ShawandPartners
Financial Services

Peninsula Energy (PEN)

Rating: Buy | Risk: High | Price Target: $0.34

Lance Projects DFS completed, FID this half

Key Information

Current Price ($ps)	0.18
12m Target Price ($ps)	0.34
52 Week Range ($ps)	0.12 - 0.34
Target Price Upside (%)	93.6%
TSR (%)	93.6%
Reporting Currency	AUD
Market Cap ($m)	175
Sector	Energy
Avg Daily Volume (m)	3.0
ASX 200 Weight (%)	0.01%

Fundamentals

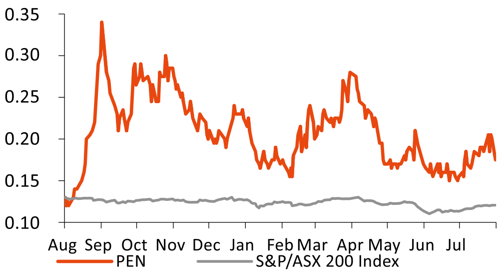
YE 30 Jun (AUD)	FY21A	FY22E	FY23E	FY24E
Sales ($m)	10	24	15	47
NPAT ($m)	(1)	1	(4)	3
EPS (cps)	(0.2)	0.1	(0.4)	0.3
EPS Growth (%)	81.9%	121.9%	nm	174.1%
DPS (cps) (AUD)	0.0	0.0	0.0	0.0
Franking (%)	0%	0%	0%	0%

Ratios

YE 30 Jun	FY21A	FY22E	FY23E	FY24E
P/E (x)	(68.7)	nm	(49.2)	66.4
EV/EBITDA (x)	(185.5)	407.0	(74.3)	17.9
Div Yield (%)	0.0%	0.0%	0.0%	0.0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%

Price Performance

YE 30 Jun	1 Mth	2 Mth	3 Mth	1 Yr
Relative (%)	6.4%	(3.6%)	3.5%	37.4%
Absolute (%)	12.9%	2.9%	2.9%	29.6%
Benchmark (%)	6.5%	6.5%	(0.6%)	(7.8%)



Price performance indexed to 100 *Source: FactSet*

Major Shareholders

Paradice Investment Management	8.8%

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Event

Peninsula Energy has released a Definitive Feasibility Study (DFS) for its flagship Lance Projects in Wyoming, USA. The update incorporates the learnings from the company's technical de-risking activities over the past several years and builds upon the 2018 DFS.

Key results from the DFS include a pre-tax NPV_8 of US$125m and an IRR of 43% using an average sales price of US$62/lb. The company assumes steady-state production of 2Mlbs from year 4 (approx. FY28) to produce 14Mlbs across the life-of-mine and life-of-mine all-in-costs of US$46/lb. This compares to the total current resource base of 54Mlbs and exploration upside previously assessed to be 50-150Mlbs (2015).

PEN believes it is on track for a Lance Projects Final Investment Decision this half, commissioning and ramp-up early next year.

Highlights

- PEN's flagship Lance Projects in Wyoming, USA, requires low upfront capital and can rapidly restart post a Final Investment Decision. PEN is the only ASX company with direct exposure to US Government initiatives which are pro-domestic mine development.
- PEN has an existing contract book and product inventory, with a binding purchase agreement netting a cash margin of US$7.8m in CY2021 (450klbs) and >US$9m in CY22 (450klbs). The company has long-term sales contracts extending to 2030, up to 4.8Mlbs at US$56-58/lb U_3O_8 with major utilities across Europe and the US.
- The company is looking to switch operations from high to low pH in order to increase product yields. The results of the 18-month field demonstration, which completed Dec21q (uranium average grades ~60-70ppm and peak grades ~150ppm) suggest that the targeted low-pH chemistry and field patterns are effective in dissolving and recovering uranium.
- The company has released a DFS, which details a simplified, two-stage, ramp-up to 2Mlbs/yr, with production sourced from the Ross and Kendrick areas of Lance Projects. The DFS concludes a pre-tax NPV_8 of US$125m and an IRR of 43% using an average sales price of US$62/lb. Key features include:
  - Total development/ upfront capex for the two stages of ~US$80m (~US$9m for Stage 1 and ~US$70m for Stage 2).
  - The company assumes steady-state production of 2Mlbs from year 4 to produce 14Mlbs across the life-of-mine. This compares to the current resource base of 54Mlbs and exploration upside previously assessed to be 50-150Mlbs.
  - Life-of-mine All-in Sustaining Costs of US$39/lb and All-in Costs of US$46/lb.
  - Our post-tax NPV_{10} of US$128m is in line with the company's DFS results.
- PEN believes it is on track for a Lance Projects Final Investment Decision this half, commissioning and ramp-up early next year before steady-state Stage 1 production of 0.8Mlbs by end CY23 /early CY24, and a continued ramp-up to 2.0Mlbs.
- Strong balance sheet – the company is term debt free with an unrestricted net cash balance of US$8m (end Jun22q, + 300klbs uranium inventory with a market value ~US$15m). In our view PEN is fully funded to meet all early preparatory works for the Lance Projects restart into CY23.

