energy's commercial and business development functions for the Cooper basin and Queensland coals seam gas business. He currently provides consulting services to the energy industry.

Malcolm chairs the Remuneration and Nomination Committee and is a member of the Audit and Risk Committee

Key executives

Thomas Z Nador, Chief Executive Officer, appointed September 2022. BSc, PGDip Sc, MAICD

Thomas joined Buru in September 2022 as Chief Executive Officer. Thomas is a globally experienced oil and gas executive with over 25 years' experience in various roles across the oil and gas value chain, mining and metals, pipelines, and infrastructure developments. Thomas has been involved in the development of major oil and gas resources from discovery to production, managed significant pre and post-merger integrations on an asset and corporate level, and has led large multidisciplinary and multicultural teams to deliver high value, complex and innovative programs of work.

Prior to joining Buru, Thomas held positions as Group Executive, Development with Beach Energy, Executive Vice president and Country manager for interOil Corporation in Papua New Guinea, and Development Manager, Project interface Manager and Project integration Manager for LNG projects at Woodside Energy.

Paul Bird, Chief Financial Officer & Company Secretary. BSc, FCCA, AGIA

Paul is a chartered accountant and Governance professional with over 25 years' experience, predominantly within the energy sector with ASX listed companies. Paul joined Buru in October 2022 following his most recent role as Chief Financial Officer and Company Secretary of ASX-listed Metgasco Ltd. He has had previous senior finance and leadership roles with national oil companies, and publicly listed and private oil companies in Australia, USA, Europe and SE Asia.

Dr Kris Waddington, Chief Operating Officer, BSc, PhD, GAICD

Kris has 15 years' experience in the energy industry across health and safety, development, maintenance, production, and operational aspects of the industry. He has expertise in risk management and implementing firm purpose internal control systems for company operations, ensuring Buru's activities are executed safely and cost effectively. Kris has experience working with Joint Venture partners and integrating environmental and cultural heritage considerations into project planning and operations, so that on-ground operations are executed with minimal impact on the environment while delivering benefits to local stakeholders and native title groups.

Frank Glass, GM Exploration and New Ventures, MSc (Structural geology)

Frank joined Buru in 2018 and has 32 years' experience in both technical and managerial roles in oil and gas operations. For most of his career he was employed by Shell International and worked in various international locations, including the USA, The Netherlands, Malaysia, Australia and the UK. His roles included acting as Asia-Pacific regional exploration advisor, supervising and assuring technical and economic inputs into regional exploration projects for Shell. Frank is a member of the Petroleum Society of Australia, Petroleum Exploration Society of Great Britain, American Association of Petroleum Geologists, European Association of Geoscientists and Engineers, and Southeast Asia Petroleum Exploration Society.

Mark Deveraux, GM Technical and sub-surface integration. BSc, PGDip Petroleum

Mark joined Buru in November 2013 and has more than 25 years of technical and managerial experience primarily in offshore exploration and operations. He has previously worked for international companies Arco, Mobil and OMV, and also for former Australian Independent company Ampol Exploration. Prior to joining Buru, Mark held positions of Exploration Manager for OMV's

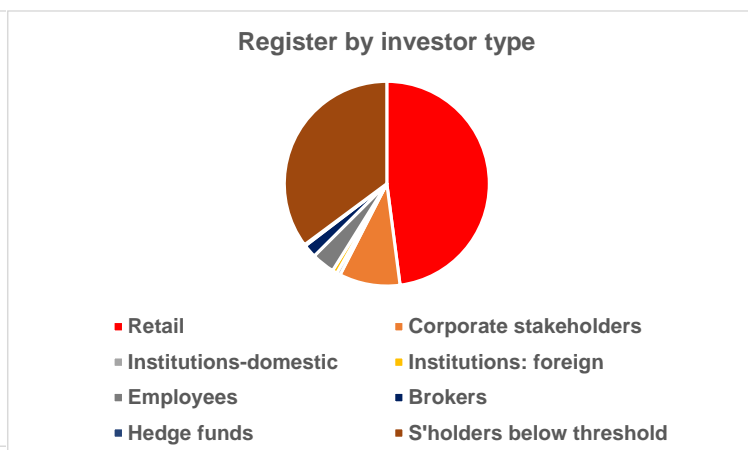
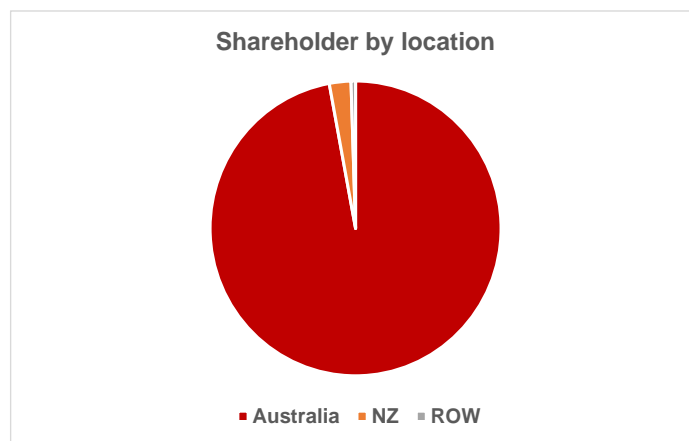
Australian exploration portfolio. He is a member of the Society of Petroleum Engineers, American Association of Petroleum Geologists, and Petroleum Exploration Society of Australia

