Sprott | Equity Research

Energy Transition Metals

Uranium Energy Corp (UEC US)

Initiation: Supplanting Cameco as the go-to uranium stock

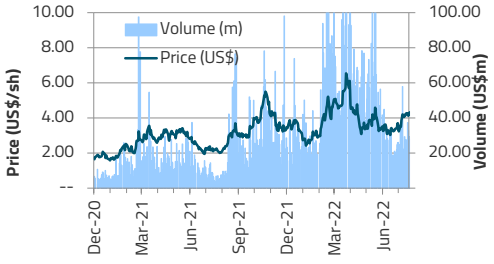
RECOMMENDATION: **BUY** *PRICE TARGET:* **US$7.00/sh** *RISK RATING:* **HIGH**

SHARE DATA	**US$3.82/sh**
Shares (basic, FD)	367 / 378
52-week high/low	6.54 / 2.42
Market cap (US$m)	1402.2
Net cash (debt) (US$m)	75
1.0xNAV7%(US$m)	2,168
1.0xNAV7% FD (US$/sh)	US$5.74
P/NAV (x)	0.67x
Average daily value (US$m, 3M)	33.21

FINANCIALS	**FY23E**	**FY24E**	**FY25E**
Texas production (Mlbs)	-	-	0.6
Wyoming production (Mlbs)	-	0.5	1.3
Uranium Purchases (Mlbs)	1.7	0.9	0.6
Uranium Sales (Mlbs)	2.8	2.1	2.5
Revenue (US$m)	**159**	**127**	**151**
Cash cost (US$/lb)	33.6	41.7	25.4
AISC (US$/lb)	40.8	53.1	43.0
EBITDA (US$m)	**45.9**	**18.1**	**59.8**
EBITDA margin (%)	*29%*	*14%*	*40%*
EV/EBITDA (x)	21.5x	54.2x	16.1x
Income (US$m)	44.3	12.5	36.5
EPS (US$/sh)	0.13	0.03	0.10
PER (x)	28.3x	111.8x	38.4x
CFPS (US$/sh)	0.20	0.04	0.16
P/CF (x)	14.6x	18.4x	17.8x

NAV over time	**Today**	**FY23E**	**FY24E**
1xNAV7 FD (US$/sh)	4.93	5.51	5.29
ROI to 1xNAV (% pa)	29%	20%	11%

SOTP 1xNAV7% US$60/lb U3O8	**US$m**	**US$/sh**
Texas ISR	288	0.76
Wyoming ISR	488	1.29
Roughrider	350	0.93
Other in-situ + exploration	899	2.38
Central SG&A & fin costs 4Q21	(38)	(0.10)
Net cash + options + inventory	182	0.48
TOTAL	**2,168**	**5.74**



Source: SCPe, Factset and Bloomberg market data

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North America's largest pure play uranium inventory

Since the mid-2000s, Uranium Energy Corp (UEC) has been one of the leading uranium developers and producers, initially focused on its Texas ISR assets. Recent years have seen transformational M&A which has seen UEC diversify to Wyoming and Saskatchewan, with a ~266Mlb resource base (excl its minority stakes in Canadian assets) that includes fully permitted US ISR assets in WY and TX capable of producing up to 6.5Mlbs, and a >3,000km^2 land position and 146Mlb resource base in the world class Athabasca basin.

Targeting Cameco's vacated role as the go-to uranium pure play

With long time bell weather Cameco now diversified into downstream services, we think UEC is well poised to replace Cameco as the go-to uranium pure play for large institutions. Key attractions include its US listing, diversification with US ISR and high grade Athabasca projects, permitted assets in safe jurisdictions, physical uranium on balance sheet, and >US$45m per day trading liquidity. While some investors may prefer either permitted production or big, high grade Athabasca projects, UEC's has the broadest appeal, which results in sector leading liquidity, making it an institutional hub for uranium investors.

US domestic production potential with permitted TX and WY assets

UEC has the best domestic US ISR portfolio in our view, with permitted assets in Wyoming (89Mlbs) and Texas (19Mlbs), and hard rock assets in NM and AZ. Both the WY and TX hub and spoke projects have existing processing plants, permitted wellfields and operating permits for a combined 6.5Mlbs per year (~14-16% of US domestic demand). With US$93m of cash and liquid assets (incl 0.8Mlbs of U_3O_8), UEC is permitted and well-funded with a further 3.1Mlbs at US$42/lb of committed purchases to add to its exposure.

Athabasca portfolio brings UEC's aggressive approach to the basin

In addition to permitted domestic US assets, UEC has one of the largest portfolios in Saskatchewan's Athabasca basin, home the world's largest and highest grade uranium deposits. This includes the Roughrider project (historic 58Mlbs at 4.7% U_3O_8), which Rio Tinto acquired for US$640m in 2011 (beating out Cameco), 49% of the 95Mlb at 1.3% U_3O_8 Shea Creek project, and a 15% share of Cameco's 105Mlb at 2.6% U_3O_8 Millennium project. In addition, UEC has >3,000km^2 of exploration holdings in prolific exploration areas. We think UEC can bring greater value out of these assets with its strong balance sheet and aggressive approach.

Initiate with Buy rating and US$7.00/sh 1.2xNAV$_{7\%}$ price target

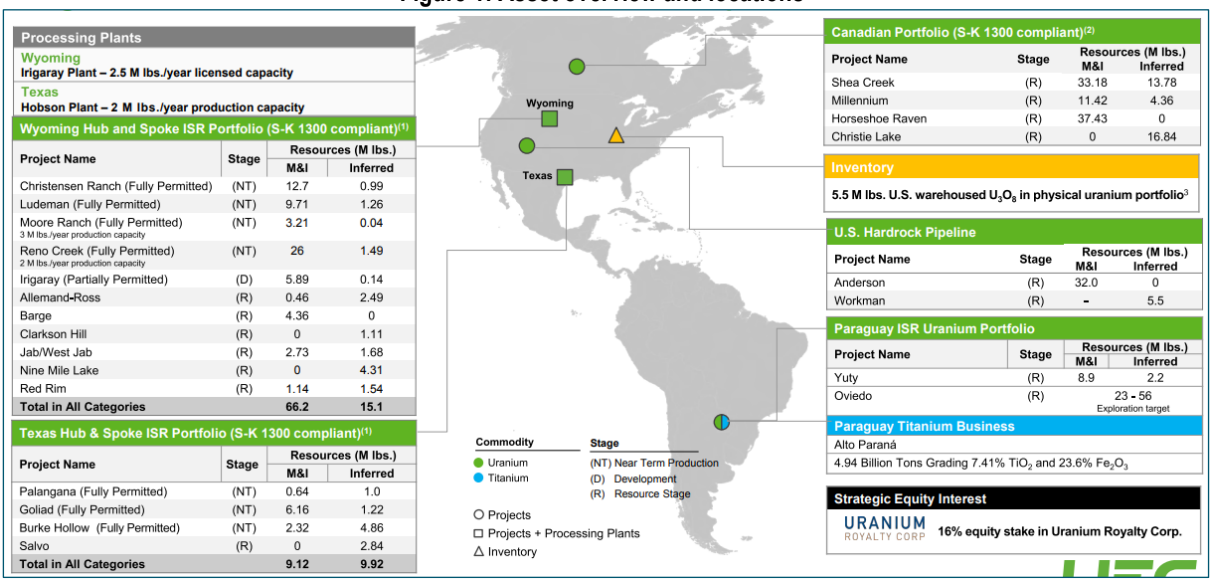
We value UEC using a combination of SOTP DCF and EV/in-situ valuation. We value the Texas and Wyoming ISR assets using NPV$_{7\%\text{-}60/lb}$, and the other assets at US$2.0-6.0/lb. Adding in cash and liquid assets, we generate a US$2,280m NAV and US$5.74/sh FD/FF NAVPS estimate to which we apply a 1.2x NAV multiple for US premium, liquidity premium, and management.

Replacing Cameco as the premier pure play uranium investment vehicle

Overview of company

Uranium Energy Corp (UEC) is a Vancouver headquartered uranium company with high grade conventional development assets in the Athabasca, Saskatchewan; and in-situ recovery assets in Texas and Wyoming. The company's 266Mlb uranium resource base is one of the largest in North America, is diversified amongst premier uranium districts, and is supplanted by 0.8Mlbs of U_3O_8 warehoused in the US, and 3.1Mlbs of purchase agreements. In addition to the assets, what makes UEC stand out is its strong US investor following, its market leading daily liquidity, and CEO Amir Adnani and the team's ability to leverage strong investor support to build the asset portfolio with accretive transactions such as the 2021 acquisition of Uranium One's 81Mlb Wyoming ISR portfolio, and the 2022 acquisition of UEX Corp's 115Mlb Saskatchewan assets and Rio Tinto's Roughrider project.