Recommendation

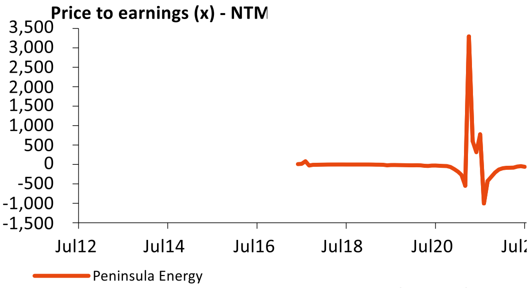
We maintain our Buy recommendation. We have updated our Lance Project financial model in line with today's DFS release. Our valuation reduces slightly to A$0.26ps (previously A$0.30ps) and price target reduces to A$0.34ps (from A$0.40ps, 1.3x fully diluted valuation).

We continue to like PEN for its operations being in the US, having an existing contract book, and its leverage to a uranium sector upcycle.

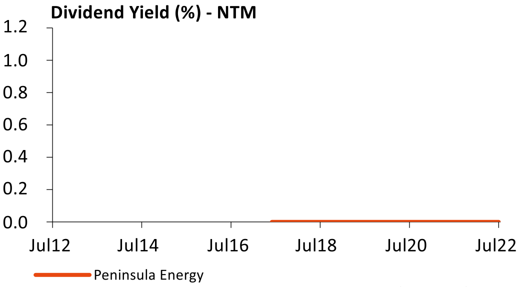
Peninsula Energy
Energy
Energy
FactSet: PEN-AU / Bloomberg: PEN AU

Key Items	Data
Recommendation	BUY
Risk	HIGH
Price ($ps)	0.18
Target Price ($ps)	0.34
52 Week Range ($ps)	0.12 - 0.34
Shares on Issue (m)	997
Market Cap ($m)	175
Enterprise Value ($m)	163
TSR (%)	93.6%

Peninsula Energy is an ASX listed company that owns the Lance Uranium Project in Wyoming, USA which are in transition from an alkaline to a low pH in-situ recovery operation. The Lance Project requires low upfront capital and can rapidly restart post a Final Investment Decision. PEN is the only ASX company with direct exposure to US Government initiatives which are pro-domestic mine development.



Source: FactSet



Source: FactSet

Financial Year End: 30 June

Investment Summary (AUD)	FY20A	FY21A	FY22E	FY23E	FY24E
EPS (Reported) (cps)	**(1.4)**	**(0.2)**	**0.1**	**(0.4)**	**0.3**
EPS (Underlying) (cps)	**(1.4)**	**(0.2)**	**0.1**	**(0.4)**	**0.3**
EPS (Underlying) Growth (%)	91.9%	81.9%	121.9%	nm	174.1%
PE (Underlying) (x)	**(5.3)**	**(68.7)**	**nm**	**(49.2)**	**66.4**
EV / EBIT (x)	**(83.7)**	**(185.5)**	**407.0**	**(41.0)**	**50.5**
EV / EBITDA (x)	**(84.9)**	**(185.5)**	**407.0**	**(74.3)**	**17.9**
DPS (cps) (AUD)	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Franking (%)	0%	0%	0%	0%	0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Free Cash Flow Yield (%)	(20.0%)	(10.9%)	1.4%	(3.2%)	(1.4%)

Profit and Loss (AUD) (m)	FY20A	FY21A	FY22E	FY23E	FY24E
Sales	6	10	24	15	47
Sales Growth (%)	*(7.8%)*	*60.8%*	*144.0%*	*(37.5%)*	*216.3%*
Other Operating Income	1	1	0	0	0
EBITDA	**(2)**	**(1)**	**0**	**(2)**	**9**
EBITDA Margin (%)	*(31.6%)*	*(9.0%)*	*1.7%*	*(14.7%)*	*19.3%*
Depreciation & Amortisation	0	0	0	(2)	(6)
EBIT	**(1.9)**	**(0.9)**	**0.4**	**(4.0)**	**3.2**
EBIT Margin (%)	*(32.1%)*	*(9.0%)*	*1.7%*	*(26.7%)*	*6.9%*
Net Interest	(4)	0	0	0	(0)
Pretax Profit	(6)	(1)	1	(4)	3
Minorities	0	0	0	0	0
NPAT Underlying	**(6)**	**(1)**	**1**	**(4)**	**3**
Significant Items	1	1	0	0	0
NPAT Reported	**(7)**	**(2)**	**1**	**(4)**	**3**

Cashflow (AUD) (m)	FY20A	FY21A	FY22E	FY23E	FY24E
EBIT	(2)	(1)	0	(4)	3
Tax Paid	(0)	0	(0)	0	0
Net Interest	(2)	(0)	0	0	(0)
Change in Working Capital	0	(9)	2	0	(2)
Depreciation & Amortisation	0	0	0	2	6
Other	(4)	(7)	0	0	0
Operating Cashflow	**(8)**	**(17)**	**2**	**(2)**	**7**
Capex	(0)	(0)	0	(5)	(10)
Acquisitions and Investments	0	0	0	0	0
Disposal of Fixed Assets/Investments	0	0	0	0	0
Other	(0)	0	(2)	(2)	(2)
Investing Cashflow	**(0)**	**(0)**	**(2)**	**(7)**	**(12)**
Free Cashflow	**(8)**	**(17)**	**2**	**(6)**	**(3)**
Equity Raised / Bought Back	31	11	0	20	0
Dividends Paid	0	0	0	0	0
Change in Debt	(16)	1	0	10	0
Other	(0)	0	0	0	0
Financing Cashflow	**15**	**12**	**0**	**30**	**0**
Exchange Rate Effect	0	0	0	0	0
Net Change in Cash	**7**	**(5)**	**0**	**22**	**(5)**

