Canaccord Genuity

Australian Equity Research
22 May 2023

Company Update

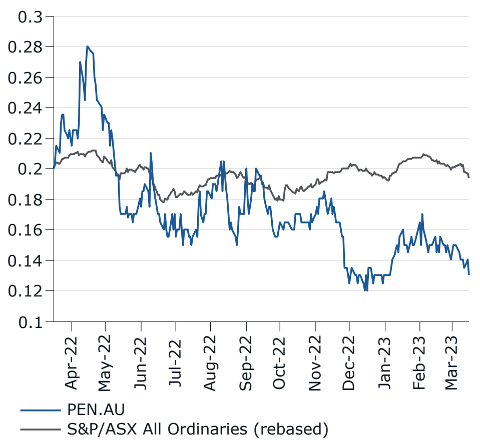
Peninsula Energy Limited
Specialty Minerals and Metals

Rating	Price Target
SPECULATIVE BUY *unchanged*	**A$0.36** *unchanged*
PEN-ASX	Price **A$0.16**

Market Data

52-Week Range (A$) :	0.13 - 0.28
Avg Daily Vol (000s) :	2,716
Avg Daily Vol (M) :	6.3
Market Cap (A$M) :	176.0
Shares Out. (M) :	1,257.1
Dividend /Shr (US$) :	0.00
Dividend Yield (%) :	0.0
Enterprise Value (A$M) :	122
NAV /Shr :	0.36

FYE Jun	2022A	2023E	2024E	2025E
Sales (US$M)	18.3	6.0	25.0	56.2
EBITDA (US$M)	(5.8)	(2.2)	11.5	30.5



Source: FactSet

Priced as of close of business 15 March 2023

Peninsula Energy Limited is a uranium focused development company which is seeking to restart the Lance Uranium Projects in the Powder River Basin in Wyoming, US.

James Bullen | Analyst | Canaccord Genuity (Australia) Ltd. | jbullen@cgf.com | +61.2.9263.2728

Lance site visit: primed for production, as Russian sanctions loom

We recently visited PEN's flagship Lance re-start project, which is on track for first uranium production by mid-year and first sales in the DecQ. With cranes on site lifting key vessels into place, drilling of the first mine unit complete and pre-acidification underway, the team is extremely busy but tracking to schedule and budget.

We retain our SPEC BUY rating and $0.36ps price target. With the likelihood of US sanctions on Russia increasing and a clear desire to stimulate domestic uranium production, PEN is a highly attractive play, in our view.

Bipartisan ban on Russian uranium takes another step forward...

The House Energy and Commerce subcommittee has approved the "Prohibiting Russian Uranium Imports Act", which is a companion bill to a bipartisan bill being passed concurrently through the Senate (S.763). Once passed, these bills would prohibit imports of low-enriched uranium from Russia or any Russian entity beginning 90 days after enactment. The legislation would also grant a waiver to the secretary of the Energy Department to allow reduced amounts of uranium from Russia through 2027 if necessary to sustain nuclear reactors in the US.

While the date for when the legislation will reach the floor remains to be determined, the political direction is clear and feedback from our Global M&M conference and the WNFC conference all point to increasing levels of self-sanctioning regardless.

...while domestic US production takes another leg down

The most recent US domestic uranium production report by the DoE is a tough read for the world's largest uranium consumer. U_3O_8 production in MarQ'23 totaled a tiny 2,511 pounds. This is 75% lower than Marq'22 production and a drop of 99% from DecQ'22. If the US wants to improve energy security it needs Lance Stage 2+++, and this will require the right pricing signals. The IRA has provided some incentives, as has the strategic reserve but more is required, and we believe Lance will be a key beneficiary of any proposed measures.

Building and high-grading the resource base

PEN has drilled over 2,000 contemporary wells in Lance in addition to the ~4,700 NuBeth drilled prior. This drilling has enabled the company to clearly identify the redox boundaries in the Ross and Kendrick areas, not only increasing resource estimates to 21.8Mlb, but also resulting in a large migration from "inferred" to "measured and indicated".

While the company is rightly preserving capital for the Stage Development, which should lift production from 0.8Mtpa to 2.0Mtpa, we believe that additional drilling at Barber could significantly increase the 31.9Mlb resource estimate. As evident in Figure 9, if the potential of Barber gets even close to matching Kendrick and Lamar, PEN could easily exceed a 100Mlb resource.

Production outlook, expect nameplate in early CY24

Like any ISR, the production ramp-up will take time, and we do not expect production to hit nameplate until the new mine units (which had not been previously exposed to alkaline leach) are in production. See Figure 10 for our forecasts.

Budget and cash position

PEN has indicated that the overall capital expenditures for the project transformation are closely tracking with the August 2022 DFS projection and no material deviation is anticipated. The DFS projected CAPEX of US$8.4mn for the low pH transition and Stage-1 upfront costs. PEN had US$26mn in cash at the end of the MarQ.