Figure 1: Asset overview and locations



Processing Plants

Wyoming
Irigaray Plant – 2.5 M lbs./year licensed capacity

Texas
Hobson Plant – 2 M lbs./year production capacity

Wyoming Hub and Spoke ISR Portfolio (S-K 1300 compliant)[1]

Project Name	Stage	Resources (M lbs.) M&I	Inferred
Christensen Ranch (Fully Permitted)	(NT)	12.7	0.99
Ludeman (Fully Permitted)	(NT)	9.71	1.26
Moore Ranch (Fully Permitted) 3 M lbs./year production capacity	(NT)	3.21	0.04
Reno Creek (Fully Permitted) 2 M lbs./year production capacity	(NT)	26	1.49
Irigaray (Partially Permitted)	(D)	5.89	0.14
Allemand-Ross	(R)	0.46	2.49
Barge	(R)	4.36	0
Clarkson Hill	(R)	0	1.11
Jab/West Jab	(R)	2.73	1.68
Nine Mile Lake	(R)	0	4.31
Red Rim	(R)	1.14	1.54
Total in All Categories		**66.2**	**15.1**

Texas Hub & Spoke ISR Portfolio (S-K 1300 compliant)[1]

Project Name	Stage	Resources (M lbs.) M&I	Inferred
Palangana (Fully Permitted)	(NT)	0.64	1.0
Goliad (Fully Permitted)	(NT)	6.16	1.22
Burke Hollow (Fully Permitted)	(NT)	2.32	4.86
Salvo	(R)	0	2.84
Total in All Categories		**9.12**	**9.92**

Canadian Portfolio (S-K 1300 compliant)[2]

Project Name	Stage	Resources (M lbs.) M&I	Inferred
Shea Creek	(R)	33.18	13.78
Millennium	(R)	11.42	4.36
Horseshoe Raven	(R)	37.43	0
Christie Lake	(R)	0	16.84

Inventory

5.5 M lbs. U.S. warehoused U_3O_8 in physical uranium portfolio[3]

U.S. Hardrock Pipeline

Project Name	Stage	Resources (M lbs.) M&I	Inferred
Anderson	(R)	32.0	0
Workman	(R)	-	5.5

Paraguay ISR Uranium Portfolio

Project Name	Stage	Resources (M lbs.) M&I	Inferred
Yuty	(R)	8.9	2.2
Oviedo	(R)	23 - 56 Exploration target	

Paraguay Titanium Business

Alto Paraná

4.94 Billion Tons Grading 7.41% TiO_2 and 23.6% Fe_2O_3

Strategic Equity Interest

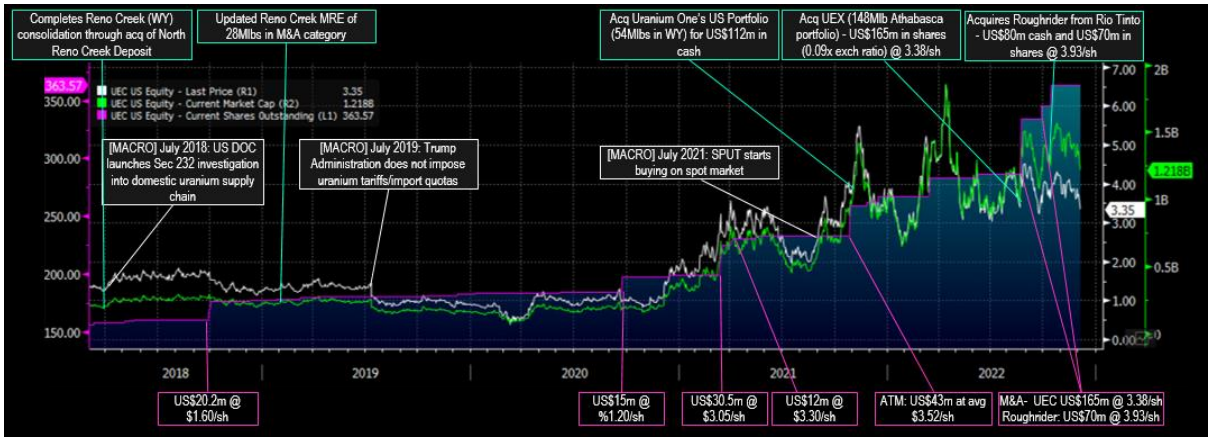
URANIUM ROYALTY CORP **16% equity stake in Uranium Royalty Corp.**

Source: Uranium Energy Corp

History – Stable management, past producer, well timed strategic decisions, growth through acquisition

UEC was founded by current CEO Amir Adnani in 2005, focused on uranium assets in the SW United States. In late 2009 UEC acquired the Palangana ISR asset and Hobson processing plant in South Texas, commenced production in November 2011. In just under two years, UEC produced ~530klbs at US$27/lb cash costs (incl royalties) but curtailed production in September 2013 when uranium fell below US$35/lb. In the low price period that followed, UEC first focused on resource growth and permitting (Goliad in 2012 and Burke Hollow in 2016) its Texas ISR portfolio, and as the market improved, acquisitions including Reno Creek (2017), Uranium One Americas (2021), UEC Corp (2022) and Rio Tinto's (formerly Hathor's) Roughrider project (2022).

Figure 2: Company history, share price performance and market cap



Source: Bloomberg, annotated by SCPe

Step 1: Best portfolio of US ISR assets in our view

We think UEC has the best portfolio of US ISR uranium assets due to size, grade, diversification and permitted status: it is the only company with fully permitted assets in more than one state, and has the largest contained resources. At 100Mlbs between its Wyoming and Texas assets it is the largest ISR portfolio, rivalled only by enCore Energy's 78Mlb portfolio which is spread between four projects. Texas (19Mlbs at 1,190ppm) has the second highest grade overall MRE among ISR projects and is 2x the contained lbs of Ur-Energy's Shirley Basin (9Mlbs at 2,300ppm). Wyoming (81Mlbs at 590ppm), is ready for restart with minimal capex, plus size and grade flexibility, including 55Mlbs at 740ppm in the higher grade deposits plus the larger but lower grade Reno Creek (28Mlbs at 400ppm) deposit. Below we detail US ISR projects held by developers. UEC's assets are near the top of our SCPe Permitted MRE Score (tonnes times grade adjusted for well and plant permitted status, see below) also the highest group permitted-MRE score (MRE score times 1x for permitted assets, 0.5x coefficient for unpermitted assets).

Figure 3: US ISR assets – UEC offers best combination of size, grade and permitted status

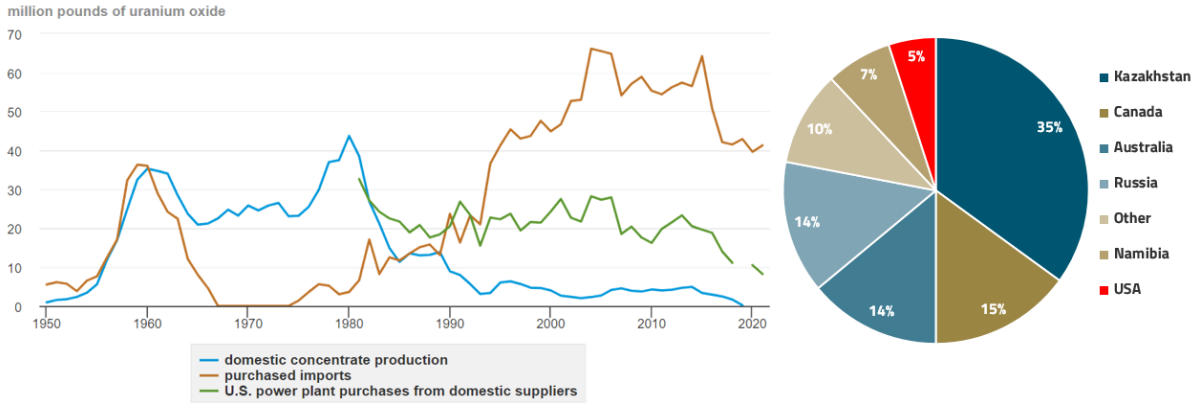
		Peers								SCPe UEC	
Asset	**Unit**	**Lance**	**Shirley Basin**	**Crownpoint**	**S Texas**	**Lost Creek**	**Dewey Burdock**	**Gas Hills**	***Peer avg***	**Wyoming**	**Texas Hub**
Location		Wyoming	Wyoming	New Mexico	Texas	Wyoming	South Dakota	Wyoming		Wyoming	Texas
Company		Peninsula	Ur-Energy	EnCore	EnCore	Ur-Energy	EnCore	EnCore		UEC	UEC
Study		DFS	PEA	MRE	MRE	PEA	PEA	PEA		MRE	MRE
Date		Aug 2022	Sep 2022	Mar 2022	Dec 2021	Sep 2022	Dec 2020	Aug 2021		Sep 2022	Sep 2022
U3O8 production rate	(Mlbs pa)	0.8	0.8	--	1.6	1.2	1.0	1.0	*1.4*	1.3	1.5
LOM U3O8 production	(Mlbs U3O8)	14.4	6.4	--	--	12.3	14.3	6.5	*13.7*	35.9	13.8
M&I grade	(% U3O8)	0.048%	0.230%	0.105%	0.104%	0.047%	0.116%	0.113%	*0.086%*	0.057%	0.180%
Total MRE Grade	(% U3O8)	0.048%	0.230%	0.106%	0.117%	0.046%	0.111%	0.108%	*0.082%*	0.059%	0.119%
M&I contained	(Mlbs)	15.8	8.8	26.6	3.4	11.9	17.1	6.8	*17.2*	66.2	9.1
Total MRE contained	(Mlbs)	53.6	8.8	32.7	20.2	18.5	17.8	7.0	*28.8*	81.3	19.1
U3O8 recovery	(%)	65.8%	80.0%	--	--	80.0%	80.0%	80.0%	*77.5%*	71.3%	71.3%
Wellfield permits		Yes	Yes	Yes	Yes	Yes	No	No		Yes	Yes
Plant permits		Yes	Yes	No	No	Yes	No	No		Yes	Yes
Permitted MRE score*		25.5	20.3	17.3	11.9	8.5	4.9	1.9	*12.9*	47.6	22.7

Source: Company disclosures; SCPe used for UEC production .;

US still the largest uranium market, increasing political will to support domestic supply

Not only have domestic US lbs always traded at a premium relative to size and grade, we think the premium for US assets will further increase in the medium term, given the growing focus on re-establishing domestic US supply capabilities and scrutiny on non-allied foreign supply sources. While many commodities are now China-dominant by consumption volume, uranium remains western-driven, with the US still the world's largest consumer at ~45Mlbs per year in a ~170Mlb global market. Evidence of concrete actions to support US production include the establishment of the US Nuclear Fuel Working Group in 2019, the US Dept of Energy's HALEU program, to procure high assay low enriched uranium from US sources for next generation nuclear reactors; and the National Nuclear Security Administration's recent national Uranium Reserve purchases, in which the NNSA purchased uranium at above spot prices from domestic US bidders, including 300klbs at US$59.50/lb from UEC. UEC's domestic assets, and good standing with domestic utilities and Government (including UEC Chairman Spencer Abraham, a former US Senator and US Energy Secretary from 2001-2005) are a material asset in our view.