Balance Sheet (AUD) (m)	FY20A	FY21A	FY22E	FY23E	FY24E
Cash	12	7	7	29	24
Accounts Receivable	1	11	2	1	4
Inventory	0	0	2	1	3
Other Current Assets	3	7	7	7	7
PPE	19	19	19	21	24
Total Assets	**82**	**92**	**87**	**112**	**118**
Accounts Payable	1	7	2	1	4
Short Term Debt	1	1	0	0	0
Long Term Debt	0	0	1	11	11
Total Liabilities	**15**	**24**	**18**	**27**	**30**
Total Shareholder Equity	**67**	**78**	**78**	**94**	**97**

Ratios	FY20A	FY21A	FY22E	FY23E	FY24E
ROE (%)	(14.1%)	(3.2%)	0.7%	(4.4%)	3.1%
Gearing (%)	(20.0%)	(8.4%)	(9.0%)	(24.0%)	(16.2%)
Net Debt / EBITDA (x)	5.9	6.9	(16.3)	8.4	(1.5)
Price to Book (x)	0.9	2.2	2.2	2.1	2.1

Peninsula Energy financial summary

Profit & Loss (US$m)	FY20	FY21	FY22f	FY23f	FY24f
Revenue	6.1	9.8	23.9	14.9	47.1
Expenses	-8.0	-10.7	-23.4	-17.1	-38.0
Underlying EBITDA	**-1.9**	**-0.9**	**0.4**	**-2.2**	**9.1**
Depreciation & Amort	0.0	0.0	0.0	-1.8	-5.9
Underlying EBIT	**-1.9**	**-0.9**	**0.4**	**-4.0**	**3.2**
Net Interest	-4.2	0.0	0.1	0.2	-0.2
Profit Before Tax	**-6.2**	**-0.9**	**0.5**	**-3.8**	**3.0**
Tax	-1.5	-0.5	0.0	0.0	0.0
NPAT (Underlying)	**-7.7**	**-1.4**	**0.5**	**-3.8**	**3.0**
Exceptional items	0.0	0.0	0.0	0.0	0.0
NPAT (reported)	**-7.7**	**-1.4**	**0.5**	**-3.8**	**3.0**
Minorities	0.0	0.0	0.0	0.0	0.0
Attributable NPAT	**-7.7**	**-1.4**	**0.5**	**-3.8**	**3.0**

Balance Sheet (US$m)	FY20	FY21	FY22f	FY23f	FY24f
Cash	11.9	6.7	7.2	29.1	24.3
Net Receivables	0.6	10.8	2.0	1.2	3.9
Other	3.8	8.0	9.1	8.5	10.7
Current Assets	**16.3**	**25.5**	**18.2**	**38.8**	**38.9**
Property, Plant & Equipment	18.8	18.7	18.7	21.0	23.8
Other	47.1	57.1	59.1	61.6	64.6
Non Current Assets	**66.0**	**75.9**	**77.9**	**82.6**	**88.3**
Total Assets	**82.3**	**101.3**	**96.1**	**121.4**	**127.3**
Trade Creditors	1.2	7.4	2.1	1.2	4.1
Borrowings	0.6	0.6	0.0	0.0	0.0
Other	0.8	0.8	0.8	0.8	0.8
Current Liabilities	**2.5**	**8.8**	**2.9**	**2.0**	**4.9**
Borrowings	0.0	0.0	0.6	10.6	10.6
Other	12.9	14.8	14.4	14.4	14.4
Non Current Liabilities	**12.9**	**14.9**	**15.0**	**25.0**	**25.0**
Net Assets	**66.9**	**77.7**	**78.2**	**94.4**	**97.4**
Shareholder Capital	240.6	252.5	252.5	272.5	272.5
Retained earnings	-180.3	-181.7	-181.2	-185.0	-181.9
Minorities/others	6.5	6.9	6.9	6.9	6.9
Total Equity	**66.9**	**77.7**	**78.2**	**94.4**	**97.4**

Cash Flow (US$m)	FY20	FY21	FY22f	FY23f	FY24f
Receipts	7.5	3.4	23.9	14.9	47.1
Payments	-13.9	-11.5	-23.4	-17.1	-38.0
Other Operating Cash Flow	-1.6	-9.2	2.1	0.6	-2.2
Operating Cash Flow	**-8.0**	**-17.3**	**2.5**	**-1.6**	**6.9**
Capex	-0.1	-0.2	0.0	-4.5	-9.6
Other Investing Cash Flow	0.1	0.0	-2.0	-2.0	-2.0
Investing Cash Flow	**-0.1**	**-0.2**	**-2.0**	**-6.5**	**-11.6**
Net Equity raised	31.3	11.4	0.0	20.0	0.0
Dividends Paid	0.0	0.0	0.0	0.0	0.0
Net Borrowings	-16.4	0.5	0.0	10.0	0.0
Financing Cash flow	**14.7**	**11.9**	**0.0**	**30.0**	**0.0**
Total Cash Change	6.7	-5.6	0.5	21.9	-4.7

Company Information	
Financial Year End Date	30-Jun
Share Price (A$ps)	0.180
Market Capitalisation (A$m)	180
Valuation (A$m)	0.26
Target price (1.3x diluted valuation) (A$m)	0.34
Recommendation	Buy