Figure 1: Financial summary

FY Jun 30	2021	2022	2023E	2024E	2025E
PROFIT & LOSS (US$mn)					
Revenue	9.8	18.3	6.0	25.0	56.2
Operational Costs	0.0	0.0	0.0	-7.3	-16.6
Royalty	0.0	0.0	0.0	-2.5	-5.7
Other COGS	-8.5	-15.2	-4.5	0.0	0.0
Other Income	0.7	0.6	0.0	0.0	0.0
Business Devt & Expl	0.0	0.0	-2.0	-2.0	-2.0
Corporate & Other	-2.8	-9.5	-1.7	-1.6	-1.5
EBITDA	**-0.9**	**-5.8**	**-2.2**	**11.5**	**30.5**
DD&A	0.0	0.0	0.0	0.0	1.9
EBIT	**-0.9**	**-5.8**	**-2.2**	**11.5**	**32.4**
Net Financing	0.0	0.0	0.3	-0.3	-5.7
NPBT	**-0.9**	**-5.8**	**-1.8**	**11.3**	**26.7**
Tax	-0.6	1.3	0.5	-3.4	-8.0
Reported NPAT	**-1.6**	**-4.5**	**-1.3**	**7.9**	**18.7**
Non-Controlling Interest	0.0	0.0	0.0	0.0	0.0
Sig Items, Discon Ops & Mins	0.0	0.0	0.0	0.0	0.0
Normalised NPAT	**-1.6**	**-4.5**	**-1.3**	**7.9**	**18.7**
Effective income tax rate	-70%	22%	30%	30%	30%
CASHFLOW (US$mn)					
Cash receipts	3.4	32.6	6.0	25.0	56.2
Payments to suppliers	-11.5	-20.8	-8.2	-13.4	-25.8
Interest received	0.1	0.0	0.3	0.1	-1.0
Interest paid	-0.1	0.0	0.3	-0.3	-5.7
Other	-9.2	-9.8	0.0	-8.0	-3.2
Operating Cashflow	**-17.3**	**2.0**	**-1.5**	**3.3**	**20.5**
Payments for PP&E	0.0	0.0	0.0	0.0	0.0
Payments for Development	-0.2	-1.0	-19.1	-50.3	-50.4
Payments for Exploration	0.0	0.0	0.0	0.0	0.0
Asset Sales / (Purchases)	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.2	0.2	0.2
Investing Cashflow	**-0.2**	**-1.0**	**-18.9**	**-50.1**	**-50.1**
Share Issuance / (Buyback)	11.8	0.0	20.8	0.0	0.0
Drawdown / (Repayment) of Debt	0.5	0.0	0.0	46.8	29.6
Dividends	0.0	0.0	0.0	0.0	0.0
Other	-0.5	-0.1	0.0	0.0	0.0
Financing Cashflow	**11.9**	**-0.1**	**20.8**	**46.8**	**29.6**
Surplus / Defecit	-5.6	0.9	0.4	0.0	0.0
BALANCE SHEET (US$mn)					
Current Assets	25.5	29.6	9.3	17.3	20.5
Non-Current Assets	75.9	58.6	77.7	128.0	180.3
Total Assets	**101.3**	**88.2**	**87.0**	**145.3**	**200.8**
Current Liabilities	8.8	1.5	1.5	3.9	5.3
Non-Current Liabilities	14.9	13.2	13.2	57.6	85.8
Total Liabilities	**23.7**	**14.7**	**14.7**	**61.5**	**91.1**
Net Assets	**77.7**	**73.4**	**72.3**	**83.8**	**109.6**
Total Cash	6.7	7.6	8.0	8.0	8.0
Total Debt	0.0	0.0	0.0	46.8	76.4
Net Debt	**-6.7**	**-7.6**	**-8.0**	**38.8**	**68.4**

	2021	2022	2023E	2024E	2025E
KEY ASSUMPTIONS					
Spot U3O8 (US$/lb)	32.3	52.3	63.8	73.8	75.4
A$/US$	0.70	0.73	0.73	0.73	0.73
REALISED PRICES					
U3O8 (US$/lb)	0.0	0.0	0.0	67.7	68.6
PRODUCTION FORECASTS					
U3O8 (klbs)	0.0	0.0	0.0	368.7	820.0
Total (klbs)	0.0	**0.0**	**0.0**	**368.7**	**820.0**
RESOURCES					
Lance Measured (Mlbs)	3.9				
Lance Indicated (Mlbs)	11.9				
Lance Inferred (Mlbs)	38.1				
Total (Mlbs)	**53.9**				
PER SHARE DATA					
Average Shares (Diluted, M)	803	954	1150	1242	1242
EOP Shares (Diluted, mn)	996	997	1242	1242	1242
Normalised EPS (US¢/sh)	-0.2	-0.5	-0.1	0.6	1.5
CF PS (US¢/sh)	-2.2	0.2	-0.1	0.3	1.7
FCF PS (US¢/sh)	-2.2	0.1	-1.8	-3.8	-2.4
RATIOS					
Dividend Yield	0%	0%	0%	0%	0%
PE	n/a	n/a	n/a	25.2	10.6
PCF (Debt Adj)	n/a	74.6	n/a	56.4	8.1
EV / EBITDA	n/a	n/a	n/a	21	9
Gearing (ND / ND + E)	n/a	n/a	n/a	32%	38%
Net Debt / EBITDA	n/a	n/a	n/a	n/a	n/a
Interest Cover	-25.1x	-1945x	0.0x	40.8x	5.7x
ROE (Reported Profit / Av Equity)	n/a	n/a	n/a	10%	19%
ROIC	n/a	n/a	n/a	6%	11%
ROACE	n/a	n/a	n/a	7%	11%
FCF Yield	-14%	1%	-11%	-24%	-15%
DIVIDEND AND FRANKING					
Dividend (US¢/sh)	0	0	0	0	0
Payout ratio	0%	0%	0%	0%	0%
Franking Balance (US$mn)	0	0	0	0	0
VALUATION (A$)	**Risked**				
PRODUCTION ASSETS	0.01				
DEVELOPMENT ASSETS	0.21				
RESOURCES	0.07				
EXPLORATION	0.01				
EV adjustments	0.06				
TOTAL	**0.36**				
PREMIUM/(DISCOUNT)	0.0				
PRICE TARGET	**0.36**				