Share register

The shareholder base is dominated by Australian based investors. The largest holder is Birkdale Enterprises with 8.1%. There were 6569 shareholders at Dec 31, 2022, and of this, 2482 had 5000 shares or less (worth \$500 or less at current market prices). Management has significant interests with the Chairman holding ~4%.

Figure 20: Shareholders by region

Figure 21: Shareholder by investor type



Source: Buru Annual Report 2022

Source: Buru Annual Report 2022

Appendix 1

Figure 22: Schedule of interests in permits at 31 March, 2023

Property	Operator	W.I.(%)	License type	Location
L6	Buru	100	Production	Canning
L8	Buru	100	Production	Canning
L17	Buru	100	Production	Canning
L 20	Buru	50	Production	Canning
L 21	Buru	50	Production	Canning
EP 129	Buru	100	Exploration	Canning
EP 391	Buru	100	Exploration	Canning
EP 428	Buru	100	Exploration	Canning
EP 431	Buru	100	Exploration	Canning
EL 436	Buru	100	Exploration	Canning
EP 457	Buru	60	Exploration	Canning
EP 458	Buru	60	Exploration	Canning
EP 510	Min Res	25	Exploration	Carnarvon
L22-2	Min Res	25	Exploration	Carnarvon
L22-4	Min Res	25	Exploration	Carnarvon
EO4/2674	Sipa Reseources	50	Exploration	Canning
EO4/2684	Sipa Reseources	50	Exploration	Canning

Source: Buru March 2023 Quarter Report

Appendix 2.

Although Rafael is shaping up as an export project, there are domestic market alternatives which could become available, or conjunctive sources of value, depending on the ultimate size of the resource.

The WA Gas market is tightening rapidly.

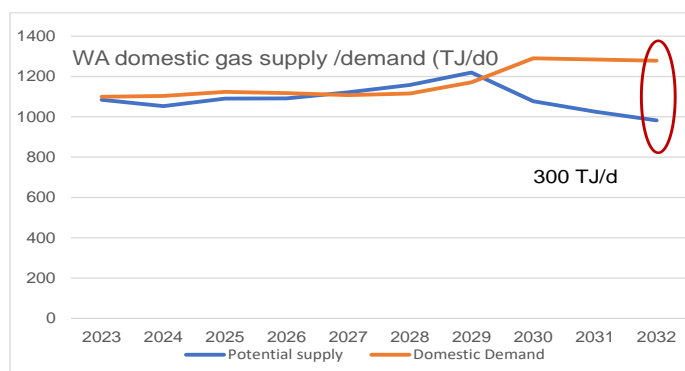
The large offshore northern W.A gas discoveries made decades ago saturated the domestic gas market and ushered in a multi-decade era of low gas prices. However, W.A gas market dynamics have changed. The large offshore fields are depleting, and there have been no major offshore discoveries in a decade. These once-giant fields are committed to the export LNG trade, and what is left that is available to the WA domestic market and under domestic producer's gas obligations is depleting. The recent AEMO W.A. Gas Statement of Opportunity identifies a shortfall by 2032 of ~300 TJ/d. (Figure 23).

Gas prices for domestic users for the past 20 years were entrenched <A\$4/GJ but are now rising as the market tightens. Some of the Perth Basin exploration companies document prices for new contracts which are in the \$7-9/GJ range, and spot prices in early 2023 are ~A\$10/GJ. Figure 24.

The market opportunity for Canning Basin gas is emerging. In addition, there are LNG opportunities, and potential for alternative uses of gas in conversion to hydrogen, Ammonia, or methanol.

Strategically, this is important for Buru because it increases the confidence in attracting partners and capital for ongoing exploration, appraisal of the 2021 Rafael gas discover, Buru's contingent resources.

Figure 23: WA Supply / demand



Source: AEMO WA Statement of Opportunity, March 2023

Figure 24: WA domestic gas (perth) prices firming



Source: AEMO WA Statement of Opportunity, March 2023

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Appendix 3: CCS background

There are 20 large scale CCS projects in the world, storing 40 MTPA of CO₂, with momentum gaining for more as an economic solution for permanent storage of unwanted CO₂ emissions.