Figure 4: (A) US uranium purchases by source; (B) 2021 sources of supply

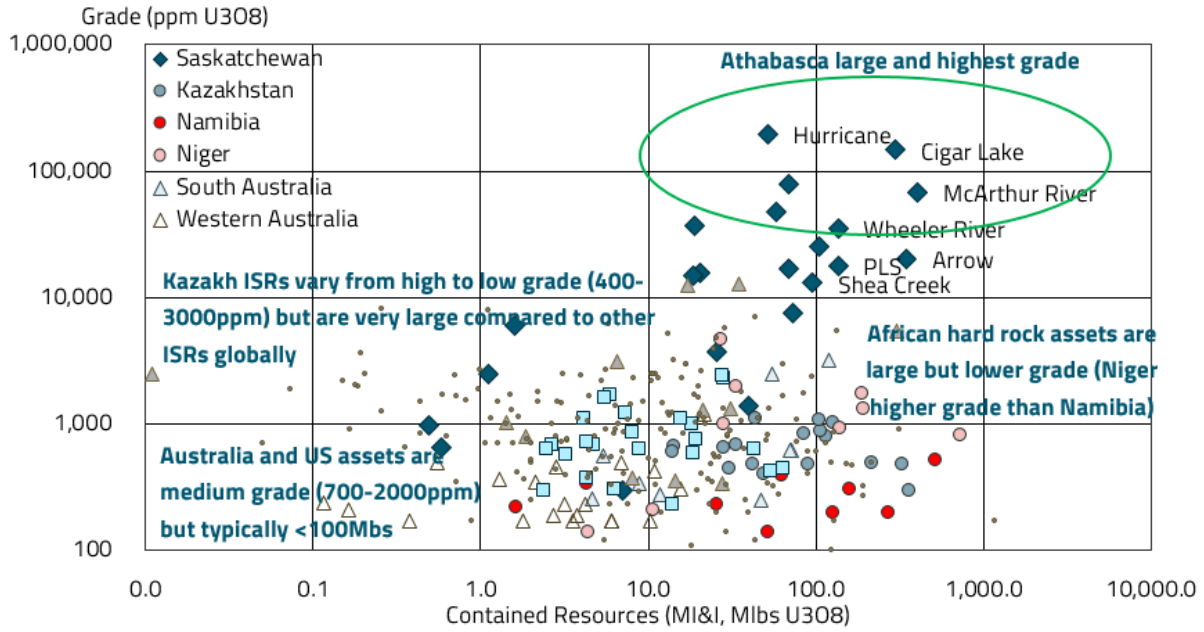


Source: US Energy Information Administration (EIA)

Step 2: Add high grade Athabasca projects with world class exploration upside

To add to its US assets, UEC entered Canada's Athabasca Basin uranium district in Saskatchewan, home to the world's largest / highest grade uranium deposits. We think UEC's strategic boldness, strong balance sheet, and now >3,000km2 exploration and project holdings, and the basin's prodigious uranium endowment are an intriguing combination for investors. Recent Athabasca discoveries speak for themselves: Fission's 2012 discovery of PLS (130Mlbs), NexGen's 2013 discovery of Arrow (340Mlbs), and Iso's 2018 discovery of Hurricane (52Mlbs incl 43.9Mlbs @ 52.1%). The size and grade of Athabasca deposits is unmatched and the geology is unique; while there are other world class sedimentary style deposits (e.g. the Central African Copper Belt), the Athabasca is the only known district scale uranium sedimentary district. Examples of similar style uranium deposits in other terranes are much lower grade, and other uranium deposit styles simply don't match the discovery upside of Athabasca unconformity/shear hosted deposits (e.g. NexGen's Arrow A2 shear = 170Mlb high grade zone / 200m of strike).

Figure 5:Global uranium deposits plotted by size and grade on logarithmic scale

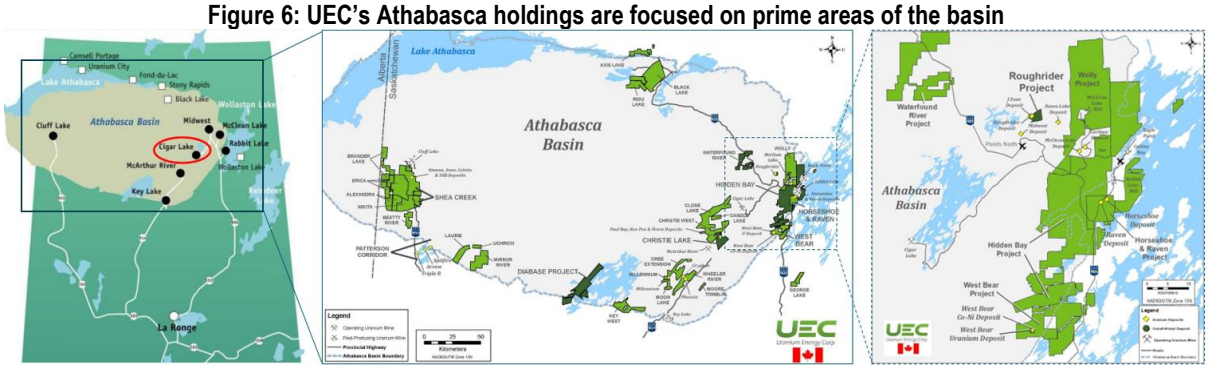


Source: S&P Market Intelligence, SCPe

Not just any Athabasca projects, holdings are in blue chip basin hotspots

With the Athabasca well staked by Cameco, Orano, NexGen, Fission, and Iso (and now UEC), many juniors represent themselves as Athabasca explorers but with holdings either off the basin margins (risk is deposits are eroded), the north or south of the basin (challenging access), or too far into the basin (thick sandstone cover). UEC's holdings include Roughrider, Christie Lake and Horseshoe-Raven properties in the eastern Athabasca near the existing mills and roads which benefit from established logistics, manageable depth, road access and most importantly, proven regional endowment. In our view, UEC offers something new to the basin: a well-funded company with strong liquidity (most explorers have constrained balance sheets / access to capital) and high leverage to a new discovery (most developers scale back exploration, Cameco too large for exploration leverage).

Figure 6: UEC's Athabasca holdings are focused on prime areas of the basin



Source: UEC, Nuclear Safety Canada (Map)

Step 3: Long-term strategy, good management / governance, sector leading liquidity

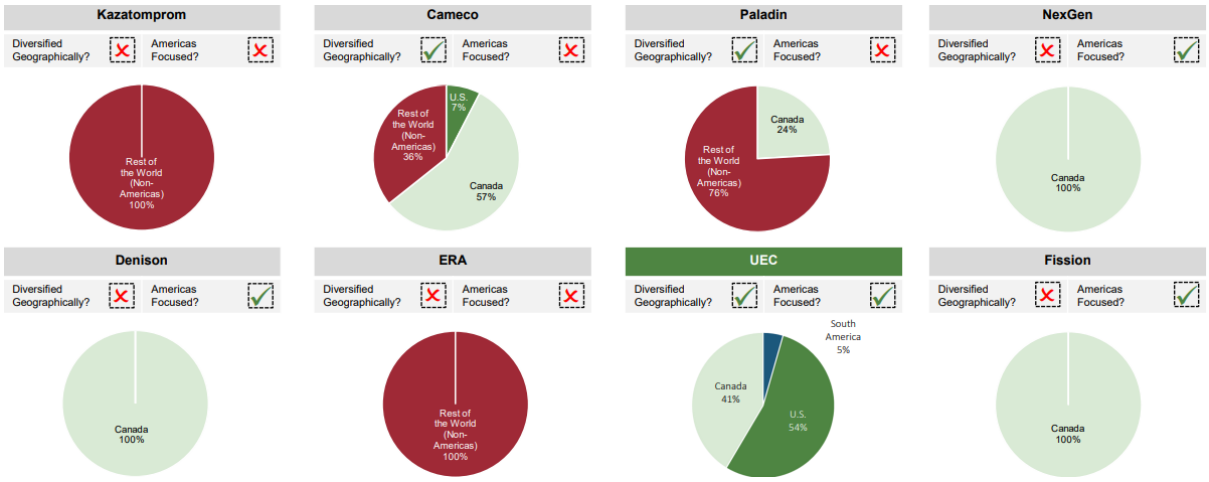
In addition to a strong asset base, we look for strategy, execution and governance, and on these fronts we think UEC is excellent. Of its peers, we think UEC has the most investment portfolio-oriented strategy. In practice, we think UEC excels at optimizing NAV per share uplift, and the value of diversification, in short a top-down strategy rather than asset bottom-up. While this may offend some purists, we think the clarity of vision plays to UEC's strengths, has been well executed, and has seen UEC add share value consistently, such as permitting the Texas assets during the downturn, and consolidating disparate Reno Creek licences to create a district play with minimal spend: UEC now offers near term development (US assets), world class exploration (Athabasca), a 15% holding in Uranium Royalty Corp, and has demonstrated physical uranium trading profits while acquiring attractive projects at a weighted average ~US$1.80/lb purchase price (including historical resources for Roughrider).