Source: Company Reports, Canaccord Genuity estimates

Figure 2: Drilling operation underway in mine unit 2…

Source: Company Reports, Canaccord Genuity estimates

Figure 3: …while mine unit 1 is being pre-acidified

Source: Company Reports, Canaccord Genuity estimates

Figure 4: Little additional work is required to the ion exchange process…

Source: Company Reports, Canaccord Genuity estimates

Figure 5: …and the resin will be toll treated at UEC's Irigaray facility during stage 1

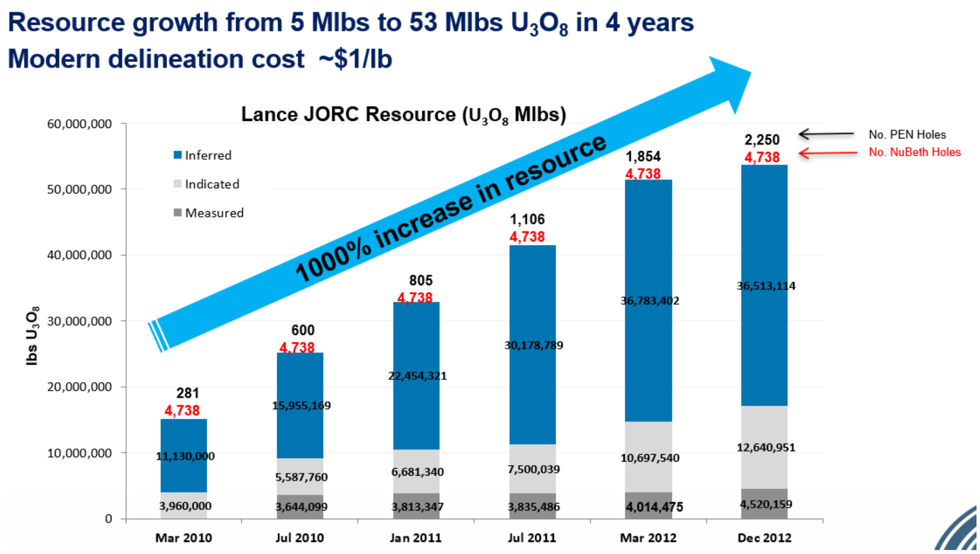
Source: Company Reports, Canaccord Genuity estimates

Upside beyond the DFS

During our site visit we met with a number of PEN's staff and spent a significant amount of time discussing the learnings from drilling at Kendrick and Lamar and what this could mean for the under-appraised and far larger Barber area. Post these meetings we remain convinced that our valuation of PEN, which is more bullish than the Lance DFS, remains appropriate.

As highlighted in Figure 6, when equity capital was available for uranium exploration, the Lance resource saw rapid expansion at a cost of ~US$1/lb.

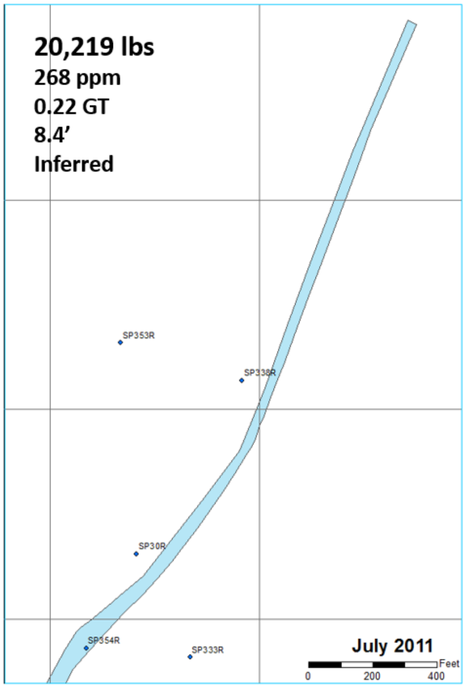
Figure 6: Lance resource growth was rapid when capital was available for exploration/appraisal drilling



