

# INVESTOR GUIDE

PLUS: MARKET INSIGHTS | 15+ COMPANIES TO WATCH

**NOVEMBER 2024** 



Western Australia's most trusted government relations and strategic communications counsel.



# 6-7

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# **ENERGY GUIDE**





#### Editor's Letter

Energy stocks are flying under the radar, but you won't miss the memo here.

#### **JOSH CHIAT**

pelunk in the darkly lit cavern of the ASX energy index and you may have the impression the sector is a fading star.

Bellwethers Woodside
Energy (ASX:WDS) and Santos
(ASX:STO) are down 24% and
12% YTD as of mid-November,
while the Global X Uranium ETF
may be up this year, but the pace
of the yellowcake revival sparked
by private buyers like Sprott in
2021 has slowed considerably with
spot prices moderating.

And for renewable stocks, the resumption of a Trump Presidency has all sorts of questions marks over the future of green energy.

But scratch a little deeper and the tailwinds for oil, gas, uranium and even renewable plays begin to reveal themselves. See Jess Cummins' review of the expert opinions on energy investing under Trump 2.0 on page 8.

The Australian Energy Market Operator sees shortages of natural gas emerging in peak time on our East Coast next year with seasonal supply shortfalls from 2026.

Even in well-stocked WA, the supply picture is clouded with potential 10% shortfalls from 2031.

That places a premium, unrecognised by many investors, on the Aussie explorers looking for the next major gas discoveries in Queensland's Taroom Trough, NT's Beetaloo Sub-Basin and WA's Perth Basin. See senior energy journalist Bevis Yeo's incisive summary on page 4 of this guide for the full scoop.

Uranium prices may be down too, but enthusiasm for the commodity's long-term future hasn't dulled. From next year, secondary uranium supplies are Scratch a little deeper and the tailwinds for oil, gas, uranium and even renewable plays begin to reveal themselves.

forecast to meet less than 3% of demand.

Mined production hasn't measured up to utility demand since 1991, presenting a tantalising supply-demand shortfall for emerging miners.

After years in the wilderness, the shift to low emissions electricity generation has brought the nuclear sector back to life. See stockbroker and geologist Guy Le Page's run-down on page 6 for your slice of yellowcake.

Plus, to help you drill a little deeper, capital markets veteran and resources analyst Peter Strachan sat down with CEOs and MDs from 16 emerging oil and gas, uranium and green energy plays that may have slipped under your radar.

Happy reading.

#### **EDITORIAL**

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**MARKET INSIGHTS** 

# Gas still vital part of Australia's energy mix





Our gas supplies are running thin. That spells opportunity for ASX explorers.

**BEVIS YEO** 

part of the energy mix since the beginning of the industrial revolution and will remain so for decades to come even as nuclear and renewables wrestle ever increasing slices of the pie.

While coal is definitely on its way out in Australia due to a combination of it being seen as the most polluting fuel and ageing coal-fired generators being phased out, natural gas – methane – is if anything even more critical now.

Besides being cleaner than coal, gas is used for baseload and peaking power generation – the latter of which is essential for meeting power demand during peak periods as they can be quickly fired up when needed.

Gas is also invaluable for backing up renewables at night, on overcast days or when the wind is not blowing as there simply aren't enough batteries in place to firm up the grid.

It is not just electrical generation either, with methane used for

heating, cooking and for industrial processes such as the production of fertilisers.

#### **Gas shortages incoming**

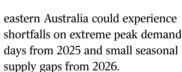
Where the problem lies is that there has been more than a decade of underinvestment in gas exploration and development.

With ESG in their periphery, financiers have shied away from major new hydrocarbon projects, leaving no ready replacements for Australia's ageing gas fields. And consumption is still rising.

On the east coast, the Bass Strait oil and gas fields that were the mainstay of gas supply for nearly 60 years are now on their last legs.

While there been a couple of smaller projects that have come on stream in recent times, such as Beach Energy's (ASX:BPT) Kipper Compression project, there are no new sources capable of replacing such a large quantum of gas supply.

The Australian Energy Market Operator warned in its 2024 Gas Statement of Opportunities that



Isolated Western Australia has long benefitted from low gas prices thanks to its Domestic Gas Reservation policy, which required the giant offshore liquefied natural gas (LNG) developments in the state's north to set aside 15% of their gas for domestic use.

However, ageing gas fields, new developments running into a wall of red tape, and growing demand to pick up the slack from the closure of coal plants have also raised the spectre of gas shortages.

The AEMO forecasts a deficit in the West of more than 100 terajoules per day from 2031.

This is more than 10% of WA's

"Gas is also invaluable for backing up renewables at night, on overcast days or when the wind is not blowing as there simply aren't enough batteries in place to firm up the grid."

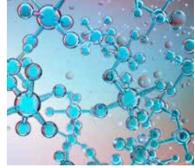






#### **QUICK FACTS**

- Australia's east coast could see gas shortfalls in peak demand times from 2025.
- Seasonal supply gaps likely from 2026.
- Even in well-stocked WA with its domestic reservation policy, gas supply could be in a 100TJ/d shortfall by 2031.
- Options to fill gaps in NT's Beetaloo Basin, Queensland's Taroom Trough and WA's Perth Basin.



demand each year and even takes into account several new projects such as Woodside's giant Scarborough field.

#### Solutions are in the works

It isn't all doom and gloom though.

Over on the east, two areas have emerged that could hold the answer to addressing the gas supply crunch.

These are the Beetaloo Sub-Basin in the Northern Territory and the other is the new wave of unconventional coal seam gas and basin-centred gas plays in places such as the Taroom Trough in Queensland's Bowen Basin.

The Beetaloo is further along the appraisal curve but has to overcome

the 'tyranny of distance', which requires significant investment in infrastructure, while the Queensland plays have the benefit of being closer to infrastructure but require more work to establish resources.

Importing LNG, ironic as it sounds given Australia's standing as a leading LNG supplier, has also been touted as an option with Andrew Forrest's Squadron Energy going so far as to construct an import terminal at Port Kembla, which is nearing completion.

That option might struggle with luring buyers due to the high price of the commodity.

Over in the wild west, the emergence of deep gas plays in

the Perth Basin might well be the answer for the state's own brand of gas woes, for which it at least has a bit of time to get solutions underway.

As an incentive the Cook Labor Government has relented – in part – on the previous ban on onshore gas exports, allowing companies to export up to 20% of their total production, at least until the end of 2030.

This allows gas producers to benefit from higher export pricing, which in the ideal world would also justify the cost of getting the gas field up and running, whilst ensuring that the lion's share of the gas is available for domestic use.

While it might not be enough to

get some players across the line – especially those salty at Mitsui E&P and Kerry Stokes-backed Beach being allowed in 2020 to export half of the gas at their major Waitsia project – it is certainly enough to get others speeding ahead.

Gina Rinehart's Hancock Prospecting's recent \$1.13 billion deal for Mineral Resources' (ASX:MIN) Lockyer discovery (plus some addons) shows interest in the region remains strong. **MARKET INSIGHTS** 

# Nuclear renaissance still evolving

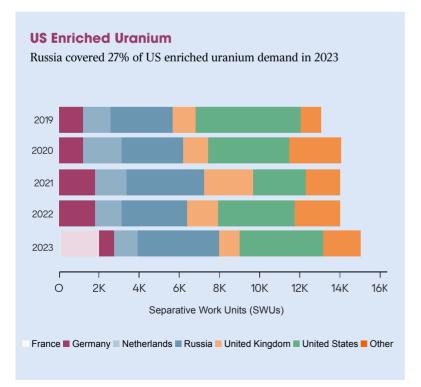


ranium's meteoric rise from US\$21/lb to US\$106/lb earlier this year coincided with the COP28 conference in Dubai where 22 countries, including the US, Canada, the UK and France, pledged to triple nuclear power capacity by 2050.

The renaissance in part is due to the acknowledgement by many countries that nuclear power is capable of providing reliable, baseload power with zero carbon emissions during operation.

It accounts for half of the United States' clean energy with China anticipated to expand capacity from 55GW in 2022 to 70GW by 2025 and potentially 150GW by 2035.

According to the International Atomic Energy Agency, there are currently 437 operational nuclear



Source: US Energy Information Administration. Bloomberg.







reactors globally, with 57 under construction and many more planned.

But it has become a geopolitical flashpoint as well. Russia has temporarily limited exports of enriched uranium to the US, creating potential supply risks for utilities with reactors that generate almost a fifth of the nation's electricity.

There are more tailwinds. The

"It's become clear we have no chance of reaching net zero by 2050 without it."



Source: Numerco historic uranium prices

introduction of Sprott Physical Uranium Trust in 2021 has taken 66Mlb of material out of the spot market. That's made contracting more important for reactor owners.

Even though spot prices have mellowed, utilities are typically looking to procure material around two years out, which has resulted in longer term contract prices remaining "sticky" on the upside.

We have a hot debate on the merits of nuclear in Australia. It's become clear we have no chance of reaching net zero by 2050 without it.