Per Share Data (c)	FY20	FY21	FY22f	FY23f	FY24f
Shares (m)	882	996	997	1,154	1,154
Normalised EPS	-1.4	-0.2	0.1	-0.4	0.3
Dividends	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Book Value	0.08	0.08	0.08	0.08	0.08
P/E (x)	-3.5	-51.5	239.7	-36.3	49.5
EV/EBITDA (x)	-29.7	-64.9	142.4	-26.0	6.3

Valuation (fully diluted)	US$m	A$m	A$ps
Lance	128	170	0.13
Net debt	6	8	0.01
Exploration upside	96	128	0.09
Cash from FY23/FY25 raising	45	60	0.04
Corporate costs	-11	-15	-0.01
Total Valuation	**264**	**352**	**0.26**
Target price (1.3x diluted valuation)			**0.34**

Assumptions	FY20	FY21	FY22f	FY23f	FY24f
Prices					
A$/US$	0.67	0.75	0.72	0.72	0.73
U_3O_8 (US$/lb)	28	31	46	67	72

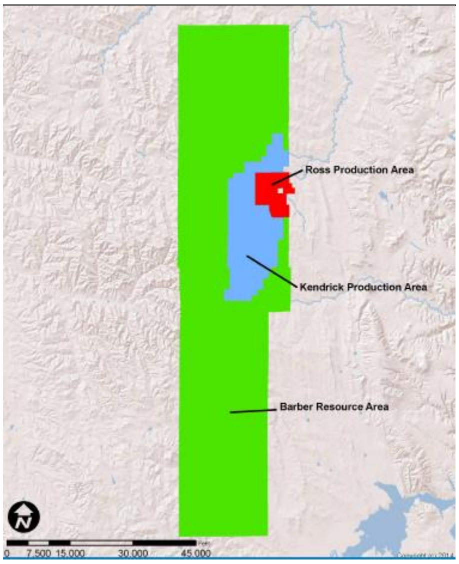
Operating Metrics	FY20	FY21	FY22f	FY23f	FY24f
Ore processed (ktpa)	0	0	0	0	500
Average grade (ppm)	0	0	0	0	470
U_3O_8 sold (Mlb)	0.2	0.5	0.5	0.2	0.7
C1 cost (US$/lb)	0	0	0	35	36
Average price (US$/lb)	n/a	n/a	n/a	n/a	n/a
Average cost (US$/lb)	n/a	n/a	n/a	n/a	n/a
Average margin (US$/lb)	n/a	n/a	n/a	n/a	n/a

Financial metrics (%)	FY20	FY21	FY22f	FY23f	FY24f
EBITDA margin	-31.6%	-9.0%	1.7%	-14.7%	19.3%
EBIT margin	-32.1%	-9.0%	1.7%	-26.7%	6.9%
ROIC	-2.5%	-0.9%	0.4%	-3.7%	2.7%
Return on Assets	-9.3%	-1.5%	0.5%	-3.5%	2.4%
Return on Equity	-13.1%	-1.9%	0.7%	-4.4%	3.2%

Balance sheet metrics	FY20	FY21	FY22f	FY23f	FY24f
Net Debt (m)	-11	-6	-7	-18	-14
ND / ND+E	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Company reports, Shaw and Partners analysis

Figure 1: Lance Projects production areas



Source: Company reports, Shaw analysis

Lance Projects overview

The Lance Projects, broken into the Ross, the Kendrick and the Barber deposits (Figure 1), are located on the north-east flank of the Powder River Basin in Wyoming. They are a series of in situ recovery (ISR) deposits.