Source: Company Reports

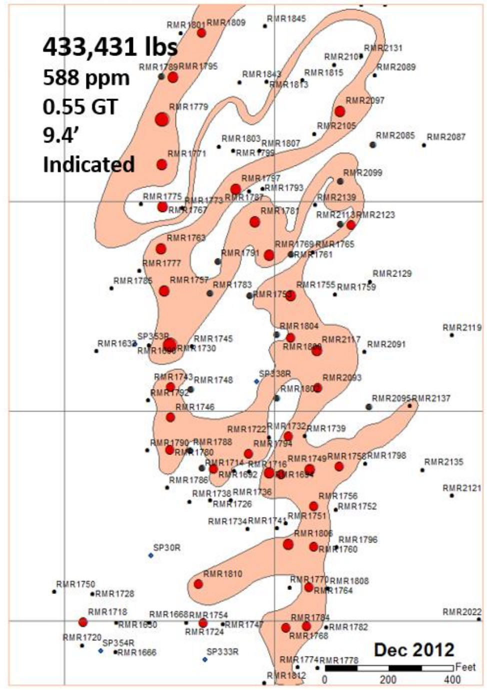
This was driven by a significant drilling campaign that successfully delineated and expanded the redox boundaries (roll fronts), primarily at Kendrick and Lamar (Figures 7 and 8 illustrate an example of this).

Figure 7: Initial resource estimate based on sparse drilling…



Source: Company Reports, Canaccord Genuity estimates

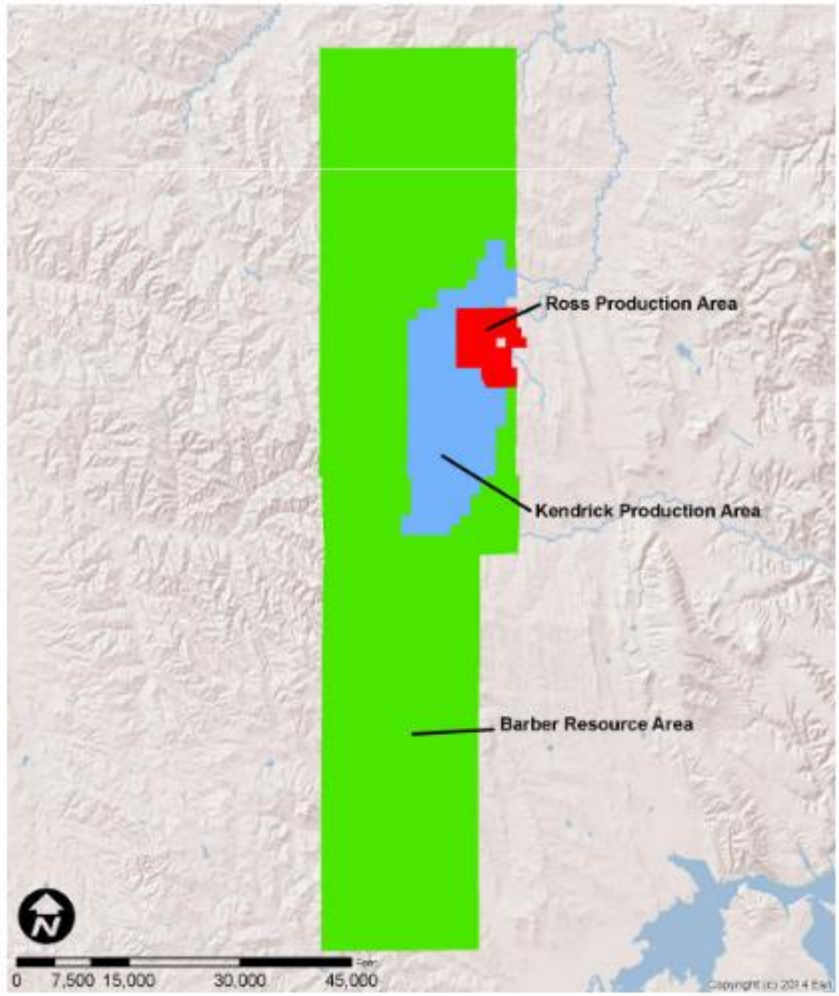
Figure 8:…resource estimate post sustained drilling campaign to delineate roll front



Source: Company Reports, Canaccord Genuity estimates

Based on our discussions with PEN's team we believe that there is similar potential at Barber, which covers a far larger area (see Figure 9). This could be a highly material exploration target, in our opinion, and we believe that additional colour on size etc could be significant to the investment case.

Figure 9: The Lance Projects – Ross, Kendrick and Barber



Source: Company Reports, Canaccord Genuity estimates

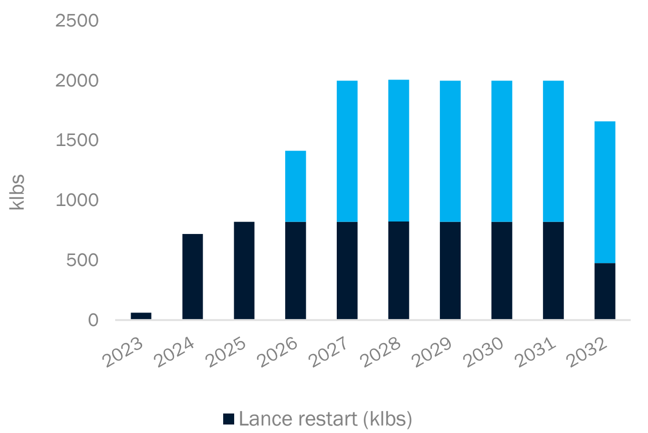
DFS outcomes and CG valuation

The 2022 DFS addressed only two Production Areas located within the Lance Projects area – Ross and Kendrick. The JORC compliant resources in Barber, which were included in the 2018 Feasibility Study, but are not included in the 2022 DFS, are predominantly inferred resources. By removing Barber from the resource pool for this DFS, the conservatism of the DFS has been dramatically increased, with only 42% of the resource base being in the inferred resource category.