On my calculation, adjusting CSIRO levelised cost of electricity (LCOE) modelling with US utilisation rates of 93% and using minor adjustments to fuel prices delivers a similar LCOE to firmed renewables. And 'firmed' means with fossil fuels.

Funnily enough, nuclear power seems to be a strong investment case in other countries with cheaper energy alternatives than Australia like Russia and UAE. If nuclear makes sense in those gasrich countries, how couldn't it in Australia?

So, what is happening on the equities front? Investors have piled into Paladin Energy (ASX: PDN) and NexGen Energy (ASX:

NXG) and merger and acquisition activity is starting to pick up with the three-way merger between 92 Energy (ASX:92E), ATHA Energy (CSE:SASK) and Latitude Uranium (CSE:LUR).

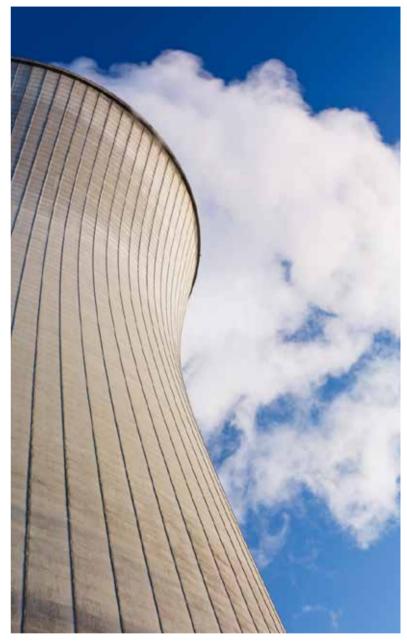
Paladin's proposed acquisition of Fission Uranium Corp (TSX: FCU), however, seems to have hit regulatory hurdles.

The juniors have been a mixed bag and market valuations overall have been disappointing as the spot price drifted back to US\$80/lb.

Explorers in countries not widely recognised as "uranium destinations" such as Tanzania (Gladiator Resources Ltd, ASX:GLA) have had mixed results while companies such as Haranga Resources Ltd (ASX:HAR), which has returned promising results at Saraya in Senegal are gaining little or no market traction.

With price projections ranging from US\$100-US\$120 over the next few years I can't help thinking the sentiment will shift.

Advanced developers such as Aura Energy (ASX:AEE) are likely to return to favour. Its Tiris project in Mauritania has an impressive US\$499m NPV and 39% internal rate of return but AEE is trading at a modest \$100m enterprise value.



#### **QUICK FACTS**

- 22 major economies including the US, France, Canada and the UK pledged to triple nuclear capacity by 2050.
- China is planning to nearly triple nuclear capacity to 150GW by 2035.
- Spot prices hit 17 year highs of US\$106/lb in January and now trade around US\$80/lb.
- Long term prices are close to spot, at levels not seen in several years as utilities are forced to move from spot purchases to contracts.

**MARKET INSIGHTS** 

### The Trump factor

What Donald Trump's return to the White House means for energy sector

#### **JESSICA CUMMINS**

onald Trump's victory in the US presidential election has renewable advocates biting their nails but the long term impacts of his policies remain uncertain.

His return to the Oval Office could bring sweeping policy changes to end the offshore wind industry in the US, withdraw the country from the Paris Climate Agreement, close down the NOAA, which monitors emissions, and dismantle Joe Biden's signature Inflation Reduction Act to focus on fossil fuels.

Trump's promised tariffs on cleantech imports such as EVs and solar could also have severe consequences on US consumers already slammed by cost-of-living pressures. But could his 'drill, baby, drill' rhetoric put US oil producers in the driver's seat?

Capital markets veteran and resources analyst Peter Strachan told Stockhead Trump 2.0 may make drilling easier but would not increase

#### **QUICK FACTS**

- Trump's pro-gas 'drill, baby, drill' rhetoric has investors looking at US energy stocks.
- A big exporter, US still imports 6 million barrels of oil a day, says analyst Peter Strachan

demand for oil in the US over the short term.

"The oil market is already oversupplied and despite all efforts by Trump to increase production, he can't – Russia and Iran are still under heavy sanctions and that isn't going to change," he said.

"The US still imports about 6 million barrels of oil a day, so overall they are not actually meeting their oil and gas needs.

"He is wanting to make it easier for American industry to expand and drill by easing restrictions on activities, but I can't see them adding more than I million barrels of oil a day over the next four years."

Even with Trump coming to power, most companies are now very aware of their social licence to operate.

"A lot of the majors might find their shareholders won't be happy for them to go along and start drilling in those areas," Strachan said.

"The tariff game is also putting up trade barriers that is likely to slow the American economy and perhaps lead to a global economic slowdown."

Not all market watchers believe Trump's election sounds a death knell for the renewable sector.

Melbourne's Triple Eight Capital, which boasts the T8 Energy Vision clean energy fund, says the rise of AI data centres has seen US electricity demand increase for the first time in 20 years. That means industrial







consumers need more generation and fast.

"New nuclear is extremely unlikely to be part of the picture inside 10 years (despite the considerable hype) and natural gas is unlikely to fuel more than 30-40% of the new electricity generation capacity, meaning the majority will be produced from solar and wind combined with energy storage," the fund said in its latest market update.

"This is quite a different reality to the rhetoric.

"We expect uncertainty to remain elevated until after inauguration day as markets wait to see how Trump's rhetoric will translate to policy and ultimately fundamentals." "We expect uncertainty to remain elevated until after inauguration day as markets wait to see how Trump's rhetoric will translate to policy and ultimately fundamentals."

# FEATURED COMPANIES

From uranium to oil, gas and renewables, meeting our growing and evolving energy needs will be multi-faceted. These emerging ASX companies are tackling the challenge head on



#### **ADX ENERGY**

ASX: ADX

Company Name: ADX EnergyCompany ASX code: ADXKey Areas: Oil & Gas

■ Key Personnel: Ian Tchacos, Executive Chairman

| Paul Fink, CEO & Executive Director

■ Locations: Austria, Romania and Italy, Europe

■ Market Cap as of 22/11/2024: \$27.86M

■ 52 Week share price range: \$0.045 - \$0.248

■ Website: adx-energy.com



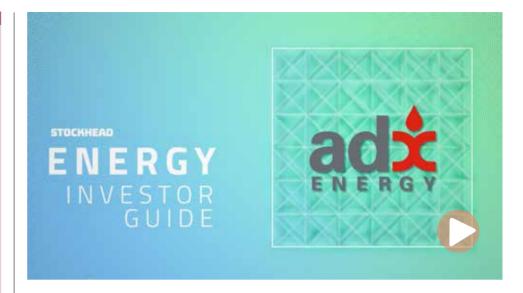
#### **COMPANY PROFILE**

ADX Energy is expanding the scope of its oil and gas production and exploration activities in Austria, building on revenue of over \$2.2 million during the September quarter of 2024 from its Zistersdorf and Gaiselberg and Anshof oil fields.

Executive chairman Ian Tchacos says, "through November, the company will add oil production from a development well at its Anshof oilfield and evaluate its giant Welchau oil and gas discovery".

Projects in the Vienna Basin averaged production of 172 barrels of oil equivalent per day (boe/d) during the quarter.

Tchacos says the addition of oil production from its recently completed Anshof-2A development well in upper Austria, in which ADX holds a 60% interest, has potential to boost total production at Anshof to over 300 barrels of oil per day (b/d) from thicker,



high-quality reservoir, lifting total net equity production over 360 boe/d.

ADX has capacity to add production at Anshof via further development drilling, or from success at seven nearby prospects with an average mid-case prospective resource estimate of 3 million barrels of oil, located on 100% held interests that are possible targets for drilling in 2025.

While it did not identify a commercial discovery, critical structural and stratigraphic data from the Lichtenberg-1 wildcat well drilled in October will be assessed to accurately tie-in to ADX's 3D dataset.

This will enable more accurate imaging of the sediments in what is a relatively under-explored part of the basin with nearby commercial gas production.

At its 75%-held Welchau discovery, ADX is preparing to flow test several zones within a 450m hydrocarbon intersection during Austria's winter months.

Welchau is classified as most likely to contain light oil and associated gas, with a Best Prospective Resource estimate of 46 million boe (barrels of oil equivalent) and upside to 200 million boe.

Further evaluation of the Welchau oil discovery will most likely be determined by results from flow testing. The well may be deepened to test 1000m of sediments at depth or a step-out well

could be added.

Success at Welchau has highlighted potential for the look-a-like Rossberg lead, located less than 6km north, which has similar structural size and depth. Tchacos commented "ongoing surface geological data collection made possible due to its shallow nature will be collected during 2025, that could upgrade Rossberg to a drillable prospect".

Light oil and gas are high-value products in Europe, ensuring a smooth path to market for either commodity in Austria as it decouples from Russian supplies. European gas pricing is aligned with global LNG pricing at around US\$13 per gigajoule while oil is linked to the price of Brent.