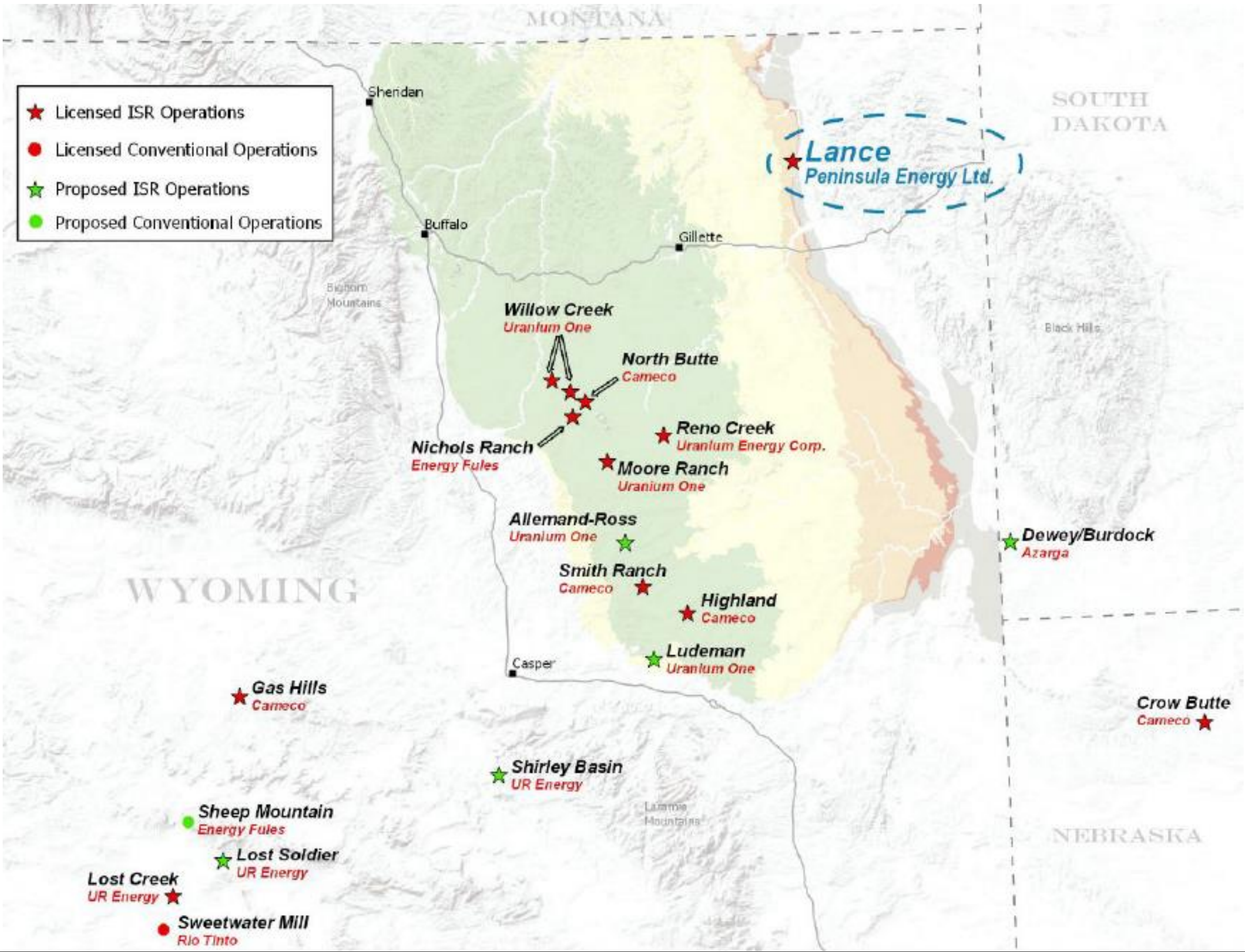
In-situ leach mining operations are for sandstone-hosted uranium deposits located below the water table in a confined aquifer. The uranium is dissolved in acid or alkali injected into and recovered from the aquifer by means of wells. In 2019 approximately 57% of global uranium production was via in-situ leach operations (vs 2000 15%). The increase over the past 20 years is largely due to the rise of Kazakh in-situ production (43% of 2019 production).

Lance started producing from the Ross unit in December 2015. Alkane based operations were idled in July 2019 after ~350klbs U_3O_8 had been mined - the company had ongoing difficulties in maximising recoveries.

Since then, PEN has focused its efforts on a transition to low pH operations, which have the potential to recover a higher percentage of uranium. Low pH recoveries are typically in the range of 70-90% vs 60-70% for alkali. The 2022 Ross and Kendrick DFS study conservatively assumes a 66% Resource recovery.

Figure 2: Powder River Basin, Wyoming, USA

The Powder River Basin in Wyoming, USA was discovered to host uranium in 1951. Deposits were found along a 60-mile trend, and a total of 190Mlbs of U_3O_8 has been produced from this region since first production in 1953.



Source: Company reports

Lance Projects Mineral Resource and technical updates

The 2022 DFS incorporates operational parameters observed in the MU1A Low-pH Field Demonstration, which took place between Sep-20q and Dec-21q. The DFS includes updated:

- Uranium grade and recovery curves (more conservative),
- ISR/well pattern design parameters (slightly narrower spacing), and
- process designs and reagent requirement models i.e.
    - Rates of acidification/ consumption - slightly less sulphuric acid consumption.
    - Strength of oxidants required - hydrogen peroxide used instead of gaseous oxygen.

Figure 3: The Ross Process Plant at the Lance Projects, Wyoming USA

Source: Company reports

Figure 4: Lance Projects Mineral Resource, cut-off 200ppm U_3O_8

The first 5 years of production of PEN's Ross and Kendrick DFS can be sourced almost entirely from Measured and Indicated Resources. We note there is an assumed overall resource recovery of 66% and a resource conversion of 61% to convert the Ross and Kendrick Area Inferred resources to Indicated or greater quality.

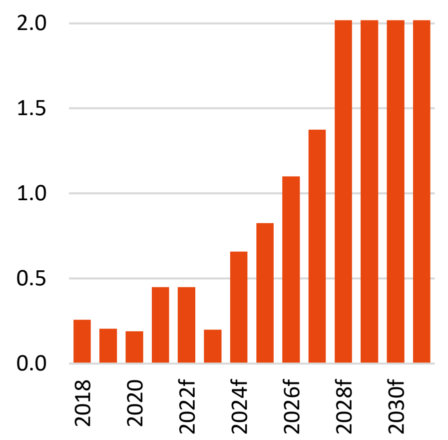
There is a low level of geological confidence associated with Inferred Mineral resources, which is mostly comprised of the Barber Resource (~70% of the resource base). The Barber Resource is not included in the 2022 DFS. We note Exploration upside in the area was previously assessed to be 50-150Mlbs (2015).

Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.4	1.7	489	3.7
Indicated	11.1	5.5	496	12.1
Inferred	36.2	17.2	474	37.8
Total	**50.7**	**24.4**	**480**	**53.6**

Project Area	Commence Production	Estimated Resources (lbs U_3O_8) (1)	Estimated Production (lbs U_3O_8) (2)
Ross	Year 0	5,882,000	4,104,000
Kendrick	Year 2	15,930,000	10,247,000
DFS Area	**Sub-Total**	**21,812,000**	**14,351,000**
Barber Resource(3)	N/A	31,859,000	N/A
Lance Projects	**Total**	**53,672,000**	**N/A**

Source: Company reports

Figure 5: Lance U_3O_8 Sales (Mlbs)



Source: Company reports, Shaw analysis

Lance Projects financial model updates

We have updated our model of Lance Projects broadly in line with the company's DFS assumptions. Key assumptions in our model include:

- An estimated LOM production of 16Mbls over 14 years.
- Stage 1 production of 0.8Mlbs/yr (end CY23) and a second stage production at steady state from year 4 (FY28) of 2Mbls.
- All-in Sustaining Cash Costs (AISC) of US$39/lb and All-in-Costs (AIC) of US$46/lb.
- Life-of-Mine Capex of US$290m, comprised of:
  - Stage 1 Upfront Capex of US$9m and Stage 2 Upfront Capex of US$70m.
  - Stage 1 Sustaining Capex of US$16m and Stage 2 Sustaining Capex of US$195m.
- Restoration costs of US$50m.
- Exploration/ Resource upside of US$3/lb for the Barber Resource. This is in line with the modelling methodology we use for PEN's peers.
- We assume a multi-year realised price spike at US$70/lb for PEN (i.e. US$70/lb realised includes the exiting contract book), before settling to our long-term U_3O_8 realised price assumption of US$65/lb (2022 Real) in 2028 (vs PEN realised pricing of US$62/lb).

Following DFS updates, we believe the Lance Projects is NPV positive at an average weighted U_3O_8 price of US$53/lb. Using our base case U_3O_8 deck, the project has a post-tax NPV_{10} of US$128m. This is in line with the company's pre-tax NPV_8 of US$125m and an IRR of 43%.

Figure 6: Lance financial model (US$m)

Lance (US$m)	2020	2021	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Uranium extraction (kt)		0	0	0	500	900	1,200	1,500	2,200	2,200	2,200
Grade (ppm)		0	0	0	470	470	470	470	470	470	470
U3O8 (Mlb) - sold		0.5	0.5	0.2	0.7	0.8	1.1	1.4	2.0	2.0	2.0
Revenue		12	24	15	47	60	82	105	150	153	157
Expenses		10	15	9	30	38	52	44	65	66	68
EBITDA		2	8	6	17	22	31	61	85	87	89
D&A		0	0	2	6	7	10	12	18	18	18
EBIT		2	8	4	12	15	21	49	67	69	71
Net Operating Assets	66	66	66	69	72	95	148	152	159	171	184
Capex	0	0	0	5	10	29	63	17	25	30	31
EBITDA Margin (%)	0%	0%	0%	40%	37%	37%	37%	58%	57%	57%	57%
EBIT / Assets (%)	0%	0%	0%	6%	16%	16%	14%	32%	42%	40%	39%
Realised U3O8 (US$/lb)	28	31	46	67	72	73	75	77	74	76	78
AUD/USD	0.67	0.75	0.72	0.72	0.73	0.74	0.74	0.74	0.74	0.74	0.74
Revenue (A$/lb)				75	72	73	75	77	74	76	78
Expenses (A$/lb)				45	45	46	47	32	32	33	34
EBITDA (A$/lb)				30	27	27	28	45	42	43	44
D&A (A$/lb)				9	9	9	9	9	9	9	9
EBIT (A$/lb)				21	18	18	19	36	33	34	35
Nominal Tax @ 21%	0	0	0	0	0	0	0	0	0	-21	-21
Non-cash inventory movement	0	0	0	0	0	0	0	0	0	0	0
Cash Flow	0	2	8	1	8	-7	-32	45	60	36	37

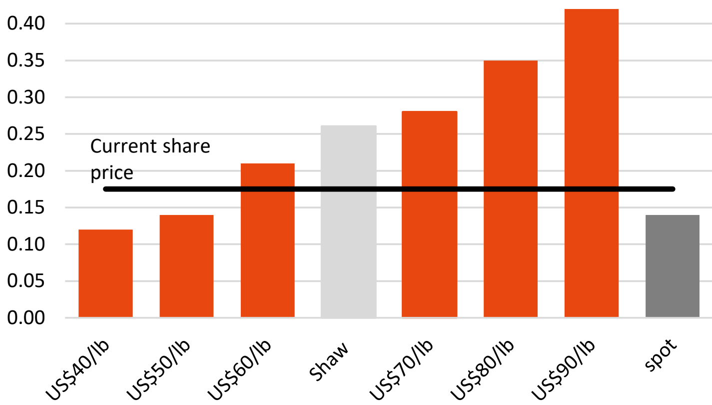
Source: Company reports, Shaw analysis

Figure 7: PEN valuation (fully diluted)

Peninsula Energy Valuation - diluted	US$m	A$m	A$ps
Lance	128	170	0.13
Net debt	6	8	0.01
Exploration upside	96	128	0.09
Cash from FY23/FY25 raising	45	60	0.04
Corporate costs	-11	-15	-0.01
Total Valuation	**264**	**352**	**0.26**
Target price (1.3x diluted valuation)			**0.34**

Source: Company reports, Shaw and Partners analysis

Figure 8: PEN valuation sensitivity (A$ps)



Source: Company reports, Shaw and Partners analysis

Figure 9: PEN cash flow (US$m)