The removal of Barber, which necessitated the removal of a “Stage 3” increase in production to 3.0Mlb, resulted in increased AISC to US$39/lb (US$32/lb prior).

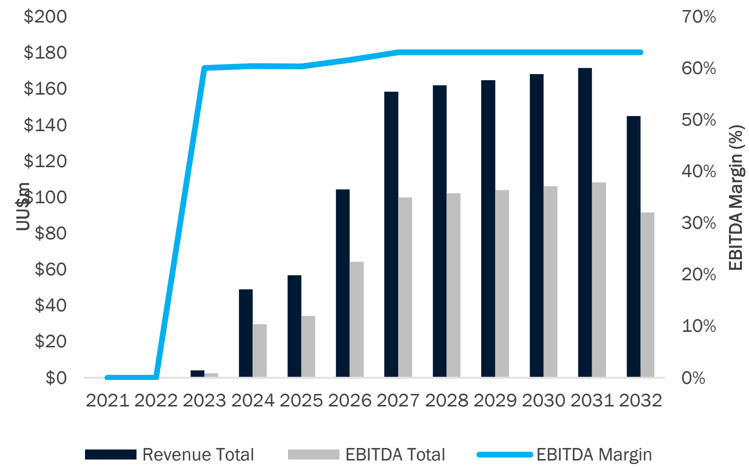
As highlighted in Figures 10 and 11, the Lance Uranium Project (LUP) has the capacity to generate project level of EBITDA of ~$100mn/year when operating at 2.0Mlb. For our valuation work we have relied heavily on PEN’s DFS results but have allowed for modest resource to reserve conversion (we use 16.3Mlb) which extends the mine life to 13 years.

Figure 10: Production forecast (klb)



Source: Company Reports, Canaccord Genuity estimates

Figure 11: Revenue and EBITDA (US$mn)



Source: Company Reports, Canaccord Genuity estimates

Figure 12: Valuation build-up

Asset	Equity %	Net Capacity klb	NPV A$mn	Risking %	Risked NPV A$mn	Risked NPV A$ps
Existing contracts pre Lance start-up			10.3	100%	10.3	0.01
PRODUCTION ASSETS		**0.00**	**10.3**	**100%**	**10.3**	**0.01**
Lance Stage 1	100%	Variable	180.1	80%	144.0	0.12
Lance Stage 2	100%	Variable	147.8	80%	118.2	0.10
DEVELOPMENT ASSETS			**327.9**		**262.3**	**0.21**
Barber Resource	100%		136.3	65%	88.6	0.07
RESOURCES			**136.3**		**88.6**	**0.07**
Other exploration					10.0	0.01
EXPLORATION					**10.0**	**0.01**
Net Debt, Balance sheet adj. & corp. overhead					**76.1**	**0.06**
Premium / (Discount)						0.00
Price Target						**0.36**

Source: Company Reports, Canaccord Genuity estimates

Appendix: Important Disclosures

Analyst Certification

Each authoring analyst of Canaccord Genuity whose name appears on the front page of this research hereby certifies that (i) the recommendations and opinions expressed in this research accurately reflect the authoring analyst's personal, independent and objective views about any and all of the designated investments or relevant issuers discussed herein that are within such authoring analyst's coverage universe and (ii) no part of the authoring analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the authoring analyst in the research, and (iii) to the best of the authoring analyst's knowledge, she/he is not in receipt of material non-public information about the issuer.

Analysts employed outside the US are not registered as research analysts with FINRA. These analysts may not be associated persons of Canaccord Genuity LLC and therefore may not be subject to the FINRA Rule 2241 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Sector Coverage

Individuals identified as "Sector Coverage" cover a subject company's industry in the identified jurisdiction, but are not authoring analysts of the report.

Investment Recommendation

Date and time of first dissemination: May 21, 2023, 16:38 ET

Date and time of production: May 21, 2023, 16:38 ET

Target Price / Valuation Methodology:

Peninsula Energy Limited - PEN

Our target price is derived from a DCF-based sum-of-the-parts valuation, comprising our $NPV8_{\%}$ of the staged Lance project, a nominal value for exploration, and net cash.

Risks to achieving Target Price / Valuation:

Peninsula Energy Limited - PEN

Financing risks: Our analysis suggests that PEN will require additional capital to fund the development costs for the Lance project for which we have risked our valuation. PEN is reliant on equity/debt/external capital to fund capital commitments, and there is no guarantee that accessing these markets will be achieved without dilution to shareholders.

Furthermore, accurate estimates of capital costs for the project remain subject to completion of pre-feasibility and feasibility studies, which may see capital requirements exceed our model assumptions. There is no guarantee that studies will result in a positive investment decision for the project.