Figure 7: (A) Selected recent UEC M&A acquisitions; (B) Leading uranium miners/developers by M&I location

			Acqusition value (US$m)				Resources			EV/lb	
Asset	Vendor	Date	Cash	Equity	Other	Total	M&I	Inferred	Total	M&I	Total
Reno Creek	Pacific Road Funds	May 2017	--	19.6	5.7	25.3	22.0	0.9	22.9	1.10	1.10
Uranium One	Uranium One	Dec 2021	112.0	--	2.9	114.9	37.7	4.3	41.9	2.74	2.74
UEX Corp	M&A	Aug 2022	--	165.0	--	165.0	107.8	38.8	146.6	1.13	1.13
Roughrider*	Rio Tinto	Oct 2022	80.0	69.3	--	149.3	40.7 (1)	17.2 (1)	57.9 (1)	2.58	2.58

Source: UEC and SCPe; (1) Historic resource dated 13 Sept 2011 prepared by SRK for Hathor Resource;

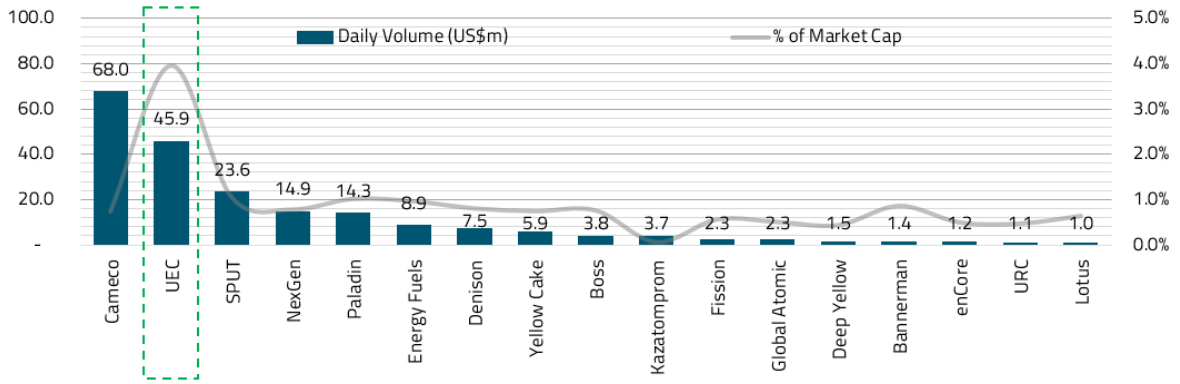
* Roughrider resources are classified as historical as they were completed by Hathor to NI 43-101 standards



Source: UEC

In addition, UEC offers near sector leading liquidity, with average trading volume of US$46m/day, second only to Cameco's US$68m/day. As a percentage of market cap, UEC is the highest in the sector, trading 4% of its market cap daily, well above the peer average of 0.7%. We think this combination should be compelling for investors: UEC is still at a market cap where production growth and / or a transformative exploration discovery can deliver outsized returns but with liquidity that is suitable for large institutions.

Figure 8: Publicly-listed uranium companies with >US$1m daily liquidity



Source: Bloomberg, SCPe

Valuation

What we model: We model Wyoming production first as minimal capex is required to recommence production, with Texas a year later due to SCPe US$15m capex costs, though we expect Texas to be lower cost due to warm weather, porosity and grade. We model production from the Wyoming ISR hub commencing in 2024 at 0.5Mlbs and ramping up to 1.3Mlbs pa with US$5-12m/year of sustaining capex but no initial capex. We model the addition of Reno Creek (part of the Wyoming package) in year four for US$30m of capex, taking production to 3.3Mlbs pa and a further US$15m for expansion to 4Mlbs pa in year six. This results in a 17-year LOM producing a total of 57Mlbs at US$23/lb cash cost and US$36/lb AISC, with SCPe US$55m per year of FCF at US$60/lb, with US$109m of EBITDA per year at 55% annual EBITDA margin. We model 1.3Mlbs per year for US$15m restart at the Texas assets starting in 2025, expanding to 2.5Mlbs in year four (US$7.5m of exploration to define 10-year mine life + US$10m expansion capex), with LOM US$21/lb cash cost and US$34/lb AISC, generating US$40m per year of FCF and US$75m per year of EBITDA at 58% EBITDA margin.

Figure 9: Summary of SCPe UEC estimates

Year (to 31 July)	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Wyoming production (Mlbs)	--	--	--	0.5	1.3	1.3	2.6	3.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Wyoming cash cost (US$/lb)	--	--	--	23.4	21.3	21.3	25.1	24.7	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Texas production (Mlbs)	--	--	--	--	0.6	1.3	1.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Texas cash cost (US$/lb)	--	--	--	--	22.4	21.6	21.0	21.9	21.9	21.9	21.9	21.9	19.9	19.9	19.9
Physical uranium purchases (Mlbs)	1.0	0.8	1.7	0.9	0.6	0.1	--	--	--	--	--	--	--	--	--
Physical uranium sales (Mlbs)	--	--	(2.8)	(1.6)	(0.6)	(0.1)	--	--	--	--	--	--	--	--	--
Group uranium sales (klbs)	--	--	2.8	2.1	2.5	2.7	4.1	5.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Uranium COGS ($/lb)	--	--	33.6	41.7	25.4	21.8	23.8	23.6	22.1	22.1	22.1	22.1	21.3	21.3	21.3
Revenue (US$m)	23	159	127	151	159	243	345	386	386	386	386	386	386	386	386
EBITDA (US$m)	(21)	46	18	60	77	117	172	202	202	202	202	207	207	207	207
Net income (US$m)	5	44	13	36	46	67	101	117	102	103	104	109	110	111	112
EPS (US$/sh)	0.02	0.13	0.03	0.10	0.12	0.18	0.27	0.32	0.28	0.28	0.28	0.29	0.29	0.29	0.30
EBITDA margin (%)	*(92%)*	*29%*	*14%*	*40%*	*48%*	*48%*	*50%*	*52%*	*52%*	*52%*	*52%*	*54%*	*54%*	*54%*	*54%*
Cash flow from ops (US$m)	(16)	(22)	(45)	48	82	102	160	187	178	179	180	185	186	187	188
Cash flow from investing (US$m)	(1)	--	(8)	(33)	(58)	(58)	(65)	(85)	(70)	(70)	(70)	(70)	(70)	(70)	(70)
FCF (US$m)	(17)	(22)	(53)	15	24	44	95	102	108	109	110	115	116	117	118
FCFPS (US$/sh)	(0.06)	(0.06)	(0.15)	0.04	0.07	0.12	0.26	0.28	0.29	0.29	0.29	0.31	0.31	0.31	0.31

Source: SCPe; metric units unless otherwise noted; USD unless otherwise noted

Valuation build-up: We value UEC on a sum-of-the-parts basis. We value the US ISR assets on a DCF methodology with a discount rate of 7% and modelling at flat US$60/lb long term. This generates an NPV of US$288m for Texas and US$488m for Wyoming. For the Athabasca assets we apply an in-situ multiple of US$6/lb for Wheeler River, Christie Lake and Shea Creek, and a nominal US$350m for Rough Rider (equates to ~US$6.0/lb on the historical 58Mlb MRE completed by Hathor); this is equivalent to 10% of in-situ value at our LT US$60/lb uranium price estimate. For Anderson and we apply a US$5/lb multiple, in line with our valuation for other US hard rock assets, and we apply a US$2/lb multiple for Kiggivik and Horseshoe-Raven, which are further from the development path and lower grade than the other Athabasca assets.