CASH FLOW (US$m)	2019	2020	2021	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Operating activities												
Receipts from customers	8	7	3	24	15	47	60	82	105	150	153	157
Payments to suppliers and employe	-15	-14	-11	-23	-17	-38	-46	-60	-53	-74	-76	-77
Income taxes paid	0	0	0	0	0	0	0	0	0	0	0	-18
Working capital movement	0	0	-9	2	0	-2	-1	-1	-4	-4	0	0
Other	0	-1	0	0	0	0	0	0	-1	-1	1	3
Net cash flow from operating activities	**-7**	**-8**	**-17**	**2**	**-2**	**7**	**13**	**20**	**46**	**71**	**78**	**63**
Investing activities												
Payments for PPE	0	0	0	0	-5	-10	-29	-63	-17	-25	-30	-31
Other	2	0	0	-2	-2	-2	-2	-2	-2	-2	-2	-2
Net cash flow from investing activities	**2**	**0**	**0**	**-2**	**-7**	**-12**	**-31**	**-65**	**-19**	**-27**	**-32**	**-33**
Free cash flow	**-8**	**-8**	**-17**	**2**	**-6**	**-3**	**-16**	**-42**	**30**	**46**	**48**	**32**
Financing activities												
Net proceeds from issue of shares	0	31	11	0	20	0	25	0	0	0	0	0
Proceeds from borrowings	0	1	1	0	10	0	25	0	0	0	0	0
Repayments of borrowings	-1	-17	0	0	0	0	0	0	0	-10	-10	-10
Dividends paid	0	0	0	0	0	0	0	0	0	0	0	-5
Other	-1	0	0	0	0	0	0	0	0	0	0	0
Net cash flow from financing activities	**-1**	**15**	**12**	**0**	**30**	**0**	**50**	**0**	**0**	**-10**	**-10**	**-15**
Net increase/(decrease) in cash	-7	7	-6	0	22	-5	32	-44	28	34	36	16

Source: Company reports, Shaw analysis

Figure 10: PEN balance sheet (US$m)

In our base case modelling we assume that the company will recapitalise in two stages:

- FY23 - raise ~A$27m (US$20m) equity at a share price of A$0.17ps and ~A$14m (US$10m) of debt (project finance) to fund stage 1 of the restart (0.8Mlb/yr).
- FY25 – raise ~A$35m (US$25m) equity at a share price of A$0.17ps and ~A$35m (US$25m) of additional debt in order to ramp up operations through Stage 2 of the re-start (2Mlb/yr). We have not modelled any prepayments, but this is an option for the company given PEN has an existing contract book.

BALANCE SHEET (US$m)	2019	2020	2021	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Cash and cash equivalents	5	12	7	7	29	24	56	12	40	74	110	125
Trade and other receivables	1	1	11	2	1	4	5	7	9	12	13	13
Other	4	4	8	9	9	11	12	13	15	18	18	18
Total current assets	**10**	**16**	**25**	**18**	**39**	**39**	**73**	**32**	**63**	**104**	**140**	**156**
Property, plant and equipment	19	19	19	19	21	24	43	90	92	97	106	116
Exploration and evaluation expendi	0	0	0	2	4	6	8	10	12	14	16	18
Other	41	47	57	57	58	59	61	68	69	72	75	78
Total non-current assets	**60**	**66**	**76**	**78**	**83**	**88**	**112**	**168**	**174**	**183**	**197**	**212**
TOTAL ASSETS	**70**	**82**	**101**	**96**	**121**	**127**	**185**	**199**	**237**	**287**	**337**	**368**
Trade and other payables	2	1	7	2	1	4	5	7	6	9	9	9
Borrowings	16	1	1	0	0	0	0	0	10	10	10	6
Other	1	1	1	1	1	1	1	1	1	1	1	1
Total current liabilities	**19**	**2**	**9**	**3**	**2**	**5**	**6**	**8**	**17**	**20**	**20**	**16**
Deferred tax	0	2	2	2	2	2	2	2	2	2	20	21
Borrowings	0	0	0	1	11	11	36	36	26	16	6	0
Other	11	11	13	13	13	13	13	13	13	13	13	13
Total non-current liabilities	**11**	**13**	**15**	**15**	**25**	**25**	**50**	**50**	**40**	**30**	**38**	**34**
TOTAL LIABILITIES	**30**	**15**	**24**	**18**	**27**	**30**	**56**	**58**	**57**	**50**	**58**	**49**
NET ASSETS	**41**	**67**	**78**	**78**	**94**	**97**	**129**	**141**	**180**	**237**	**279**	**319**
Net debt	11	-11	-6	-7	-18	-14	-20	24	-4	-48	-94	-120
Gearing (ND/ND+E %)	21%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%

Source: Company reports, Shaw analysis

Key risks

As a small mining company broadly exposed to a single commodity and a single asset we consider an investment in Peninsula Energy to be high risk. The key risks include;

- The U_3O_8 market is relatively opaque and difficult to forecast. The actual uranium price may differ substantially from our forecasts.
- Operations for PEN have not yet started and there is a risk that they may be unable to bring Lance Projects to production in line with expectations. Costs may be higher and operations may not be as expected.
- Resource risks - PEN's 2022 Ross and Kendrick DFS assumes an overall resource recovery of 66% and a resource conversion of 61% to convert the Ross and Kendrick Area Inferred resources to Indicated or greater quality.
- PEN will need to recapitalise to fund the commencement of operations. There is a risk that capital markets are not willing to fund the project.
- Forecasting future operating costs has considerable uncertainty. Our forecasts may prove to be too optimistic. If each company's costs are higher than we expect then our cash flow forecasts will be too high.
- Smaller companies carry more significant 'key personnel' risk than larger organisations. If senior management depart it could delay projects or exacerbate operational risks.
- Safe and reliable production from operations once projects are operational. The inability to maintain safe and reliable operations may result in a sustained, unplanned interruption to production and impact the company's licence to operate and financial performance. Production facilities are subject to operating hazards associated with major accident events, cyber-attack, inclement weather and disruption to supply chain, that may result in a loss of uranium (radioactive material) containment, harm to personnel, environmental damage, diminished production, additional costs, and impacts to reputation or brand.