Operational risks: Once in production, the company will be subject to risks such as plant/equipment breakdowns, metallurgical (noting flowsheet changes to address previous challenges), geological and other technical issues. An increase in operating costs could reduce the profitability and free cash generation from the operating assets and negatively impact valuation.

Further, the yellow cake product specifications may differ from initial test work interpretations which can also materially impact product acceptance by customers and therefore earnings from forecast production.

Implementation risks: We note the compressed development schedule will require concurrent plant commissioning of Stage 1 followed soon after by the installation of Stage 2 equipment and then Stage 3. This sequence presents a natural risk that delays in Stage 1 could impact Stage 2 and therefore Stage 3 which present downside risk to our cash flow projections.

Market risks: PEN's sales revenue is dependent on being able to secure term contracts for its proposed level of production and priced with the required mechanisms that will enable proactive capital and budgetary management. We note the protracted nature of negotiating uranium product offtake with the potential that timelines could be prolonged to ensure than an acceptable order book is agreed on.

Commodity price and currency fluctuation: The company as a near-term uranium producer is exposed to commodity price and currency fluctuations, often driven by macro-economic forces including inflationary pressure, interest rates and supply and demand of commodities. These factors are external and could reduce the profitability, costing and prospective outlook for the business.

Geological and resource risk: The actual characteristics of a mineral deposit may differ significantly from initial interpretations and expectations. PEN's plan incorporates Mineral Resources whose actual economics are yet to be determined. Grades and tonnages for Exploration Targets are conceptual in nature.

Distribution of Ratings:

Global Stock Ratings (as of 05/21/23)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	605	64.84%	22.31%
Hold	138	14.79%	10.87%
Sell	16	1.71%	0.00%
Speculative Buy	160	17.15%	46.88%
	933*	100.0%	

*Total includes stocks that are Under Review

Canaccord Genuity Ratings System

BUY: The stock is expected to generate risk-adjusted returns of over 10% during the next 12 months.

HOLD: The stock is expected to generate risk-adjusted returns of 0-10% during the next 12 months.

SELL: The stock is expected to generate negative risk-adjusted returns during the next 12 months.

NOT RATED: Canaccord Genuity does not provide research coverage of the relevant issuer.

"Risk-adjusted return" refers to the expected return in relation to the amount of risk associated with the designated investment or the relevant issuer.

Risk Qualifier

SPECULATIVE: Stocks bear significantly higher risk that typically cannot be valued by normal fundamental criteria. Investments in the stock may result in material loss.

12-Month Recommendation History (as of date same as the **Global Stock Ratings** table)

A list of all the recommendations on any issuer under coverage that was disseminated during the preceding 12-month period may be obtained at the following website (provided as a hyperlink if this report is being read electronically) http://disclosures-mar.canaccordgenuity.com/EN/Pages/default.aspx

Required Company-Specific Disclosures (as of date of this publication)

Peninsula Energy Limited currently is, or in the past 12 months was, a client of Canaccord Genuity or its affiliated companies. During this period, Canaccord Genuity or its affiliated companies provided investment banking services to Peninsula Energy Limited.

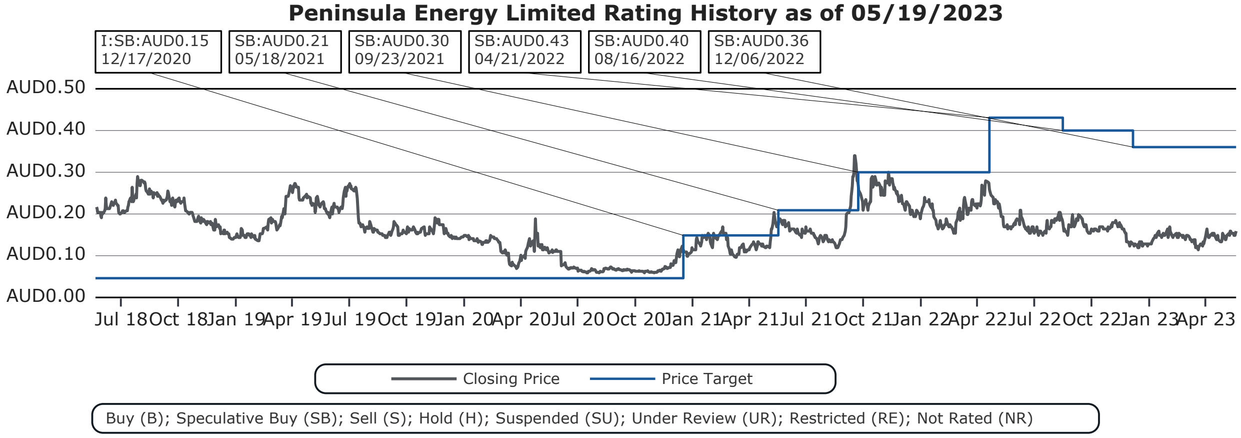
In the past 12 months, Canaccord Genuity or its affiliated companies have received compensation for Investment Banking services from Peninsula Energy Limited .