IAN TCHACOS EXECUTIVE CHAIRMAN



#### **BASS OIL**

**ASX: BAS** 

■ Company Name: Bass Oil■ Company ASX code: BAS■ Key Areas: Oil & Gas

■ Key Personnel: Tino Guglielmo, Managing Director | Hector M Gordon, Chairman and Non-Executive Independent Director

■ Locations: Cooper Basin, South Australia

and Sumatra, Indonesia

Market Cap as of 22/11/2024: \$19.17M
 52 Week share price range: \$0.044 - \$0.125

■ Website: bassoil.com.au



#### **COMPANY PROFILE**

Bass Oil currently enjoys annual revenue running close to \$9 million from its oil production assets in the Cooper Basin, Australia and onshore in Southern Sumatra, with total output of around 320 barrels per day (bpd).

However, managing director Tino Guglielmo notes the company is refocusing to become a Cooper Basin gas company.

It may well have a strong base to work with given that its Kiwi-l well in the 100% held PRL-245, delivered gas at rates of up to 4.1 million cubic feet per day alongside over 230 barrels of condensate per million cubic feet of gas.

While the field was originally estimated to host mean contingent resources of 5.2 billion cubic feet (Bcf) of gas from 3D seismic and downhole well data along with upside 3C resources of 11.5Bcf, the stronger than



anticipated results indicate potential for significant upside in recoverable gas and condensate from Kiwi and surrounding prospects.

A much higher domestic gas price since discovery, combined with recent testing of high levels of associated condensate at Kiwi, further enhances the project's economics with Guglielmo saying, "the scoping economics indicate a value that is 1.5 times the company's current market capitalisation".

Moving Kiwi into production could convert some of the company's contingent resource into reserves with positive impact on cash flow and valuation.

Bass is also examining options to develop a basin-centred gas and condensate play, surrounded by infrastructure, at its 100% held PEL-182 where a prospective resource of 568Bcf of gas plus 22.7 million barrels (MMbbl) of condensate has been assessed.

Consultant SLB has delivered parameters that would guide drilling and fracture stimulation procedures for horizontal completions to best effect. This study is being applied to formulate preliminary well designs and locations, including the number of frac stages required to achieve an economic flow rate and likely gas recovery per well to exploit this resource.

While gas is now the focus, Bass has

not abandoned oil. It has identified a potential oil trend containing the Tyrell and Flint prospects in the southern Cooper Basin along the Warra ridge in PRLs 231-233, north of its wholly owned Worrior oil producer. Preliminary assessment of Tyrell estimates a prospective resource of 2MMbbl with more work required to bring both prospects to a drillable status.

In Sumatra, Bass is working with its partner to drill the Bunian-6 development well which should maintain field production. In 2025, the Sumatran joint venture plans to drill the Bunian West-1 well, which could lift Bass' Reserves in Indonesia from 0.4MMbbls to over 0.9MMbbls.



TINO GUGLIELMO
MANAGING DIRECTOR



#### **BPH ENERGY**

ASX: BPH

Company Name: BPH Energy
 Company ASX code: BPH
 Key Areas: Gas - Hydrogen

■ Key Personnel: David Breeze, Managing Director

and Chairman

Locations: New South Wales, Australia
 Market Cap as of 22/11/2024: \$14.60M
 52 Week share price range: \$0.010 - \$0.071

■ Website: bphenergy.com.au



#### **COMPANY PROFILE**

Diversified investment company BPH Energy pursues activities across a range of sectors including petroleum exploration, clean hydrogen, carbon nanotube production and AI-driven medical devices.

The company holds a 35.8% interest in unlisted company Advent Energy, which in turn has an 85% stake in the PEP II joint venture with Bounty Oil & Gas that sits in Federal Government-controlled waters offshore Newcastle, New South Wales.

Covering 4576km2 in the Sydney Basin, work by Advent has already proven an active hydrocarbon generation and migration system, establishing an inventory of leads and prospects with prospective resources of 5.7 trillion cubic feet of gas at the P50 confidence level.

"The National Offshore Petroleum Titles Administrator recommended approval of the project, which has since been moving through a series of Government reviews," BPH managing



director and chairman David Breeze said.

Should the approvals go through, Advent plans to drill an exploration well to test the Baleen prospect about 30km offshore that is supported by mapping and seismic data and has been assessed to contain 475 billion cubic feet of P50 prospective resources.

Success could put a sizeable dent in the expected gas supply shortfall for Australia's east coast, which the Australian Energy Market Operator has forecast at a cumulative ~3300 petajoules until 2035 with seasonal deficits post-2027.

BPH also has a 16.2% direct interest in hydrogen technology company Clean Hydrogen Technologies, which is raising additional funds to commercialise its products over the coming 12-18 months in two production plants.

The US-based company's thermocatalytic pyrolysis process uses its own unique catalysts and bespoke engineering to convert the hydrocarbons (e.g. methane) in natural gas into clean hydrogen and carbon nanotube material that has to date been sold for up to \$50/kg.

It allows customers to leverage natural gas, an existing resource with comprehensive existing infrastructure and supply chains in place, to accelerate their path towards becoming carbon neutral.

This will be achieved by Clean

Hydrogen Technologies' hydrogen replacing the supply of polluting hydrogen produced using stream methane reforming.

Trials with a customer in India of the carbon product in batteries found it could increase distance travelled by vehicles using the batteries by 25%.

Although India is a large market, Clean Hydrogen Technologies is focused on the more valuable US market, where it can benefit from the US\$9.5bn of funding that is part of the broader US\$1.2 trillion Infrastructure Investment and Jobs Act.

BPH also owns a 16.4% interest in Perth-based neurotechnology medical device company Cortical Dynamics, which is developing a next generation Brain Anaesthesia Response Monitor to help clinicians better administer anaesthetic and analgesic drugs during operations.



**DAVID BREEZE**MANAGING DIRECTOR
AND CHAIRMAN



#### **BURU ENERGY**

**ASX: BRU** 

Company Name: Buru Energy
 Company ASX code: BRU
 Key Areas: Oil & Gas

■ Key Personnel: Thomas Nador, Chief Executive

Officer | David P. Maxwell, Independent

Non-Executive Chair

Locations: Western Australia, Australia
 Market Cap as of 22/11/2024: \$32.52M
 52 Week share price range: \$0.040 - \$0.135

■ Website: buruenergy.com



#### **COMPANY PROFILE**

Buru Energy is focused on developing a foundational small-scale liquefied natural gas (LNG) and condensate project at its wholly-owned Rafael gas and condensate discovery in the Canning Basin of Western Australia's Kimberley region.

Found in 2021, the Rafael discovery is currently assessed to hold net 176 billion standard cubic feet (Bscf) of recoverable gas plus 3.6 million barrels (MMbbl) of net condensate of best estimate (2C) contingent resources.

Logging data from the Rafael-1 discovery well, which flowed gas at a rate of 7 million standard cubic feet per day (MMscf/d) from one of the three tested zones, and drilling fluid loss during operations, indicate permeable and porous reservoirs.

The company plans to drill a lowrisk appraisal well at Rafael and retest



flow rates after 'cleaning out' the discovery well, which might have been partially plugged by drilling mud and debris. Buru is aiming to establish a gas production base of 10-20MMscf/d.

While Rafael has current high estimate (3C) contingent resources of over 400Bscf of net gas and 8MMbbl of condensate, chief executive officer Thomas Nador says "hope is not a strategy" and that "the project will be commercial on estimated Cl gas alone." Rafael currently has net Cl gas resources of 76Bscf along with 1.6MMbbl of condensate.

Nador notes that "five institutional investors have acquired holdings on the back of Buru's Rafael gas strategy, supporting that Cl gas resource alone will support development."

The company aims to get first gas into an onsite, skid mounted LNG plant by H2 2027. This development will have annual capacity for up to 100,000 tonnes of LNG and 90,000 barrels of condensate.

Products will be trucked for sale to regional markets, including Broome, local communities and nearby mines. LNG pricing reflects alternative fuels that currently cost over \$20 per gigajoule, while associated condensate will be sold locally, where diesel replacement currently fetches \$2 per litre.

Buru also plans to test the Mars

prospect that has best case prospective resources of 2.8MMbl of oil. Success could see a joint development with the nearby Ungani oilfield that it plans to restart in 2025.

Ungani produced ~400 barrels per day prior to floods damaging its path to the Port of Wyndham and a combined development with Mars could potentially extend operating life and lower operating costs by increasing production.

Outside of Rafael and Ungani, the company also holds a portfolio of gas and oil prospects and appraisal assets including the Yulleroo gas field with a 2C contingent resource of 714PJ of gas plus 24.9MMbbl of condensate.