The science: What is required

CO₂ occurs naturally in oil and gas fields, and in Australia some large fields have CO₂ concentrations up to 20%, in the Cooper Basin, and the offshore Gorgon LNG project and gas fields. Operators in both regions have embarked on large scale capture of field CO₂, and re-injection back into underground reservoirs.

The process engineering is well understood, as CO₂ has to be removed from raw gas streams ex-field in order for the gas to meet end-user specifications. CO₂ and other gases are removed from the feedstock chemically, then dehydrated and compressed in order to overcome underground reservoir pressures when re-injected into the ground.

Naturally occurring CO₂ could be processed and sold to the beverage industry, but more commonly unwanted CO₂ is vented to the atmosphere. With CO₂ emissions increasingly likely to attract taxes or penalties, venting will no longer be permissible, or if so, expensive.

Recovering CO₂ from a gas stream is a well understood science but permanent storage back into the ground is less well known and the geological conditions required limits where this can be done. For a successful project, the CO₂ must be permanently captured. There are two main avenues

- Re-injection into underground saline reservoirs, where over time, the CO₂ reacts chemically with the water and salts and eventually forms solid carbonate crystals.
- Injecting back into depleted oil and gas fields, taking advantage of the fact that these fields once had an effective sealing system to contain the hydrocarbon but are now voided.

There is debate as to how permanent these solutions are. Often, sub-surface reservoirs are leaky, and what needs to be established is the competence of the rocks trapping the gas and measuring the result in practise may require decades of monitoring at the surface. To date, one of the largest and oldest Sleipner in Norway has stored ~20 MT from 1996 to now with no evidence of leakage.

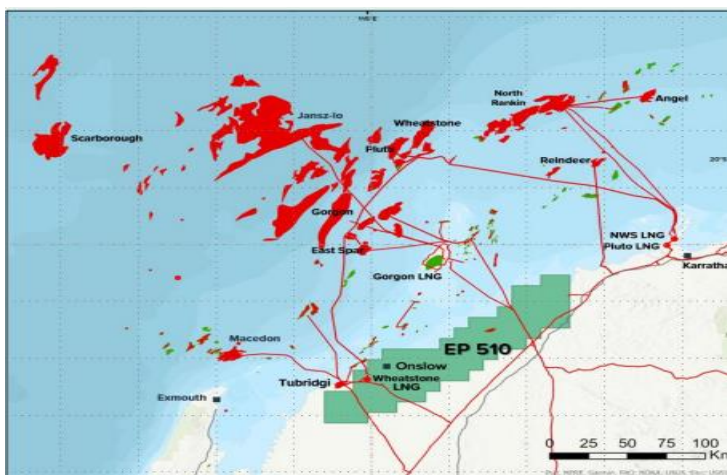
CCS Economics.

Producers or end users generating CO₂ are facing the prospect in many countries of being taxed for their CO₂ emissions in production and combustion processes, so there is commercial value in paying a third party to capture and permanently store the CO₂.

Economic data is not easy to source, and is a function of project scale, location, and infrastructure and transport costs for moving CO₂ around, as well as taxes, royalties or any other imposts.

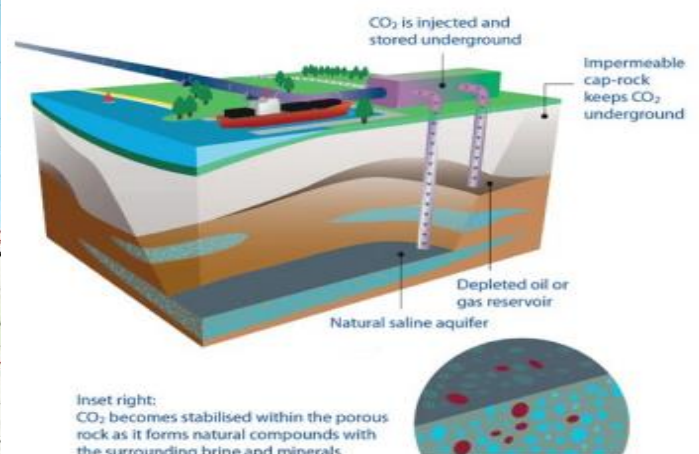
In Australia, Santos cites their Moomba CCS project, which aims to start sequestration in 2024 of 1.7 MTPA, claim a full development life-cycle cost of US\$24/T and annual cash opex of US\$6-8/T. In Western Australia, Triangle Energy (ASX: TEG) propose a CCS project at its offshore Cliff Head field and presentational material shows a project NPV of A\$110-210M for storage of 6.2 MT over 15 years, equating to an NPV-per-tonne of A\$18-34/T.

Figure 25: Acreage EP510



Source: Buru Energy

Figure 26: CCS concept



Source: Buru Energy

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