In the past 12 months, Canaccord Genuity or any of its affiliated companies have been lead manager, co-lead manager or co-manager of a public offering of securities of Peninsula Energy Limited or any publicly disclosed offer of securities of Peninsula Energy Limited or in any related derivatives.

Canaccord Genuity or one or more of its affiliated companies intend to seek or expect to receive compensation for Investment Banking services from Peninsula Energy Limited in the next three months.

An analyst has visited the material operations of Peninsula Energy Limited. No payment was received for the related travel costs.

Peninsula Energy Limited Rating History as of 05/19/2023



Required Company-Specific Disclosures (as of date of this publication)

Past performance

In line with Article 44(4)(b), MiFID II Delegated Regulation, we disclose price performance for the preceding five years or the whole period for which the financial instrument has been offered or investment service provided where less than five years. Please note price history refers to actual past performance, and that past performance is not a reliable indicator of future price and/or performance.

Online Disclosures

Up-to-date disclosures may be obtained at the following website (provided as a hyperlink if this report is being read electronically) http://disclosures.canaccordgenuity.com/EN/Pages/default.aspx; or by sending a request to Canaccord Genuity Corp. Research, Attn: Disclosures, P.O. Box 10337 Pacific Centre, 2200-609 Granville Street, Vancouver, BC, Canada V7Y 1H2; or by sending a request by email to disclosures@cgf.com. The reader may also obtain a copy of Canaccord Genuity's policies and procedures regarding the dissemination of research by following the steps outlined above.

General Disclaimers

See "Required Company-Specific Disclosures" above for any of the following disclosures required as to companies referred to in this report: manager or co-manager roles; 1% or other ownership; compensation for certain services; types of client relationships; research analyst conflicts; managed/co-managed public offerings in prior periods; directorships; market making in equity securities and related derivatives. For reports identified above as compendium reports, the foregoing required company-specific disclosures can be found in a hyperlink located in the section labeled, "Compendium Reports." "Canaccord Genuity" is the business name used by certain wholly owned subsidiaries of Canaccord Genuity Group Inc., including Canaccord Genuity LLC, Canaccord Genuity Limited, Canaccord Genuity Corp., and Canaccord Genuity (Australia) Limited, an affiliated company that is 80%-owned by Canaccord Genuity Group Inc.

The authoring analysts who are responsible for the preparation of this research are employed by Canaccord Genuity Corp. a Canadian broker-dealer with principal offices located in Vancouver, Calgary, Toronto, Montreal, or Canaccord Genuity LLC, a US broker-dealer with principal offices located in New York, Boston, San Francisco and Houston, or Canaccord Genuity Limited., a UK broker-dealer with principal offices located in London (UK) and Dublin (Ireland), or Canaccord Genuity (Australia) Limited, an Australian broker-dealer with principal offices located in Sydney and Melbourne.

The authoring analysts who are responsible for the preparation of this research have received (or will receive) compensation based upon (among other factors) the Investment Banking revenues and general profits of Canaccord Genuity. However, such authoring analysts have not received, and will not receive, compensation that is directly based upon or linked to one or more specific Investment Banking activities, or to recommendations contained in the research.

Some regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of research. This research has been prepared in accordance with Canaccord Genuity's policy on managing conflicts of interest, and information barriers or firewalls have been used where appropriate. Canaccord Genuity's policy is available upon request.

The information contained in this research has been compiled by Canaccord Genuity from sources believed to be reliable, but (with the exception of the information about Canaccord Genuity) no representation or warranty, express or implied, is made by Canaccord Genuity, its affiliated companies or any other person as to its fairness, accuracy, completeness or correctness. Canaccord Genuity has not independently verified the facts, assumptions, and estimates contained herein. All estimates, opinions and other information contained in this research constitute Canaccord Genuity's judgement as of the date of this research, are subject to change without notice and are provided in good faith but without legal responsibility or liability.

From time to time, Canaccord Genuity salespeople, traders, and other professionals provide oral or written market commentary or trading strategies to our clients and our principal trading desk that reflect opinions that are contrary to the opinions expressed in this research. Canaccord Genuity's affiliates, principal trading desk, and investing businesses also from time to time make investment decisions that are inconsistent with the recommendations or views expressed in this research.

This research is provided for information purposes only and does not constitute an offer or solicitation to buy or sell any designated investments discussed herein in any jurisdiction where such offer or solicitation would be prohibited. As a result, the designated investments discussed in this research may not be eligible for sale in some jurisdictions. This research is not, and under no circumstances should be construed as, a solicitation to act as a securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. This material is prepared for general circulation to clients and does not have regard to the investment objectives, financial situation or particular needs of any particular person. Investors should obtain advice based on their own individual circumstances before making an investment decision. To the fullest extent permitted by law, none of Canaccord Genuity, its affiliated companies or any other person accepts any liability whatsoever for any direct or consequential loss arising from or relating to any use of the information contained in this research.

Research Distribution Policy

Canaccord Genuity research is posted on the Canaccord Genuity Research Portal and will be available simultaneously for access by all of Canaccord Genuity's customers who are entitled to receive the firm's research. In addition research may be distributed by the firm's sales and trading personnel via email, instant message or other electronic means. Customers entitled to receive research may also receive it via third party vendors. Until such time as research is made available to Canaccord Genuity's customers as described above, Authoring Analysts will not discuss the contents of their research with Sales and Trading or Investment Banking employees without prior compliance consent.