THOMAS NADOR
CHIEF EXECUTIVE OFFICER



#### **CONDOR ENERGY**

ASX: CND

Company Name: Condor Energy
 Company ASX code: CND
 Key Areas: Oil & Gas

■ Key Personnel: Serge Hayon, Managing
Director | Matt Ireland, Non-Executive Chairman
| Scott Macmillan, Non-Executive Director

■ Locations: Peru, South America

Market Cap as of 22/11/2024: \$16.41M
 52 Week share price range: \$0.012 - \$0.058

■ Website: condor-energy.com.au



#### **COMPANY PROFILE**

Condor Energy is focused on exploring its 80%-owned Technical Evaluation Agreement (TEA) LXXXVI, which grants an exclusive right to negotiate an exploration permit over a majority of Peru's offshore Tumbes Basin with US-based partner Jaguar Exploration.

The 4858km2 permit area already has proven petroleum prospectivity with newly appointed managing director Serge Hayon explaining that Il wells were drilled in shallow waters during the 1970s and 80s, confirming hydrocarbons and a working petroleum system.

The discoveries within the TEA include the Piedra Redonda field just 8km off the coast in shallow waters. This find has a best estimate (2C) contingent resource of 404 billion cubic feet (Bcf) of gas and what Hayon describes as "a low risk, up-dip, prospective resource of up to 2.2 trillion cubic feet".



For Condor, the proven prospectivity combined with Peru's supportive regulatory environment, where the country is a net importer of oil and gas, provides a strong foundation to drive its exploration efforts.

"Since acquiring the Peruvian interest in Q3 2023, Condor has reprocessed 3D seismic data, focusing more detailed analysis on approximately 1000km2 around high graded prospects from a total of 3800km2 of data, noting that only one exploration well had been drilled utilising the 3D data set," Hayon said.

To date, mapping and interpretation of the 2D and 3D datasets has revealed over 20 leads and prospects.

Onshore mapping of sediments and geophysical structures that extend into Condor's TEA, combined with multiple exploration results offshore, also confirm an active hydrocarbon system with all the attributes for a commercial outcome present.

Mapping and reprocessing work has outlined leads at Raya, Bonito and most recently, Salmon and Cabella. Work is proceeding to deliver internal estimates of the prospective resources, which will then be reviewed by an independent reserves auditor, with results expected early 2025.

Once the company's work has progressed to define prospective resources on key prospects, Condor will seek strategic partnerships to advance exploration and development and the TEA will be converted into a license area

Hayon highlights that there has been early interest in Condor's work and the area offers a range of opportunities for different exploration or development preferences.

Prospective partners seeking lowrisk gas projects for power generation or compressed natural gas from Piedra Redonda could be interested, while others might be drawn to deeper water turbidite exploration targets. The TEA offers a diverse portfolio of high impact leads and prospects within an underexplored basin.



**SERGE HAYON**MANAGING DIRECTOR



Scan here for the company website

Please view the Cautionary statement on page 26

#### **EARTHS ENERGY**

ASX: EE1

Company Name: Earths EnergyCompany ASX code: EE1

■ Key Areas: Geothermal Energy

■ Key Personnel: Josh Puckridge, Chief Executive

Officer | Grant Davey, Chairman

■ Locations: South Australia and Queensland,

Australia

Market Cap as of 22/11/2024: \$10.50M
 52 Week share price range: \$0.011 - \$0.021

■ Website: ee1.com.au



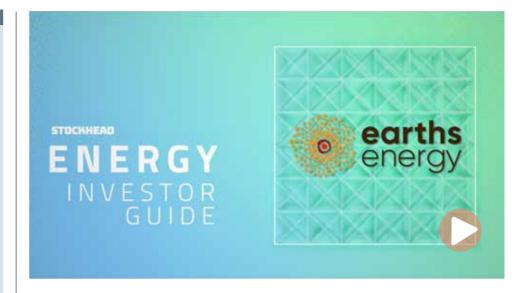
#### **COMPANY PROFILE**

Earths Energy Limited (EEI) is at the forefront of Australia's reinvigorated geothermal energy sector as it develops baseload green power projects with the reliability of traditional energy sources such as nuclear, gas, and coal-fired power stations without the emissions or safety concerns.

Utilising the latest advancements in Enhanced Geothermal Systems (EGS), which force a liquid – typically water – into the hot rocks and use the resulting steam to spin a turbine, Earths Energy's flagship Paralana project, located 300km northeast of Port Augusta in South Australia, is the most advanced commercial geothermal project in the nation.

Strategically positioned, this project enables Earths Energy to connect its South Australian assets directly to the east coast power grid, which supplies approximately 83% of Australia's electricity demand.

The Paralana project already



represents a milestone for the Australian geothermal industry, having already attracted over \$40 million in investments, enabling extensive exploration and development. High-risk, early-stage activities such as drilling and pilot testing at the project have already confirmed a bottom-hole temperature of 190°C at a depth of 4,012 meters—showcasing a significant thermal gradient of over 47°C per kilometre of depth.

This temperature gradient along with favourable permeability and the right horizontal well drilling stress environment has resulted in Paralana being assessed by the company's Techno-Economic Feasibility Study as suitable for EGS development.

Additionally, Earths Energy's Flinders West project, located near BHP's Olympic Dam copper mine, has demonstrated promising results. The Blanche I well, drilled to 1,934 metres, reached a bottom-hole temperature of 83°C, with a thermal gradient of approximately 43°C per kilometre of depth. Both projects present a strong foundation for future development and expansion in the region.

Earths Energy has independently verified a likely minimum sale price of \$150 per MWh for power generated from its South Australian projects. This competitive rate highlights the increasing demand for reliable, sustainable baseload power and the

growing interest in geothermal energy investments, especially as clean, longterm energy solutions are prioritised.

Beyond South Australia, Earths
Energy's Queensland portfolio includes
a project designed to simultaneously
power and cool a geothermal data
centre near major population centres
like Brisbane and the Gold Coast. With
a strong network of collaborations
with US geothermal operators and
innovators, Earths Energy is positioned
to lead in implementing next generation
geothermal technologies in Australia.

As the only "pureplay" geothermal company listed on the ASX, Earths Energy distinguishes itself in the Australian renewable energy landscape by harnessing its proven geothermal resources to pioneer dependable, ecofriendly and lucrative energy projects.



JOSH PUCKRIDGE
CHIEF EXECUTIVE OFFICER



#### **EMPIRE ENERGY**

ASX: EEG

Company Name: Empire Energy
 Company ASX code: EEG
 Key Areas: Oil & Gas

■ Key Personnel: Alex Underwood, Managing
Director | Peter Cleary, Chair & Non-Executive Director

Locations: Northern Territory, Australia
 Market Cap as of 22/11/2024: \$203.46M
 52 Week share price range: \$0.140 - \$0.330

■ Website: empireenergygroup.net



#### **COMPANY PROFILE**

Empire Energy is focused on developing basin centred shale gas resources from its vast permit acreage in the Northern Territory's Beetaloo Basin.

That acreage has been independently estimated to contain a best estimate (2C) contingent resource of more than 1.6 trillion cubic feet (Tcf) of gas and prospective resources of over 47Tcfe of gas and condensate.

The company recently inked a binding, 10-year gas supply agreement with the NT Government to supply up to 25 terajoules (TJ) of gas per day at competitive market rates, from initial test wells at its Carpentaria pilot project, plus optional volume expansion.

Managing director Alex Underwood says: "This offtake arrangement enables Empire to sell gas produced from evaluation and testing work as it refines operating procedures at the project,



delivering revenue to support ongoing technical studies ahead of full field development."

Underwood adds that a powerful rig is moving from the Taroom Trough in Queensland to drill Empire's fully funded Carpentaria-5H pilot well, which has a planned 3000m horizontal section that will contain a massive 60 fracture stimulation stages carried out in January 2025 to maximise flow and recovery from the well.

Development of the Beetaloo Basin will mimic successful analogues from the Marcellus Basin in the USA.

Underwood says Empire could drill up to 32 horizontal sections from each pad location, reducing environmental impact and delivering cost savings at commercial scale.

Test work to date indicates commercial flow rates of 3.5TJ/day of gas with less than 1% CO2 content, per 1000m of horizontal section with no formation water or petroleum liquids during this Phase I development.

Carpentaria-5H is expected to start production as the company commissions a 42 TJ/day capacity gas plant that will deliver first gas into the McArthur River Gas Pipeline ~5km to the south in the middle of 2025.

At its 100% held Western Beetaloo Basin permits, Empire plans to acquire 377.5km of 2D seismic data to support the location and design of horizontal test wells later in 2025/26.

Empire sees technical and market opportunities to expand output to 1000TJ/day, supplying gas not only in the Northern Territory, but also Australia's East Coast and LNG export markets.

The East Coast market is attractive for gas producers given a projected gas supply shortfall by the early 2030s as output declines from the Cooper and Gippsland Basins.

Spot pricing ranges between A\$12 and A\$14 per gigajoule, while LNG currently delivers a net-back in Australia of around A\$13.50/GJ at a delivered price of near US\$13/GJ.