Figure 10: SCPe SOTP valuation

Group-level SOTP valuation	US$m	O/ship	NAVx	US$/sh
Wyoming ISR assets 7% 1Q23	488	100%	1.20x	1.55
Texas ISR assets 7% 1Q23	288	100%	1.20x	0.91
Roughrider @ US$6/lb on historical MRE	350	100%	1.20x	1.11
Uranium portfolio @ US$5/lb	799	100%	1.20x	2.54
Central SG&A & fin costs 1Q23	(38)	-	1.20x	(0.12)
Cash and securities pro-forma asset sales 4Q22	75	-	1.20x	0.24
Physical uranium inventories and deliveries	107	-	1.20x	0.34
Debt 4Q22	-	-	1.20x	-
1xNAV7% spot fully diluted, pre-funded	**2,168**	**-**	**-**	**6.89**
Assumed equity raised	-		1.20x	-
1xNAV7% spot fully funded	**2,168**	**-**	**-**	**7.00**

Resource / Reserve	Mlbs U3O8	% U3O8	EV/lb U3O8		
Measured, ind. & inf.	290	0.12%	5.08		
Commodity price	**2022**	**2023**	**2024**	**2025**	**2026**
U3O8 spot price (US$/lb)	51	60	60	60	60
U3O8 term price (US$/lb)	51	60	60	60	60
Share data					
Basic shares (m): 367.1		FD + options (m):	377.8	FD/FF	377.8

Source: SCPe

Adding in balance sheet / corporate adjustments, we include 1Q FY23 (end of October) cash of US$21m, add US$3.5m disclosed uranium purchases and sales post quarter end, plus US$15m from ITM options. We add US$52m value for current uranium inventory: 0.87Mlbs of U_3O_8 and US$33m for UEC's 15m shares of Uranium Royalty Corp (TSXV:URC). We add US$70m for future uranium purchases (3.1Mlbs at US$42.25/lb) representing the difference between the purchase price and our SCPe LT US$60/lb uranium price estimate. Finally, we subtract US$71m for SG&A at a 7% discount rate. This generates a FD NAV of US$2.17bn or US$5.74/sh. Due to low capex (US$15m in Texas and sustaining capital only to restart Wyoming) which is also staged, we assume capex is funded by cash uranium inventory sell down which can be accomplished without further equity.

Initiate with BUY Rating and US$7.00/sh price target based on 1.2x $NAV_{7\%}$

We think UEC is a strong contender to replace Cameco as the default institutional uranium holding thanks to its diversified portfolio, ability to cater to multiple types of uranium investor (physical, development, exploration), well regarded management team and excellent trading liquidity. Compared to the other liquid names, especially Cameco and Kazatomprom, we think UEC occupies the sweet spot of large enough to offer the liquidity that institutional investors require, but still at a market cap where it can achieve transformational production growth and/or exploration success. Furthermore, we see multiple reasons why UEC should (and historically does) trade at a premium to the peer group: management premium, liquidity premium, USA premium, and Athabasca premium. As such, we rate UEC as our second premium to NAV uranium stock with a Buy rating and US$7.00/sh price target based on 1.2x $NAV_{7\%\text{-}60/lb}$, with Texas and Wyoming valued by DCF and the other assets valued in-situ at US$2.0-6.0/lb.

Why we like UEC

1. Best portfolio of production ready US ISR assets plus strong Govt and utility relationships
2. Athabasca portfolio offers game changing exploration upside
3. Combines mid-tier safety (>US$45m liquidity and strong management) but at this market cap can still achieve transformational growth

Catalysts

- 2023: SCPe restart decision (market driven)
- 2023: Sale of 300klbs to US uranium reserve for US$59.50/lb
- 2024: SCPe first production in Wyoming
- 2025: SCPe first production in Texas
- 2023-2026: 3.1Mlbs of uranium purchases at average US$42.25/lb

Ticker:	UEC US	**Price / mkt cap:**	US$3.82/sh, US$1402m	**Market P/NAV:**	0.67x	**Assets:**	Texas / Wyoming ISR
Author:	J Chan / E Magdzinski / K Kormpis	**Rec / PT:**	BUY / C$6.75	**1xNAV FD:**	US$5.73/sh	**Country:**	USA

Group-level SOTP valuation	4Q22	**1Q23**			
		US$m	**O/ship**	**NAVx**	**US$/sh**
Wyoming ISR assets 7% 1Q23		**488**	100%	1.20x	1.55
Texas ISR assets 7% 1Q23		**288**	100%	1.20x	0.91
Roughrider @ US$6/lb on historical MRE		350	100%	1.20x	1.11
Uranium portfolio @ US$5/lb		799	100%	1.20x	2.54
Exploration		100	100%	1.20x	0.32
Central SG&A & fin costs 1Q23		(42)	-	1.20x	(0.13)
Cash and securities pro-forma asset sales 4Q22		75	-	1.20x	0.24
Physical uranium inventories and deliveries		107	-	1.20x	0.34
Debt 4Q22		-	-	1.20x	-
1xNAV7% spot fully diluted, pre-funded		**2,165**			**6.87**
Assumed equity raised		-		1.20x	-
1xNAV7% spot fully funded		**2,165**			**6.75**

1x fully funded NAVPS sensitivity to NdPr price and discount / NAV multiple					
Valuation (US$/sh)	$40/lb	$50/lb	$60/lb	$70/lb	$80/lb
9% discount	4.00	5.25	6.50	7.75	9.00
8% discount	4.00	5.25	6.75	8.00	9.25
7% discount	4.00	5.50	**7.00**	8.25	9.75
6% discount	4.00	5.75	7.25	8.75	10.25
5% discount	4.00	5.75	7.50	9.00	10.75
Wyoming NPV7% (US$m)	$40/lb	$50/lb	$60/lb	$70/lb	$80/lb
9% discount	35	224	414	604	794
8% discount	39	244	449	654	859
7% discount	44	266	**488**	710	932
6% discount	50	291	531	772	1,013
5% discount	56	318	580	842	1,104
Texas NPV7% (US$m)	$40/lb	$50/lb	$60/lb	$70/lb	$80/lb
9% discount	38	143	248	353	458
8% discount	42	154	267	380	492
7% discount	46	167	**288**	409	529
6% discount	52	181	311	441	570
5% discount	57	197	337	476	616

Valuation over time	**Today**	**Jul '23**	**Jul '24**	**Jul '25**	**Jul '26**
Texas ISR (US$m)	288.0	299.5	324.4	349.9	351.3
Wyoming ISR (US$m)	488.0	474.1	507.3	533.1	542.8
Other uranium assets	1,049.0	1,049.0	1,049.0	1,049.0	1,049.0
Cntrl G&A & fin costs (US$m)	(42.1)	(50.2)	(30.6)	30.3	41.7
Net cash at 1Q (US$m)	74.6	32.5	52.3	57.5	84.7
1xNAV (US$m)	1,858	1,805	1,902	2,020	2,069
P/NAV (x):	0.78x	0.69x	0.74x	0.69x	0.68x
1xNAV share px FD (US$/sh)	4.92	5.50	5.18	5.50	5.64
ROI to equity holder (% pa)	*29%*	*20%*	*11%*	*10%*	*8%*

Sources and uses of cash			
SCPe Texas Capex	US$15m	SCPe current cash + options	US$5m
SCPe Wyoming Capex incl Reno Creek	US$30m	Physical uranium sales	US$249m
SCPe G&A + working cap pre-positive FCF	US$55m	Equity Raised	US$0m
Already contracted uranium purchases	US$103m		
Total uses	US$203m	Total proceeds	US$254m

Production (100%)	**Jul '24**	**Jul '25**	**Jul '26**	**Jul '27**	**Jul '28**
Texas ISR prodn (Mlbs U3O8)	--	0.6	1.3	1.5	2.5
Texas cash cost (US$/lb)	--	22.4	21.6	21.0	21.9
Texas AISC (US$/lb)	--	34.0	33.2	32.6	34.4
Wyoming ISR prodn (Mlbs U3O8)	0.5	1.3	1.3	2.6	3.3
Wyoming cash cost (US$/lb)	23.4	21.3	21.3	25.1	24.7
Wyoming AISC (US$/lb)	35.0	32.9	32.9	39.1	38.7
Total ISR prodn (Mlbs U3O8)	0.5	1.9	2.6	4.1	5.8
Physical uranium purchases (Mlbs)	0.9	0.6	0.1	--	--
Physical uranium sales	1.6	0.6	0.1	--	--
Total uranium sales (Mlbs)	2.1	2.5	2.7	4.1	5.8
Cash cost excl royalties (US$/lb)	41.7	25.4	21.8	23.8	23.6
Total AISC (US$/lb)	53.1	43.0	39.8	41.8	41.0
Capex (US$m)	8	33	58	58	65