For further information about the proprietary model(s) associated with the covered issuer(s) in this research report, clients should contact their local sales representative.

Short-Term Trade Ideas

Research Analysts may, from time to time, discuss “short-term trade ideas” in research reports. A short-term trade idea offers a near-term view on how a security may trade, based on market and trading events or catalysts, and the resulting trading opportunity that may be available. Any such trading strategies are distinct from and do not affect the analysts' fundamental equity rating for such stocks. A short-term trade idea may differ from the price targets and recommendations in our published research reports that reflect the research analyst's views of the longer-term (i.e. one-year or greater) prospects of the subject company, as a result of the differing time horizons, methodologies and/or other factors. It is possible, for example, that a subject company's common equity that is considered a long-term ‘Hold' or 'Sell' might present a short-term buying opportunity as a result of temporary selling pressure in the market or for other reasons described in the research report; conversely, a subject company's stock rated a long-term 'Buy' or “Speculative Buy’ could be considered susceptible to a downward price correction, or other factors may exist that lead the research analyst to suggest a sale over the short-term. Short-term trade ideas are not ratings, nor are they part of any ratings system, and the firm does not intend, and does not undertake any obligation, to maintain or update short-term trade ideas. Short-term trade ideas are not suitable for all investors and are not tailored to individual investor circumstances and objectives, and investors should make their own independent decisions regarding any securities or strategies discussed herein. Please contact your salesperson for more information regarding Canaccord Genuity’s research.

For Canadian Residents:

This research has been approved by Canaccord Genuity Corp., which accepts sole responsibility for this research and its dissemination in Canada. Canaccord Genuity Corp. is registered and regulated by the Investment Industry Regulatory Organization of Canada (IIROC) and is a Member of the Canadian Investor Protection Fund. Canadian clients wishing to effect transactions in any designated investment discussed should do so through a qualified salesperson of Canaccord Genuity Corp. in their particular province or territory.

For United States Persons:

Canaccord Genuity LLC, a US registered broker-dealer, accepts responsibility for this research and its dissemination in the United States. This research is intended for distribution in the United States only to certain US institutional investors. US clients wishing to effect transactions in any designated investment discussed should do so through a qualified salesperson of Canaccord Genuity LLC. Analysts employed outside the US, as specifically indicated elsewhere in this report, are not registered as research analysts with FINRA. These analysts may not be associated persons of Canaccord Genuity LLC and therefore may not be subject to the FINRA Rule 2241 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

For United Kingdom and European Residents:

This research is distributed in the United Kingdom and elsewhere Europe, as third party research by Canaccord Genuity Limited, which is authorized and regulated by the Financial Conduct Authority. This research is for distribution only to persons who are Eligible Counterparties or Professional Clients only and is exempt from the general restrictions in section 21 of the Financial Services and Markets Act 2000 on the communication of invitations or inducements to engage in investment activity on the grounds that it is being distributed in the United Kingdom only to persons of a kind described in Article 19(5) (Investment Professionals) and 49(2) (High Net Worth companies, unincorporated associations etc) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended). It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons. This material is not for distribution in the United Kingdom or elsewhere in Europe to retail clients, as defined under the rules of the Financial Conduct Authority.

For Jersey, Guernsey and Isle of Man Residents:

This research is sent to you by Canaccord Genuity Wealth (International) Limited (CGWI) for information purposes and is not to be construed as a solicitation or an offer to purchase or sell investments or related financial instruments. This research has been produced by an affiliate of CGWI for circulation to its institutional clients and also CGWI. Its contents have been approved by CGWI and we are providing it to you on the basis that we believe it to be of interest to you. This statement should be read in conjunction with your client agreement, CGWI's current terms of business and the other disclosures and disclaimers contained within this research. If you are in any doubt, you should consult your financial adviser.

CGWI is licensed and regulated by the Guernsey Financial Services Commission, the Jersey Financial Services Commission and the Isle of Man Financial Supervision Commission. CGWI is registered in Guernsey and is a wholly owned subsidiary of Canaccord Genuity Group Inc.

For Australian Residents:

This research is distributed in Australia by Canaccord Genuity (Australia) Limited ABN 19 075 071 466 holder of AFS Licence No 234666. To the extent that this research contains any advice, this is limited to general advice only. Recipients should take into account their own personal circumstances before making an investment decision. Clients wishing to effect any transactions in any financial products discussed in the research should do so through a qualified representative of Canaccord Genuity (Australia) Limited or its Wealth Management affiliated company, Canaccord Genuity Financial Limited ABN 69 008 896 311 holder of AFS Licence No 239052.

For Hong Kong Residents:

This research is distributed in Hong Kong by Canaccord Genuity (Hong Kong) Limited which is licensed by the Securities and Futures Commission. This research is only intended for persons who fall within the definition of professional investor as defined in the Securities and Futures Ordinance. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons. Recipients of this report can contact Canaccord Genuity (Hong Kong) Limited. (Contact Tel: +852 3919 2561) in respect of any matters arising from, or in connection with, this research.

Additional information is available on request.