**ALEX UNDERWOOD**MANAGING DIRECTOR



#### **GREENVALE ENERGY**

ASX: GRV

■ Company Name: Greenvale Energy

■ Company ASX code: GRV

■ Key Areas: Uranium

■ Key Personnel: Mark Turner, Chief Executive
Officer | Neil Biddle, Non-Executive Chairman
■ Locations: Northern Territory & Central

Queensland, Australia

Market Cap as of 22/11/2024: \$14.21M
 52 Week share price range: \$0.019 - \$0.105

■ Website: greenvaleenergy.com.au



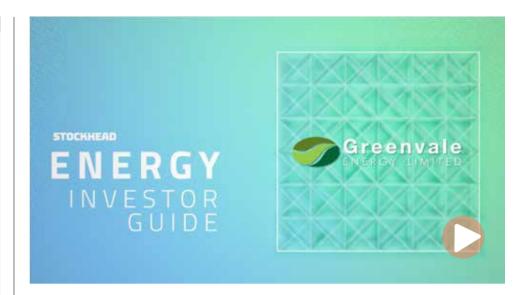
#### **COMPANY PROFILE**

Greenvale Energy has a multi-pronged approach to providing energy solutions, targeting uranium in the NT alongside the Alpha Torbanite and geothermal projects in Queensland.

In the past months, the company has been busy snapping initial 80% interests in the Douglas River, Tobermorey and Henbury uranium projects from Gempart. This was likely inspired by a buoyant uranium market that saw prices peak at US\$106/lb in January before easing to ~US\$78.50/lb in November.

Douglas River consists of EL33670 and ELA33900 in the Pine Creek Mineral Field, one of the world's largest and richest uranium provinces, and contains multiple uranium/thorium ratio anomalies concentrated within two interpreted palaeochannels on the western and eastern margins of the tenements.

Two high-order radiometric anomalies in the eastern palaeochannel have already been identified as shallow, walk-up targets with potential to



host mineralisation analogous to the Honeymoon, Pamela/Angela and Napperby deposits.

Meanwhile, the 97lkm2 Tobermorey project over EL33692 and EL33621 ~400km east-northeast of Alice Springs in the Eastern Arunta Mineral Field is highly prospective for sandstone-hosted uranium mineralisation akin to proven deposits such as Napperby. The largest anomaly trends southeast for 20km x 15km at its widest point.

Henbury (EL33637 and EL33638) covers 1063km2 ~120km southwest of Alice Springs in the Amadeus Basin and hosts multiple uranium/thorium ratio and uranium anomalies occurring within uraniferous calcrete sub-crop extending over a 14km strike length.

That all three projects are in the NT is not a coincidence given it's a jurisdiction that is supportive of uranium mining and contains a majority of Australia's significant deposits.

In each of the three projects, Greenvale is free carrying Gempart for its 20% stake through to a definitive feasibility study with no time limit on completion.

On Greenvale earning its 80% interest, Gempart can then choose to contribute pro rata to maintain its 20% interest, negotiate to sell its interest to Greenvale or convert its 20% interest to a 1.5% net smelter royalty.

Over in Queensland, the company's

Alpha Torbanite project hosts a 28Mt resource of torbanite – an organic-rich sedimentary rock – that contains up to 689 litres of hydrocarbons per tonne of material. Recent testing has proved that with some small tweaking the material can produce a premium-grade C170 bitumen suitable for infrastructure development.

Greenvale is also assessing the viability of applying the CeraPhiWell, downwell closed-loop geothermal power generation technology at hot-dry rock zones that are 2.5km to 3km deep in the Millungera Basin in central Queensland. This system can use a lower temperature reservoir water of between 80° and 120° and a heat exchanger process to operate a turbine.



MARK TURNER
CHIEF EXECUTIVE OFFICER



Scan here for the company website

Please view the JORC Competent Person statement on page 26

#### **GTI ENERGY**

**ASX: GTR** 

Company Name: GTI Energy
 Company ASX code: GTR
 Company OTC code: GTRIF

■ Key Areas: Uranium

■ Key Personnel: Bruce Lane, Executive Director

......

& Chief Executive Officer

■ Locations: Wyoming and Utah,

United States of America

Market Cap as of 22/11/2024: \$10.37M
 52 Week share price range: \$0.003 - \$0.015

■ Website: gtienergy.au



#### **COMPANY PROFILE**

If the recent uranium merger and acquisition activity near its US operations is any indicator, GTI Energy's flagship Lo Herma uranium project in the heart of Wyoming's Powder River and Great Divide Basins and its Henry Mountains project in Utah could hold considerable value.

Recent moves include NYSE-listed Uranium Energy Corp purchasing Rio Tinto's Wyoming uranium assets for US\$175m. ISO Energy has also jumped on Anfield Energy and its Shootaring Canyon Mill project next door to Henry Mountains, and Boss Energy (ASX:BOE) acquired a 30% interest in the Alta Mesa ISR uranium project in South Texas for around US\$6/lb on a measured and indicated resource basis.

GTI is the only junior explorer in Wyoming that currently boasts compliant in situ recovery (ISR) uranium resources with a number of



other companies exploring but yet to publish a resource.

Besides the clear value implied by these transactions, Lo Herma itself is advantaged by its location, where the predominant metallurgy associated with alkaline leach amenable uranium in-situ leach processing is well understood.

Projects in the productive basins of Wyoming and Texas have historically been developed using a hub and spoke model.

Loaded resins, which hold extracted uranium from dilute sedimentary solutions leached and pumped from subterranean ore zones, can be trucked or piped to a central processing hub where uranium is stripped off the resin and processed into saleable uranium oxide.

It's still early days for GTI's Lo Herma project, but studies for projects in the region with similar development pathways paint a promising picture.

Ur-Energy will spend just US\$41 million to develop its approved Shirley Basin satellite project to feed its Lost Creek ISR facility, as an example, with production costs in the region typically seen in the US\$40-50/lb range.

In September this year GTI completed a 73-hole drilling program, designed to lift Lo Herma's estimated inferred mineral resource from 5.7Mlb of uranium oxide equivalent.

Water monitoring wells to be drilled in the ore body during late 2024 will

deliver information on the aquifer including permeability and flow rates as well as some additional assay results in an effort to reduce risks and potentially increase valuations associated with Lo Herma.

All this data, along with metallurgical test work, will feed into a potential interim scoping study, funded by a recent \$2.25m capital raising and \$1.6m rights issue for delivery, during the first half of 2025.

The scope of uranium mineralisation at Lo Herma is only believed to be limited by drilling to date with a significant additional exploration target estimate published for the project. By the end of Q2 2025, the company hopes to have generated a number of options to monetise this asset.



BRUCE LANE
EXECUTIVE DIRECTOR &
CHIEF EXECUTIVE OFFICER



Scan here for the company website

Please view the JORC Competent Person statement on page 26

#### **HYTERRA**

ASX: HYT

Company Name: HyTerraCompany ASX code: HYT

Key Areas: Gas - Hydrogen & HeliumKey Personnel: Benjamin Mee, Executive

Director | Avon McIntyre, Executive Director & Chief

**Technical Officer** 

■ Locations: Kansas and Nebraska, United States

of America

Market Cap as of 22/11/2024: \$38.21M
 52 Week share price range: \$0.015 - \$0.059

■ Website: hyterra.com



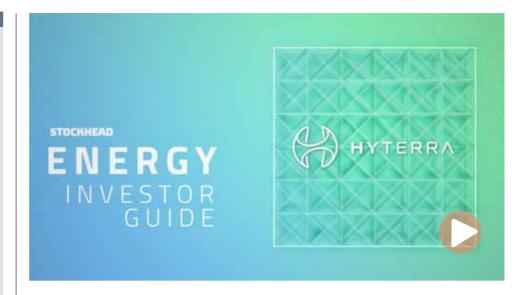
#### **COMPANY PROFILE**

One of the key obstacles to the adoption of hydrogen is the cost of producing it cleanly and HyTerra believes it has cracked the code by leveraging naturally occurring hydrogen – natural or white hydrogen – that sits underground close to potential customers.

The company has also successfully caught the attention of Andrew Forrest's Fortescue, which is looking to acquire a 39.8% stake in HyTerra for \$21.9 million subject to approval by the HYT shareholders in early December 2024.

Once secure, this fully funds HyTerra's exploration program of an initial six wells, while a separate Strategic Alliance with Fortescue jointly seeks opportunities globally to pursue natural hydrogen.

While 'green hydrogen' manufactured by renewables powered electrolysis of



water or 'grey hydrogen' by splitting methane molecules can cost anywhere from US\$2 to US\$6 per kilogram, producing natural hydrogen is predicted to cost less than US\$2/kg.

It's no surprise the company is rapidly expanding its permit acreage in Kansas, Midwest USA, to start exploration drilling for hydrogen and helium above the iron-rich mafic source rocks in the Mid-Continent Rift.

One of the most productive ways that hydrogen is produced within the earth is through the chemical process of oxidation (e.g., 'rusting'), where water meets iron to form iron oxide plus the hydrogen gas, which then can accumulate above the source, not unlike how natural gas reservoirs are formed.

Finding these reservoirs does require a predictive geological model, as early explorers expecting oil or gas found occurrences of hydrogen instead. There are historic wells in HyTerra's leases with occurrences of hydrogen up to 92% and helium up to 3% – a much sought after commodity.