Core drivers and catalyst

- In our view PEN's flagship Lance Projects in Wyoming, USA, requires low upfront capital and can rapidly restart post a Final Investment Decision. PEN is the only ASX company with direct exposure to US Government initiatives which are pro-domestic mine development. We have a A$0.34ps price target which is based on a 1.3x multiple of our base case valuation.
- PEN has an existing contract book and product inventory, with a binding purchase agreement netting a cash margin of US$7.8m in CY2021 (450klbs) and >US$9m in CY22 (450klbs). The company has long-term sales contracts extending to 2030, up to 4.8Mlbs at US$56-58/lb U_3O_8 with major utilities across Europe and the US.
- The company is looking to switch operations from high to low pH in order to increase product yields. The results of the 18-month field demonstration, which completed Dec21q (uranium average grades ~60-70ppm and peak grades ~150ppm) suggest that the targeted low-pH chemistry and field patterns are effective in dissolving and recovering uranium.
- The company released a Definitive Feasibility Study in Aug22 which details a Lance Projects NPV_8 (pre-tax) of US$125m and 43% IRR at an average U_3O_8 price of US$62/lb. Other components include:
    - a life of mine (LOM) of 14 years with a plateau production of 2.0Mlbs/yr,
    - upfront capital expenditure of ~US$80m (US$9m for Stage 1 and US$70m for Stage 2), and
    - an estimated All-in Cost (AIC) of US$46/lb U_3O_8 over LOM.
    - Our post-tax NPV_{10} of US$128m is in line with the DFS.
- PEN believes it is on track for a Lance Projects Final Investment Decision this half, commissioning and ramp-up early next year, before steady state Stage 1 production of 0.8Mlbs by end CY23 /early CY24 and a continued ramp-up to 2.0Mlbs in the ensuing years.
- Strong balance sheet – the company is term debt free with an unrestricted net cash balance of US$8m (end Jun22q, + 300klbs uranium inventory with a market value ~US$15m). In our view PEN is fully funded to meet all early preparatory works for the Lance Projects restart into CY23.
- In our view there are two key advantages to PEN's project being located in Wyoming, USA:
    - The Powder River Basin in Wyoming is in an established uranium and mining jurisdiction (uranium mining for ~70 years and coal mining for ~150 years).
    - The company has direct exposure to the US Government uranium purchase programme and the US Nuclear Fuel Working Group.

Rating Classification

Buy	Expected to outperform the overall market
Hold	Expected to perform in line with the overall market
Sell	Expected to underperform the overall market
Not Rated	Shaw has issued a factual note on the company but does not have a recommendation

Risk Rating

High	Higher risk than the overall market – investors should be aware this stock may be speculative
Medium	Risk broadly in line with the overall market
Low	Lower risk than the overall market

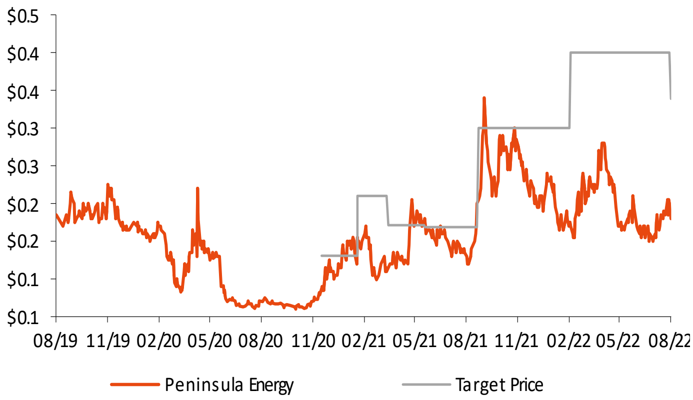
RISK STATEMENT: Where a company is designated as 'High' risk, this means that the analyst has determined that the risk profile for this company is significantly higher than for the market as a whole, and so may not suit all investors. Clients should make an assessment as to whether this stock and its potential price volatility is compatible with their financial objectives. Clients should discuss this stock with their Shaw adviser before making any investment decision.

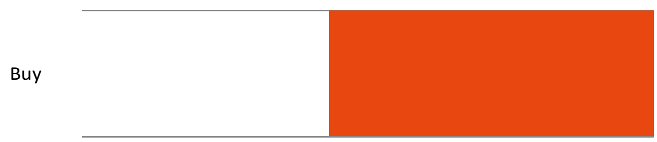
Distribution of Investment Ratings

Rating	Count	Recommendation Universe
Buy	110	89%
Hold	12	10%
Sell	1	1%

History of Investment Rating and Target Price - Peninsula Energy

Date	Closing Price ($)	Target Price ($)	Rating
15-Aug-22	0.18	0.34	Buy
17-Feb-22	0.17	0.40	Buy
5-Sep-21	0.20	0.30	Buy
2-Jun-21	0.18	0.17	Buy
29-Mar-21	0.12	0.17	Buy
2-Feb-21	0.16	0.21	Buy
30-Nov-20	0.08	0.13	Buy





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