Resource / Reserve	**Mlbs U3O8**	**% U3O8**	**EV/lb U3O8**		
Measured, ind. & inf.	290	0.12%	5.08		
Commodity price	**2022**	**2023**	**2024**	**2025**	**2026**
U3O8 spot price (US$/lb)	51	60	60	60	60
U3O8 term price (US$/lb)	51	60	60	60	60
Share data					
Basic shares (m): 367.1		FD + options (m):	377.8	FD/FF	377.8
Ratio analysis	**2022**	**2023**	**2024**	**2025**	**2026**
FD shares out (m)	290	367	367	367	367
EPS (US$/sh)	0.11	0.12	0.03	0.10	0.12
CFPS before w/c (US$/sh)	(0.18)	0.20	0.04	0.16	0.23
FCFPS pre growth (US$/sh)	(0.06)	(0.07)	(0.01)	0.18	0.06
FCF/sh (US$/sh)	(0.06)	(0.06)	(0.15)	0.04	0.06
FCF yield pre growth (US$/sh)	(2%)	(2%)	(0%)	5%	2%
FCF yield (%)	(2%)	(2%)	(4%)	1%	2%
EBITDA margin (%)	(92%)	29%	14%	40%	48%
FCF margin (%)	(73%)	(14%)	(42%)	10%	15%
ROA (%)	1%	6%	2%	5%	6%
ROE (%)	2%	7%	2%	5%	6%
ROCE (%)	1%	6%	2%	5%	6%
PER (x)	34x	28x	115x	39x	31x
P/CF (x)	(201x)	15x	18x	18x	14x
Fwd EV/EBITDA (x)	(163x)	22x	56x	17x	13x
Income statement	**2022**	**2023**	**2024**	**2025**	**2026**
Revenue (US$m)	23	159	127	151	159
COGS (US$m)	(16)	(93)	(92)	(73)	(69)
Gross profit (US$m)	**7**	**66**	**36**	**78**	**89**
Expenses (US$m)	--	(15)	(14)	(18)	(30)
Impairment & other (US$m)	25	--	--	--	--
Net finance costs (US$m)	3	0	1	1	1
Tax (US$m)	0	(2)	(1)	(2)	(2)
Minority interest (US$m)	--	--	--	--	--
Net income attr. (US$m)	**35**	**49**	**22**	**59**	**58**
EBITDA (US$m)	*(21)*	*46*	*18*	*60*	*77*
Cash flow	**2022**	**2023**	**2024**	**2025**	**2026**
Profit/(loss) after tax (US$m)	5	44	12	36	45
Add non-cash items (US$m)	(23)	28	45	23	30
Less wkg cap / other (US$m)	(35)	--	(43)	1	8
Cash flow ops (US$m)	**(53)**	**72**	**14**	**60**	**84**
PP&E (US$m)	(1)	--	(8)	(33)	(58)
Other (US$m)	(110)	(80)	--	--	--
Cash flow inv. (US$m)	**(111)**	**(80)**	**(8)**	**(33)**	**(58)**
Debt draw (repayment) (US$m)	(10)	--	--	--	--
Equity issuance (US$m)	168	28	--	--	0
Other (US$m)	(1)	(0)	--	--	--
Cash flow fin. (US$m)	**157**	**28**	**--**	**--**	**0**
Net change post forex (US$m)	(7)	20	5	27	26
FCF (US$m)	*(17)*	*(22)*	*(54)*	*15*	*24*
Balance sheet	**2022**	**2023**	**2024**	**2025**	**2026**
Cash (US$m)	40	60	65	92	118
Accounts receivable (US$m)	--	1	31	25	20
Inventories (US$m)	--	--	9	12	9
PPE & exploration (US$m)	241	617	620	630	658
Other (US$m)	73	46	7	7	7
Total assets (US$m)	**354**	**723**	**732**	**766**	**810**
Debt (US$m)	--	--	--	--	--
Other liabilities (US$m)	27	105	101	99	99
Shareholders equity (US$m)	613	895	895	895	895
Retained earnings (US$m)	(287)	(242)	(230)	(194)	(148)
Minority int. & other (US$m)	--	(0)	(0)	(0)	(0)
Liabilities+equity (US$m)	**354**	**758**	**767**	**801**	**846**
Net cash (US$m)	*33*	*52*	*58*	*85*	*111*
Net debt to NTM EBITDA (x)	*(0.7x)*	*(2.9x)*	*(1.0x)*	*(1.1x)*	*(0.9x)*

Source: SCP estimates; fiscal year ended July 31 unless otherwise noted

Wyoming ISR Hub (100% UEC), Wyoming, USA

The Wyoming Hub and spoke ISR portfolio includes the Irigaray Central Processing Plant (capacity 1.3Mlbs pa, permitted for 2.5Mlbs), the Reno Creek project (permitted for 2.0Mlbs) and 10 other mineralized areas (detailed below), for a total of 81.5Mlbs ranging from 0.04-0.156% U_3O_8. Like the Texas assets, the deposits are sandstone-hosted roll-front deposits, mostly located on the Powder River Basin (PRB), which hosts the US's largest concentration of ISR uranium assets. UEC first entered the basin through the acquisition of the Reno Creek project, the largest permitted ISR project in the United States by contained lbs, in 2018 from Pacific Road (private equity). In 2021 UEC acquired Uranium One's Wyoming assets for US$112m cash and US$19m reclamation bonding to become the largest Wyoming player. The Wyoming assets are likely UEC's designated first assets to bring production back online due to low capex as ISR at Christensen Ranch and processing at Irigaray are a true restart with minimal restart capex required.

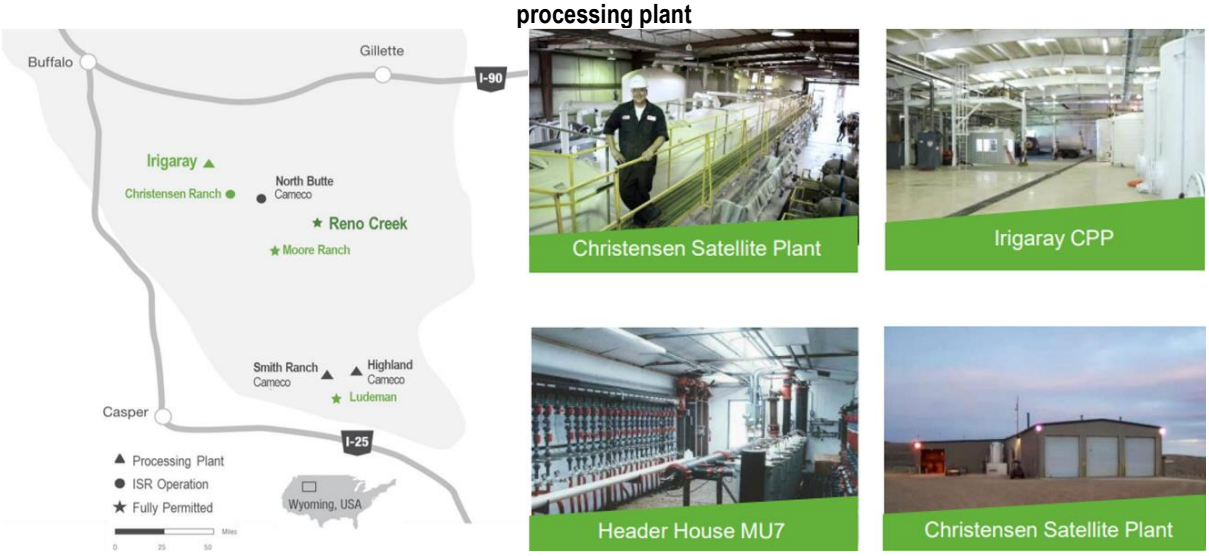
Figure 11: September 2022 SK-1300 mineral resource estimate

		M&I			Inferred			Total		
Project Area	Permits	Tonnes	Grade	U3O8	Tons	Grade	Lbs U3O8	Tons	Grade	Contained
		(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)
Allemand-Ross		252	0.083%	459	1,157	0.098%	2,496	1,409	0.095%	2,955
Barge		3,902	0.051%	4,361	--	--	--	3,902	0.051%	4,361
Charlie		1,139	0.124%	3,100	373	0.120%	988	1,511	0.123%	4,088
Christensen Ranch	Mining	5,947	0.073%	9,596	--	--	--	5,947	0.073%	9,596
Clarkson Hill		--	--	--	868	0.058%	1,113	868	0.058%	1,113
Irigaray	Processing	3,521	0.076%	5,899	94	0.068%	141	3,615	0.076%	6,040
Jab/West Jab		1,700	0.073%	2,727	1,272	0.060%	1,677	2,972	0.067%	4,404
Ludeman	Mining	4,839	0.091%	9,714	786	0.073%	1,258	5,625	0.088%	10,972
Moore Ranch	Mining	2,675	0.054%	3,210	42	0.048%	44	2,717	0.054%	3,254
Nine Mile		--	--	--	3,405	0.057%	4,308	3,405	0.057%	4,308
Red Rim		306	0.169%	1,142	473	0.148%	1,539	779	0.156%	2,681
Subtotal		**24,280**	**0.169%**	**40,208**	**8,469**	**0.148%**	**13,564**	**32,749**	**0.156%**	**53,772**
Reno Creek	NW and SW deposits	29,003	0.041%	25,990	1,920	0.035%	1,490	30,923	0.040%	27,480
Total		**53,034**	**0.057%**	**66,198**	**9,851**	**0.069%**	**15,054**	**62,885**	**0.059%**	**81,252**

Source: UEC September 2022 SK-1300 report; short tons converted to metric tonnes

History: Uranium was first discovered and exploited in the Powder River basin in the 1950s. The various deposits were discovered by different operators including Conoco, EDF/COGEMA (predecessor to Orano) among others. The Irigaray project was developed by TOMIN (Japanese) and EDF (French) in the late 1970s. Uranium One built a portfolio of assets, including the Irigaray Plant, in the region in the late 2000s, and commenced production at Christensen Ranch, with final processing to yellowcake at Irigaray. UEC acquired Reno Creek in 2018 and the other assets from Uranium One in 2021.

Figure 12: Map of Wyoming Hub and spoke project locations; Christensen satellite IX plant, Irigaray central processing plant



Source: UEC

Operations

Mining: UEC plans to use in-situ recovery, which is standard in the Powder River Basin. This involves pumping a lixiviant through series of injection and recovery wells. This extraction process is commonly used to extract flat lying roll-front style deposits in Wyoming, Texas, South Australia, and Kazakhstan. Pregnant solution is collected from recovery wells and run through satellite ion exchange (IX) columns where uranium is loaded onto resins. The resins are then trucked to the processing plants, in this case at Irigaray. Sodium bicarbonate is commonly used in the PRB as lixiviant due to high carbonates, but this is well understood with precedents in the district including Cameco's Smith Ranch and Highland operations (on care and maintenance since 2018). The Christensen Ranch project produced 2.6Mlbs primarily from 2011-2013 giving further confidence in the applicability of ISR extraction.