An independent prospective resource assessment of Nemaha currently has net recoverable prospective hydrogen resources totaling 105.5 billion standard cubic feet (Bscf) – 250.2 million kilograms – along with a net recoverable 592 million standard cubic feet (MMscf) of helium, all at the P50 level.

Executive director Benjamin Mee notes that any hydrogen the company produces is close to local markets for the manufacturing of fertilisers or methanol as well as potentially grid power generation. This is thanks to Nemaha's fortuitous positioning near industrial and manufacturing hubs.

The inventory of drilling options is healthy. Chief technical officer Avon McIntyre says "we have wells that can intersect different play types above the rift zone or at other locations where an impermeable barrier trap is postulated, to develop several play types to lower the exploration risk.

"Then, as usual, it's all about potential size and economic flow," McIntyre adds.



**BENJAMIN MEE**EXECUTIVE DIRECTOR



Scan here for the company website

Please view the Disclosure statement on page 27

#### **MOAB MINERALS**

**ASX: MOM** 

Company Name: Moab MineralsCompany ASX code: MOM

■ Key Areas: Uranium

■ Key Personnel: Malcolm Day, Managing Director

Bryan Hughes, Non-Executive Chairman

■ Locations: Tanzania, East Africa

■ Market Cap as of 22/11/2024: \$3.57M

■ 52 Week share price range: \$0.003 - \$0.009

■ Website: moabminerals.com.au





#### **COMPANY PROFILE**

Moab Minerals is focused on exploring for uranium at the 94%-owned Manyoni and Octavo projects in southeastern Tanzania that it acquired in July this year.

A significant amount of exploration was completed by previous operator Uranex, which previously posted a JORC 2004 compliant resource after drilling across the project.

However, like so many early-stage uranium projects, work at Manyoni was paused after the Fukushima tsunami incident in 2011 caused the price of uranium to plummet.

This pause is fortuitous for Moab as it allowed the company to resume work on the tenements in a more supportive investment environment.

Managing director Malcolm Day says Moab is well supported in Tanzania. One of its senior consulting geologists worked on the project with Uranex, bringing valuable expertise to the project, and the company has strong logistical support based out of major city, Dar es Salaam.

Day was complimentary of Tanzania's rapid permitting process, saying Moab was able to gain approvals to begin drill testing at Manyoni just 6 weeks after taking control of the project.

This confirmation drilling is currently underway. It consists of 105 shallow holes to a depth of ~15-20m, twinning some of Uranex's holes. It includes six deeper holes to 50m, testing a zone with higher gamma-ray readings outside of the five known mineralised zones.

Assay results are expected from this work during January 2025. The company will compile assay results received from a laboratory in South Africa and, along with metallurgical testing results from ANSTO in Australia, work towards publishing a JORC 2012 compliant mineral resource estimate in 2025.

Once the coming wet season has passed in this part of Tanzania, Moab will be back on site in June/July 2025 to conduct extensional drilling with the

aim of extending mineralisation.

The site is well connected to road and rail transport networks as well as power and water supplies. Day says that the permits are largely unoccupied with some subsistence farming and do not contain any significant villages or towns.

He adds that Russian company Rosatom has outlined the Nyota deposit containing 157Mlb U3O8 near the Octavo project, demonstrating the prospectivity of the region.



MALCOLM DAY MANAGING DIRECTOR



Scan here for the company website

Please view the JORC Competent Person statement on page 27

#### **PILOT ENERGY**

ASX: PGY

Company Name: Pilot Energy
 Company ASX code: PGY
 Key Areas: Oil & Gas

■ Key Personnel: Brad Lingo, Chairman | Nick Watson, GM - Corporate Development | Jonas Jacobsen, Project Development Director ■ Locations: Western Australia, Australia

Market Cap as of 22/11/2024: \$27.91M
 52 Week share price range: \$0.013 - \$0.036

■ Website: pilotenergy.com.au



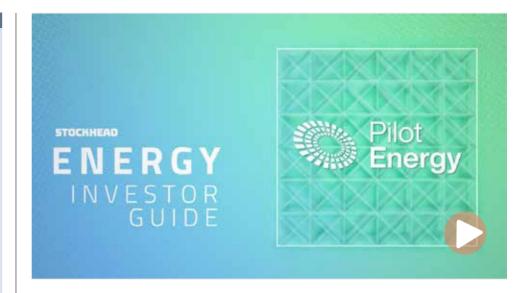
#### **COMPANY PROFILE**

Pilot Energy is leveraging the existing Cliff Head oilfield infrastructure offshore Western Australia's Perth Basin to develop its Mid-West Clean Energy Project (MWCEP).

This seeks to produce 1 million tonnes per annum of ammonia from 2028, using up to 32 petajoules of natural gas purchased from Perth Basin and North West Shelf suppliers, which could be supplemented by in-house gas in the event of exploration success.

Besides redeveloping the Cliff Head facilities, executive chairman Brad Lingo said a world-scale clean ammonia plant based on state-of-the-art technology with full carbon capture will be built at the existing Arrowsmith oil production plant. This will produce low-carbon ammonia for export to Korea and Japan.

The commercial carbon capture and storage operations, which will initially inject CO2 into the depleted Cliff Head offshore oil Field, will be undertaken



using the associated onshore processing plant.

The company, which is taking full control of Cliff Head in the WA-31-L licence surrounded by its 100%-owned WA-481-P gas exploration licence, is in the process of establishing a joint venture with a consortium of South Korean power generators and energy companies. Those partners will provide capital to support front-end engineering and design and construction activities for the carbon storage and clean ammonia production plant from 2025-2028.

The consortium will offtake ammonia produced at the MWCEP for co-firing in existing coal-fired power plants and other industrial uses to lower South Korea's CO2 emissions.

The MWCEP has already been approved as a clean ammonia supplier by the Korean Energy Economics Institute under the Korean Clean Hydrogen certification scheme.

Pilot is also looking to store up to lMt of CO2 per annum, in addition to the by-product CO2 emissions from ammonia production, within the depleted Cliff Head reservoir which has capacity to store up to 67Mt.

Access to this facility is being offered to third parties to deliver carbon abatement and greenhouse credits on a fee-for-service basis.

A technical review has revealed

potential for discovery of additional oil and gas proximal to Cliff Head at the Leander Reef prospect, which has been assessed to have 450 billion cubic feet of prospective gas resource targeting the same reservoirs present in gas discoveries in the onshore North Perth Basin.

Discussions are underway with Perth Basin gas companies to improve economics for liquids production by blending low API Cliff Head crude oil with light oil from other fields in the Basin.

The company recently received an \$11.5m offer for its Three Springs solar farm development project. Proceeds from this sale and a government grant of \$6.5 million would be applied to support the MWCEP.



BRAD LINGO CHAIRMAN



Scan here for the company website

Please view the Disclosure statement on page 28

#### **PURE HYDROGEN**

ASX: PH2

■ Company Name: Pure Hydrogen ■ Company ASX code: PH2

■ Key Areas: Gas - Hydrogen

■ Key Personnel: Scott Brown, Managing Director

| Hon. Adam Giles, Non-Executive Chairman

■ Locations: Queensland, Australia

Market Cap as of 22/11/2024: \$41.08M
 52 Week share price range: \$0.100 - \$0.255

■ Website: purehydrogen.com.au



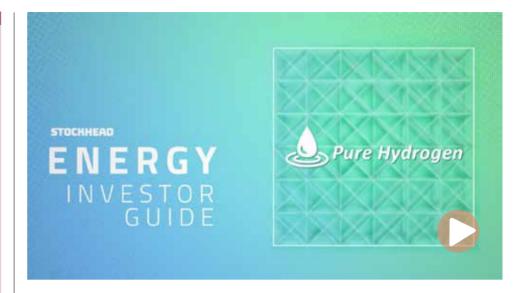
#### **COMPANY PROFILE**

Clean energy-focused Pure Hydrogen aims to become a leader in the development and supply of zero emissions vehicles, their supporting infrastructure and energy projects.

Managing director Scott Brown told Stockhead the company offers customers a total solution to transport and emission requirements.

"It designs and assembles a functional zero emission product, plus hydrogen storage and delivery systems along with charging infrastructure, spare parts and ongoing maintenance service. The package satisfies both zero emissions as well as local content requirements for customers in Australia," he said.

Pure Hydrogen builds vehicles ideally suited to running from a depot, such as buses or garbage trucks, to order recognised components sourced from an international partner. Brown says that enquiry levels have been strong,



with western aid funds targeting climate friendly technologies that can be recycled back to donors.

The company holds intellectual property around the interaction of fuel cells with other components of the entire power train for vehicles from 12t garbage collectors to 140t road-trains.

"Importantly, the cost of hydrogen fuel cells from the number one manufacturer, Ballard, has halved over the past 3 years and further reductions are expected as competition from big car companies lifts economies of scale," Brown added.

While hydrogen fuel cell vehicles are still currently more expensive than their battery electric counterparts, they offer more power for applications like multi-stopping garbage and high energy concrete mixer trucks, and buses which can travel up to 500 kilometres on a fill of hydrogen gas.

The company has made significant progress establishing a distribution network with a recent agreement with GreenH2 LATAM marking the fourth in North America while opening up Latin America and Africa.

PH2 also signed three supply agreements with Vietnam ASEAN Hydrogen Club and another party for the supply of vehicles and hydrogen equipment worth ~\$10m.

Additionally, it will be working to bank revenue as it delivers on existing orders for clients over the months to mid-2025, while ramping up marketing efforts internationally.

Separately, the company is well advanced with plans to build a hydrogen electrolysis manufacturing facility in Queensland from which to supply clients with the product they need. It also has a stake in Turquoise Group that seeks to produce hydrogen as a by-product of graphene manufacturing from methane.

The company may also float its remaining petroleum interests — including a tight gas project in the northern Cooper Basin, the Walloon coal seam gas project in the Surat-Bowen Basin, and its 19.9% interest in ASX-listed Botala Energy — in a separate vehicle to maximise their value.



**SCOTT BROWN**MANAGING DIRECTOR



#### **QPM ENERGY**

ASX: QPM

Company Name: QPM Energy
 Company ASX code: QPM
 Key Areas: Oil & Gas

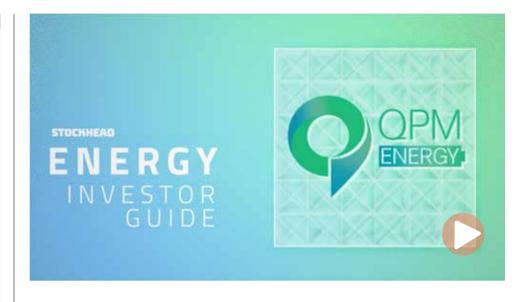
■ Key Personnel: David Wrench, Chief Executive

Officer | Eddie King, Chairperson

Locations: Queensland, Australia

■ Market Cap as of 22/11/2024: \$105.88M■ 52 Week share price range: \$0.028 - \$0.058

■ Website: qpmenergy.com.au





#### **COMPANY PROFILE**

QPM Energy owns and operates the Moranbah project in the Bowen Basin, Queensland, originally acquired to secure gas for its proposed TECH nickel project.

However, the company was quick to realise that the looming gas supply crisis meant the project, with proved and probable reserves of 33l petajoules (200PJ of which remains uncontracted), was more than capable of standing on its own – a thesis that has been soundly proven.

Moranbah currently captures up to 28-30 terajoules per day (TJ/d) of waste mine gas (methane) from coal mines and supplies it to Townsville's 242 megawatt peaking gas power station (TPS), which operates for three to seven hours per day during peak morning and evening when electricity prices are at their highest.

The company also sells gas to Dyno Nobel's ammonium nitrate facility and Glencore's Copper Refineries smelter in Townsville. During the September 2024 quarter, its gas and electricity sales netted a tidy \$25.4m in revenue, up from \$21.6m in the previous quarter due to strong electricity pricing in July and August.

QPM isn't stopping there. It recently renegotiated terms of use for access to the 108TJ/day North Queensland Gas Pipeline (NQGP) and the TPS that will reduce fixed costs of access by 83%. The company calculates that this will add some \$30m per annum to its profitability once they come into full operation.

The 10-year access agreement to the NQGP with a 3-year minimum also underpins firm capacity of 12TJ/d along with access to the line's +60TJ of storage capacity.

It also secured an \$80m prepayment facility from Dyno Nobel – to be repaid in gas delivered on a cost-plus basis, which ensures an acceptable profit margin for the company – to fund a drive to increase gas production.

This is already starting to bear fruit, with the company already noting very encouraging gas flows from two of the five proposed surface to inseam

lateral well pairs drilled by the end of September under the Teviot Brook South well program. QPM is drilling seven well pairs under the \$24m program, each with ~1000m lateral extensions to capture coal seam gas.

Further evaluation through the December quarter will feed into a reserves upgrade, expected by the June quarter of 2025.

Routine maintenance work at the Ammonia nitrate plant during the March quarter of 2025 will also enable QPM to sell gas into this high value, peak demand period, boosting revenue.



**DAVID WRENCH**CHIEF EXECUTIVE OFFICER



Scan here for the company website

Please view the Disclosure statement on page 26

#### **RECHARGE METALS**

**ASX: REC** 

■ Company Name: Recharge Metals

Company ASX code: RECKey Areas: Uranium, Copper

■ Key Personnel: Felicity Repacholi, Managing
Director | Simon Andrew, Non-Executive Chairman
■ Locations: Montana. United States of America

and Murchison, Western Australia

Market Cap as of 22/11/2024: \$3.91M
 52 Week share price range: \$0.024 - \$0.125

■ Website: rechargemetals.com.au



#### **COMPANY PROFILE**

Minerals explorer Recharge Metals reinforced its conviction on the long term uranium outlook with the recent acquisition of the Carter project in Montana in the US, on the northern rim of the world-renowned Powder River Basin uranium province, that managing director Felicity Repacholi characterises as "an advanced uranium exploration asset".

The timing is exquisite given the resurgence of the US nuclear sector and supply chain. Spot prices hit a decade long high of more than US\$100/lb earlier this year before returning to levels in the high US\$70s. But more important than that is the rising support for nuclear power from government and major electricity users in the United States.

Carter is an advanced project which saw significant historical work in the '70s and '80s by American uranium heavyweight Kerr McGee and its then partner Chevron. Drilling then returned



grades over 5000 parts per million uranium oxide.

Importantly, it covers 87% of the surface expression of the 3.7Mlb at 1250ppm uranium oxide Acadia resource and 78% of the 1.4Mlb at 1560ppm Mindy resource, both of which are reduction-oxidation, roll-front uranium deposits suitable for in situ recovery (ISR). Both resources, it should be noted, are currently non-JORC compliant and need updating to Australian reporting standards.

Recharge has engaged experienced uranium geologist Ben Vallerine as a non-executive director to help guide project evaluation and exploration activities, planned for 2025.

Its initial focus will be organising drilling permits and land access agreements ahead of conducting confirmation drilling along known zones of mineralisation at depths of between 290m and 440m to upgrade the resource to Australian JORC standards.

Beyond increasing the categorisation of known mineralisation, attention will also be turned to exploring for additional targets on leases at the Carter project.

Multiple roll-front uranium prospects have been mapped on the acreage that could further grow resources.

Repacholi says wide-spaced drilling is the normal tool used to locate uranium redox fronts that can then be defined by infill work, using knowledge of the migration path of the minerals. Here, gamma ray logging of drill samples provides low-cost, rapid and relatively accurate guideposts for geologists in this terrain.

At least six processing facilities including two owned by uranium major Cameco, sit within a 300km radius of Carter.

Peninsula and UEC have also established central facilities for producing uranium oxide.

Smaller regional developments apply alkali ISR technology to load chelating beads from solution with uranium. These are then transported for toll processing at central facilities, using a hub and spoke development model.

Project areas have access to a major highway, linked to the town of Belle Fourche in South Dakota, 75km southeast of the project.



**FELICITY REPACHOLI**MANAGING DIRECTOR



Scan here for the company website

Please view the JORC Competent Person statement on page 28

#### **UVRE**

**ASX: UVA** 

Company Name: UvreCompany ASX code: UVAKey Areas: Uranium

■ Key Personnel: Brett Mitchell, Executive Chairman | Dale Hanna, Frome Downs Project Consultant

■ Locations: South Australia, Australia and Utah,

United States of America

Market Cap as of 22/11/2024: \$5.95M
 52 Week share price range: \$0.070 - \$0.180

■ Website: uvrelimited.com



#### **COMPANY PROFILE**

Since completing the acquisition of two exploration licences in South Australia's eastern Lake Frome Basin, Uvre has refocused exploration efforts on a search for uranium in a major producing jurisdiction.

The basin is known for hosting roll-front deposits in shallow Tertiary aged sediments such as Boss Energy's Honeymoon mine.

Further highlighting its prospectivity, the province is also home to the 70.5 million pound Four Mile and 46.3Mlb Beverley uranium mines.

Despite its high atomic weight, uranium is mobile in the environment and the key to success in sedimentary systems is finding a chemical or physical trap that causes uranium to accumulate.

Uvre acquired a passive seismic survey along three lines – 3km apart, 200m station spacings - for a total of 29.5 line kilometres over its Frome



Downs uranium project, project consultant Dale Hanna told Stockhead.

This survey was designed to identify palaeochannel features and faults known to host uranium mineralisation regionally, and data evaluation has identified two primary and six secondary targets for more detailed work where channels appear to be up to 400m wide in places.

Uvre plans to return to site in November 2024 to conduct follow-up infill seismic and gravity geophysical surveys. This work will aim to further define potential palaeo-drainage patterns and outline structural features including faults, pinch-points or embayments that might nucleate uranium deposition with the intention to test drill these targets in search of uranium hosted redox roll-front occurrences in Q1 2025.