Processing Plant: Uranium from pregnant solution is first loaded onto resins at satellite ion exchange facilities. Christensen Ranch has a 6,500 gallon per minute ion exchange satellite plant, a 1,000gpm groundwater restoration plant, two wastewater disposal wells and four lined evaporation ponds. The Irigaray CPP has resin elution, precipitation, filtration and drying and packaging capabilities with 1.3Mlbs of capacity which is expandable to 2.5Mlbs. A second elution circuit is available for toll processing.

Permit status: The Irigaray Central Processing Plant (CPP) is fully permitted. The Christensen Ranch, Ludeman and Moore Ranch project areas are fully permitted for ISR operations through both the Wyoming Department of Environmental Quality/Land Quality Division (WDEQ/LQD) and BLM as appropriate. Portions of the Irigaray and Reno Creek project areas are also permitted for ISR operations. The Allemand-Ross, Barge, Charlie, Clarkson Hill, Jab/West Jab, Nine Mile and Red Rim project areas are not permitted. Portions of the Reno Creek project area and the majority of the Irigaray project area are also not permitted for ISR operations

What we model

The most updated technical report on the assets is the 2022 SK-1300 resource report, which does not include capex, production or unit cost forecasts, thus our estimates should not be seen as indicative only and not backed by PEA/PFS/DFS disclosure. Currently 42.5Mlbs are permitted for production, but this should provide time to permit the remainder of the MRE base. We model total LOM production of 57Mlbs, from an inventory of 80Mlbs at 0.06% U_3O_8, matching the MRE, but assuming 75% wellfield recovery and 95% plant recovery. Overall, Wyoming is higher cost per lb than Texas, primarily due to heating costs.

Throughput and start up: For our analysis we model first production in 2024, ramping up from 0.5Mlbs in year one to a nameplate 1.3Mlbs per year in year two of production. In year three we assume US$30m capex (including an additional satellite IX facility, development of the second elution circuit and additional drying/packaging capacity for the Irigaray CPP) for year four first production from Reno Creek (2Mlbs pa), which though lower grade, has good porosity and scalability. Steady state production from Reno Creek takes production to 3.3Mlbs pa, and we assume a further expansion of to 4Mlbs pa in year six of the operation for US$15m capex which assumes an additional satellite IX facility.

Op costs: We assume US$10/t (ore) treated and US$10/t of processing costs plus US$5m pa of G&A + fixed costs. Absolute costs are higher than Texas due to cold weather requirements (heating, burying pipework), though offset on a per tonne or per lb basis (but not in absolute $ terms) by greater scale, and noting that the main cost drivers for ISR are porosity, leach conditions, and weather, rather than grade and tonnes.

Payability: We model 100% payability at our LT US$60/lb uranium spot price estimate with 1% sales and transport costs. We assume spot sales in line with UEC's current stated marketing strategy. Full royalties are not disclosed, we model 2.0% private royalties and 5.0% government royalties for 7.0% LOM average (note in reality royalties vary by wellfield but a full schedule has not been publicly disclosed).

Capex: To restart production at Christensen Ranch and the Irigaray plant we don't model restart capex but with US$5-12m of sustaining capex per year to reach 1.3Mlbs nameplate. We model US$30m of start-up capex to bring Reno Creek online in year 4 (capex spent in year three), adding 2.0Mlbs pa. We model a further US$15m to increase production to 4.0Mlbs pa. We model US$8/t of wellfield sustaining capex (peaks at US$34m at 4.0Mlbs pa, US$8.5/lb LOM) and US$0.50/t of plant capex (US$2.1m/yr) and US$2/t (US$8.0m/yr) of restoration and closure capital.

Figure 13 SCPe economic summary: Wyoming ISR operations

Year (to 31 December)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	LOM
Grade (% U3O8)	--	--	0.073%	0.073%	0.073%	0.055%	0.055%	0.060%	0.060%	0.060%	0.060%	0.060%	**0.060%**
Wellfield recovery (%)	--	--	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	**75%**
Plant recovery (%)	--	--	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	**95%**
U3O8 produced (mlbs)	**--**	**--**	**0.50**	**1.30**	**1.30**	**2.59**	**3.30**	**4.00**	**4.00**	**4.00**	**4.00**	**4.00**	**57.0**
Well + plant cost per tonne (US$/t)	--	--	20	20	20	20	20	20	20	20	20	20	**20**
Cash cost ($/lb co-product)	--	--	23	21	21	25	25	22	22	22	22	22	**23**
AISC ($/lb)	--	--	35	33	33	39	39	36	36	36	36	36	**36**
Growth Capex (US$m)	--	--	--	--	30	--	--	15	--	--	--	--	**45**
Sustaining Capex (US$m)	--	--	5	12	12	31	39	44	44	44	44	44	**628**
Revenue (US$m)	--	--	--	21	43	51	83	83	83	83	83	88	**974**
Op Costs (US$m)	--	--	(12)	(28)	(28)	(65)	(81)	(90)	(90)	(90)	(90)	(90)	**(1,292)**
EBITDA (US$m)	--	--	16	44	44	78	101	131	131	131	131	131	**1,856**
FCF (US$m)	**--**	**--**	**9**	**26**	**(4)**	**38**	**49**	**54**	**69**	**69**	**69**	**69**	**935**

Source: SCPe; metric units unless specified; LT prices: US$60/lb U3O8

Our modelled estimates generate a 17-year life of mine producing a total of 57.0Mlbs at cash costs of US$23/lb with US$36/lb AISC. At US$60/lb, this generates a US$488m $NPV_{7\%-60}$, equivalent to US$6.10/lb for lbs mined. LOM undiscounted FCF is US$935m (US$55m/year) with US$109m LOM average annual EBITDA per year, at a LOM 55% EBITDA margin.

Sensitivity analysis: Sensitivity analysis generates similar results to the Texas assets. Wellfield performance remains the biggest driver from an operational perspective and opex is a bigger driver than capex, unsurprising as ISRs are known to be low initial capital and UEC benefits from existing infrastructure in place. Wyoming is more sensitive to prices than Texas in our analysis; a US$1/lb move in uranium price has a US$22m impact on NPV between US$50-70/lb; this is due to higher unit costs than Texas.

Figure 14: SCPe NPV sensitivity summary:

Wyoming NPV7% (US$m)	Prices : -20.0%	-10.0%	flat	+10.0%	+20.0%
DR: 5.0%	266	423	580	737	894
DR: 6.0%	242	387	531	676	820
DR: 7.0%	222	355	**488**	621	754
DR: 8.0%	203	326	449	572	695
DR: 10.0%	171	277	383	488	594

Wyoming NPV7% (US$m)	Recovery: 90%	92.5%	95%	96%	97%
Processing: US$6.0/t	522	556	590	603	617
Processing: US$8.0/t	471	505	539	552	566
Processing: US$10.0/t	420	454	**488**	501	515
Processing: US$12.0/t	369	403	437	450	464
Processing: US$14.0/t	318	352	386	399	413

Wyoming NPV7% (US$m)	Wellfield recovery: 65%	70.0%	75%	80%	85%
Wellfield costs: US$6.0/t	419	504	590	675	761
Wellfield costs: US$8.0/t	368	453	539	624	710
Wellfield costs: US$10.0/t	317	402	**488**	573	659
Wellfield costs: US$12.0/t	266	351	437	522	608
Wellfield costs: US$14.0/t	215	300	386	471	557

Wyoming NPV7% (US$m)	Opex : -20.0%	-10.0%	flat	+10.0%	+20.0%
Capex : -20.0%	606	576	547	518	488
Capex : -10.0%	576	547	517	488	459
flat	547	517	**488**	459	429
Capex: +10.0%	517	488	458	429	400
Capex: +20.0%	487	458	429	400	370

Source: SCP; all NPVs shown at 7% discount rate, US$60/lb U3O8

Texas ISR Hub (100% UEC), Texas, USA

The Texas Hub and spoke ISR portfolio includes the Hobson Central Processing Plant and four surrounding deposits: Burke Hollow, Goliad, Palangana and Salvo. Burke Hollow, Goliad and Palangana are permitted to produce and the mill is maintained in good standing with 4Mlbs pa of licensed capacity, 1.5Mlbs of plant processing capacity, and 3/4 wellfields are permitted. The deposits are sandstone-hosted roll-front deposits, which are common for ISR deposits in Kazakhstan, Wyoming and Australia, formed by uranium precipitation from oxygenated groundwater when presented with a reducing environment. At 790-1540ppm U_3O_8 (0.079-0.154%) the deposits are high grade for US ISR assets. Texas is the lower cost (better weather and higher porosity and grade) than Wyoming but is designated as the second project to bring online as modest capex (SCPe US$15m) is required.