In addition to roll-front deposits, Uvre is also targeting structurally controlled, vein style uranium mineralisation at the Yankaninna Project, located north of the Flinders Ranges and Lake Frome. The presence of magmatic-hydrothermal and epithermal occurrences in the region illustrates the prospectivity of this permit.

Uvre is undertaking benchtop studies as it prepares for an initial on-ground mapping and sampling program in early 2025.

The company has also executed a Heritage Survey Agreement with the

Adnyamathanha Traditional Lands Association, which sets the framework for both parties to work together on the Frome Downs and Yankaninna projects.

Hanna added that Uvre holds two tierl exploration projects in the US. Its 100% held East Canyon uranium-vanadium project in south-eastern Utah is in a region with a long history of uranium and vanadium production. It also holds the South Pass hard rock lithium project in Wyoming.

However, with Uvre firmly focused on uranium in South Australia, the company is assessing all opportunities where it may recognise full value for the projects, which may include continued exploration either solely or with a JV partner or some other type of corporate transaction.



BRETT MITCHELL
EXECUTIVE CHAIRMAN



Scan here for the company website

Please view the JORC Competent Person statement on page 28

# **APPENDIX**

#### Condor Energy (CND) (from page 14)

#### **Cautionary Statement**

The estimated quantities of gas that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both a risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially recoverable hydrocarbons.

See the Condor Energy ltd. announcement dated 18th of March 2024 "Globals TEA area incorporates discovered gas field".

The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Greenvale Energy (GRV) (from page 17)

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**Competent Person Statemen** 

The information in this report that relates to Exploration Results is based on information compiled by Mr. Carl D'Silva, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (Member number 333432). Mr. D'Silva is a full-time employee of SRK Consulting (Australasia) Pty Ltd, a group engaged by the Company in a consulting capacity. Mr D'Silva has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr D'Silva consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

#### Reference

The information provided in the report refers to the following announcement to the ASX:

- Test Program 5 delivers positive results, improved viscosity, 24 Oct 2024 (ASX:GRV)
- Substantial Increase to Alpha Resource, 13 Nov 2023 (ASX:GRV)

GTI Energy (GTR) (from page 18)

#### SUMMARY OF LO HERMA INFERRED MRE AND EXPLORATION TARGETS

(Advised to ASX on 5/7/23 & 20/12/23)

INFERRED MINERAL RESOURCE ESTIMATES	TONNES (MILLIONS)		AVERAGE GRADE (PMIII,O <sub>4</sub> )		CONTAINED U <sub>2</sub> O <sub>0</sub> (MUss)	
LO HERMA INFERRED MRE	4.11		630		5.71	
GDB INFERRED MRE	1.32		570		1.66	
WYOMING TOTAL INFERRED MRE	5.43					7.37
EXPLORATION TARGETS**	MIN TONNES (MILLION TOWNES)	MAX TONNES (MILLION TONNES)	MIN GRADE (ppm/s008)	MAX GRADE (ppm.u308)	MIN LBS (MILION U308)	MAX LBS (MILION USOR)
GDB Exploration Target Range	6.55	8.11	420	530	6.1	9.53
Lo Herma Exploration Target Range	5.32	6.65	500	700	5.87	10.26
TOTAL WYOMING EXPLORATION TARGET	11.87	14.76			11.97	19.79

\*\* The potential quantity and grade of the Exploration Targets is conceptual in nature and there has been insufficient exploration to estimate a JORC-compliant Mineral Resource Estimate. It is uncertain if further exploration will result in the estimation of a Mineral Resource in the defined exploration target areas. The Exploration Targets have been estimated based on historical drill maps, drill hole data and drilling by GTI conducted during 2023 to verify the historical drilling information. There are now 880 drill holes in the Lo Herma project area and the Company conducted ariel geophysics at the project as reported during 2023. The Lo Herma drill program conducted during 2023 and the drill program now underway are designed, in part, to test the Lo Herma Exploration Target.

#### **Competent Persons Statement**

Information in this announcement relating to Exploration Results, Exploration Targets, and Mineral Resources is based on information compiled and fairly represents the exploration status of the project. Doug Beahm has reviewed the information and has approved the scientific and technical matters of this disclosure. Mr. Beahm is a Principal Engineer with BRS Engineering Inc. with over 45 years of experience in mineral exploration and project evaluation. Mr. Beahm is a Registered Member of the Society of Mining, Metallurgy and Exploration, and is a Professional Engineer (Wyoming, Utah, and Oregon) and a Professional Geologist (Wyoming). Mr Beahm has worked in uranium exploration, mining, and mine land reclamation in the Western US since 1975 and has sufficient experience relevant to

the style of mineralisation and type of deposit under consideration and has reviewed the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of exploration results, Mineral Resources & Ore Reserves. Mr Beahm provides his consent to the information provided. The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and, in the case of mineral resource estimates, that all material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed.

The information in this release that relates to Mineral Resource Estimates at the GDB and Lo Herma deposits was prepared by BRS Engineering Inc and released on the ASX platform on 5 April 2023 and 5 July 2023 respectively. The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the BRS Engineering Inc findings are presented have not been materially modified.

#### **Caution Regarding Forward Looking Statements**

This announcement may contain forward looking statements which involve a number of risks and uncertainties. Forward-looking statements are expressed in good faith and are believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. The forward-looking statements are made as at the date of this announcement and the Company disclaims any intent or obligation to update publicly such forward looking statements, whether as the result of new information, future events or results or otherwise.

#### HyTerra (HYT) (from page 19)

#### **Disclosure**

Being a gas company, resources classified in accordance with SPE-PRMS

#### Moab Minerals (MOM) (from page 20)

#### **Competent Person Statement**

The information in this report regarding the Tanzanian uranium project as it relates to exploration results and geology was compiled by Mr Geoff Balfe who is a Member of the Australasian Institute of Mining and Metallurgy and a Certified Professional. Mr Balfe is a consultant to Moab Minerals Limited. Mr Balfe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Balfe consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

References: ASX Announcement: Moab Expands Flagship Manyoni Uranium Project – 16 October 2024.

# **APPENDIX**

Pilot Energy (PGY) (from page 21)

#### **Disclosure**

Pilot reports conventional petroleum and CO2 Storage resources in compliance with the SPE PRMS and SRMS and ASX Listing Rule 5.1.

QPM Energy (QPM) (from page 23)

#### **Disclosure**

The estimated proved and probable reserves, evaluated as of 31 March 2024, are contained within granted Petroleum Leases PLs 191, 196, 223 and 224, referred to as the Moranbah Project, located in the Bowen Basin of Queensland, Australia.

The volumes included in the estimate are attributable to the coals in the LH seams from the Rangal Coal Measures and the GU, P, GM and GL seams from the Moranbah Coal Measures. Economic analysis was performed only to assess economic viability and determine economic limits for the properties, using price and cost parameters specified by QPM.

The estimate was prepared by Richard B. Talley, Jr., P.E., Michelle L. Burnham, P.E. and John G. Hattner P.G. in accordance with the definitions and guidelines set forth in the 2018 Petroleum Resources Management System approved by the Society of Petroleum Engineers ("SPE"). These technical persons meet the requirements regarding qualifications, independence, objectivity and confidentiality set forth in the SPE standards. NSAI are independent petroleum engineers, geologists, geophysicists and petrophysicists who do not own an interest in the properties and are not employed on a contingency basis.

Recharge Metals (REC) (from page 24)

#### **Competent Person Statement**

The information in this report that relates to Exploration Results and Historical Resources is based on information compiled or reviewed by Ms Felicity Repacholi, a Competent Person who is a Director of the Company. Ms Repacholi is a Member of the Australian Institute

of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Repacholi consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The report contains information extracted from the following ASX announcement:

Transformational Acquisition of the Advanced High-Grade Carter Uranium Project, Montana, USA; released 29th October 2024.

Historical Resource Estimate: Readers are cautioned that the historical resource estimates for the Acadia and Mindy Deposits, referred to in this report are not reported in accordance with the JORC 2012 Code. A Competent Person has not undertaken sufficient work to classify the historical resource estimates as mineral resources in accordance with the JORC 2012 Code. Nothing has come to the attention of Recharge that causes it to question the accuracy or the reliability of the former owner's estimates. However, Recharge has not independently validated the former owner's estimates and therefore is not to be regarded as reporting, adopting or endorsing those estimates. Following evaluation and further exploration work, it is uncertain whether it will be possible to report this historical resource estimate as a mineral resource in accordance with the JORC 2012 Code. The historical resource estimate was reported in accordance to Listing Rule 5.12, The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement referred to in this report and that no material change in the results has occurred. The Company confirms that the form and context in which the Competent Person's findings are presented has not been materially modified from the original market ASX announcement.

Uvre (UVA) (from page 25)

#### **Disclosure**

Reference: ASX Announcement (ASX:UVA) 18 September 2024 "Strong geophysical results identify key Uranium targets"

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