Figure 15: August 2022 SK-1300 mineral resource estimate

		GT	M&I			Inferred			Total		
Deposit	Permits	COG	Tonnes	Grade	U3O8	Tons	Grade	Lbs U3O8	Tons	Grade	Contained
		(% x ft)	(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)
Burke Hollow	Mine	0.3	1,276	0.086%	2,324	2,263	0.095%	4,859	3,539	0.101%	7,183
Goliad	Mine	0.2	2,811	0.085%	6,160	1,404	0.044%	1,225	4,216	0.088%	7,385
Palangana	Mine	na	210	0.134%	643	274	0.183%	1,001	484	0.170%	1,644
Salvo	Exploration	0.3	--	--	--	1,021	0.113%	2,839	1,021	0.139%	2,839
Total		**0.0**	**4,088**	**0.104%**	**8,483**	**4,961**	**0.100%**	**9,924**	**7,755**	**0.094%**	**14,567**

Source: UEC; As at August 2022; S-K 1300 compliant; tonnage converted from short tons to metric tonnes

History: UEC put together the Texas portfolio from 2006-2009, starting with the Goliad ISR project, and adding the Palangana ISR (developed by Union Carbide in 1978) and the Hobson processing plant (built in 1978 and expanded to 1Mlbs pa capacity) in 2009 from Uranium One for 2.5m common shares. UEC completed permitting and commenced production in 2010, at a then spot uranium price of US$73/lb, producing 0.5Mlbs at US$27/lb cash cost (including royalties) from late 2010-2013. In September 2013 at a spot price of US$34.50/lb, UEC ramped-down production at Palangana and put the Hobson plant on standby. Since 2013, UEC has permitted the higher grade Burke Hollow and Goliad deposits and expanded the resource footprint (capital efficient value-add).

Figure 16: August 2022 SK-1300 mineral resource estimate

Source: UEC

Operations

Mining: UEC plans to use in-situ recovery for extraction of uranium. This involves pumping a lixiviant through a series of injection and recovery wells. This extraction process is commonly used to extract flat lying roll-front style deposits in Wyoming, Texas, South Australia, and Kazakhstan. Pregnant solution is collected from recovery wells and run through mobile ion-exchange columns to load the uranium ions onto resin. The resins are then trucked to the Hobson Central processing plant.

Processing Plant: The Hobson processing plant is the hub for the Texas operations. It was built in 1978 and refurbished in 2008.The plant consists of i) an elution circuit, which strips the uranium from loaded resins; ii) a yellowcake circuit to precipitate the uranium as yellowcake (U_3O_8) from the eluate; and iii) the dewatering, dying and packaging circuit. The plant has been maintained in good standing and has capacity to produce up to 1.5Mlbs pa currently constrained by the dryer circuit (cycle time of 40h and capacity of 8-10 200L drums per dryer run). The plant is licensed for up to 4Mlbs pa of production. Groundwater is stripped of uranium, filtered for solids, allowed to settle, and ~95% is reinjected into the same aquifer it was recovered from. The ore hosted groundwater does not meet drinking water standards, and is classified for industrial or agricultural use if untreated.

Permit status: The Hobson processing plant is permitted and licenced for production of up to 4.0Mlbs pa. The Burke Hollow, Goliad, and Palangana deposits are permitted for ISR operations while the Salvo deposit has exploration permits but is not yet permitted for ISR operations. UEC has executed surface use and access agreements and fee mineral leases with surface and mineral owners within and outside the various project boundaries.

What we model

With three of four deposits permitted and the processing plant on care and maintenance, the decision to produce is a function of market prices. Due to modest but higher capex requirements than restarting Wyoming, we expect restart of Texas to come ~1-year after Wyoming. The most updated technical report on the assets in the August 2022 SK-1300 resource report, which does not include capex, production or unit cost forecasts, thus our estimates should be seen as indicative but not management guidance and not backed by PEA/PFS/DFS studies.

Throughput and start up: For our analysis we model first production in 2025, ramping up from 0.8Mlbs in year one to a steady state rate of 1.5Mlbs per year with expansion to 2.5Mlbs pa in year 4 involving plant upgrades and ~20Mlbs of MRE addition to sustain a 10-year mine life at 2.5lbs pa. We model US$10m of exploration assumed in years 1-3 to define the additional resources to generate our LOM 40Mlbs at 0.081% U_3O_8 mine plan inventory (assumes 75% wellfield and 95% plant recovery) vs the current ~20Mlbs and discovery cost to date of ~US$0.40/lb per mgmt. estimates.

Op costs we derive from benchmarking from peer studies, using total op cost or cost per lb estimates, to calculate per tonne figures. We assume wellfield costs of US$10/t (ore) treated and US$15/t of processing costs plus US$5m pa of G&A + fixed costs. While a more direct estimate is to use concentration levels to model fluid volumes, this information is not widely disclosed by operators, therefore we use per tonne estimates.

Playability: We model 100% playability at our LT US$60/lb uranium spot price estimate with 1% sales and transport costs. We assume spot sales in line with UEC's current marketing strategy. Full royalties are not disclosed, we model 10.35% including private (SCPe 5%) and government royalties (4.6% severance and 0.75% franchise tax).

Capex: We model US$20m of initial capex – US$5m for initial wellfield and US$10m for plant capex with US$10m for expansion to 2.5Mlbs pa (US$3m on plant packaging/drying upgrades plus US$7m wellfield and field IX additions. We also model US$10m of cumulative exploration in year 1-3 to define 20Mlbs of additional resources, or US$0.50/lb discovery cost. We model US$10/t of wellfield sustaining capex (US$10m/yr. or US$7.3/lb LOM) and US$0.50/t of plant capex (US$0.6m/year) and US$2/t (US$2.7m/yr.) of closure capex.

Figure 17 SCPe economic summary: Texas ISR operations

Year (to 31 July)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	LOM
Grade (% U3O8)	--	--	--	0.090%	0.090%	0.090%	0.080%	0.080%	0.080%	0.080%	0.080%	0.080%	**0.081%**
Wellfield recovery (%)	--	--	--	75%	75%	75%	75%	75%	75%	75%	75%	75%	**75%**
Plant recovery (%)	--	--	--	95%	95%	95%	95%	95%	95%	95%	95%	95%	**95%**
U3O8 produced (mlbs)	**--**	**--**	**--**	**0.64**	**1.27**	**1.50**	**2.50**	**2.50**	**2.50**	**2.50**	**2.50**	**2.50**	**28.4**
Well + plant cost per tonne (US$/t)	--	--	--	25	25	25	25	25	25	25	25	25	25
Cash cost ($/lb co-product)	--	--	--	22	22	21	22	22	22	22	22	20	21
AISC ($/lb)	--	--	--	34	33	33	34	34	34	34	34	32	33
Growth Capex (US$m)	--	--	4	11	--	10	--	--	--	--	--	--	**25**
Exploration	--	--	--	3	3	3	--	--	--	--	--	--	10
Sustaining Capex (US$m)	--	--	--	6	12	14	26	26	26	26	26	26	**291**
Revenue (US$m)	--	--	--	38	76	89	149	149	149	149	149	149	**1,687**
Op Costs (US$m)	--	--	--	(14)	(28)	(32)	(55)	(55)	(55)	(55)	(55)	(50)	**(596)**
EBITDA (US$m)	--	--	--	21	43	51	83	83	83	83	83	88	**974**
FCF (US$m)	**--**	**--**	**(4)**	**(3)**	**22**	**17**	**46**	**46**	**46**	**46**	**46**	**50**	**512**

Source: SCPe; metric units unless specified; LT prices: US$60/lb U3O8

Our modelled estimates generate a 13-year life of mine producing a total of 28.4Mlbs at cash costs of US$21/lb with US$33/lb AISC. At US$60/lb, this generates a US$288m $NPV_{7\%-60}$, equivalent to US $7.20/lb on the mine plant inventory. LOM FCF is US$512m or US$40m pa at 30% FCF margin, with US$974m EBITDA LOM (US$75m pa) at 58% EBITDA margin.

Sensitivity analysis: NPV is sensitive to uranium prices; for every US$1/lb increase in uranium price from US$50-70/lb, our modelled NPV increases by US$12m. Given low capex, short time to production and 10-year mine life, the NPV is not as sensitive to discount rate. From an operating perspective, we see greatest leverage to wellfield recovery and wellfield costs, followed by opex. This matches our qualitative expectation that the biggest operational hurdle is getting good leach performance and uranium concentration in solution from the wellfields while managing impurity levels which can impact ion exchange.

Figure 18 NPV sensitivity summary:

Texas NPV7% (US$m)	Prices : -20.0%	-10.0%	flat	+10.0%	+20.0%
DR: 5.0%	169	253	337	420	504
DR: 6.0%	155	233	311	389	467
DR: 7.0%	143	216	**288**	360	433
DR: 8.0%	132	199	267	335	402
DR: 10.0%	112	172	231	290	349

Texas NPV7% (US$m)	Recovery: 90%	92.5%	95%	96%	97%
Processing: US$10.0/t	302	321	339	347	354
Processing: US$12.5/t	277	295	314	321	328
Processing: US$15.0/t	251	270	**288**	295	303
Processing: US$17.5/t	226	244	262	270	277
Processing: US$20.0/t	200	218	237	244	251

Texas NPV7% (US$m)	Wellfield recovery: 65%	70.0%	75%	80%	85%
Wellfield costs: US$6.0/t	236	282	329	375	422
Wellfield costs: US$8.0/t	215	262	308	355	402
Wellfield costs: US$10.0/t	195	241	**288**	335	381
Wellfield costs: US$12.0/t	174	221	267	314	361
Wellfield costs: US$14.0/t	154	200	247	294	340

Texas NPV7% (US$m)	Opex : -20.0%	-10.0%	flat	+10.0%	+20.0%
Capex : -20.0%	355	337	320	302	285
Capex : -10.0%	339	321	304	286	269
flat	323	305	**288**	270	253
Capex: +10.0%	307	290	272	255	237
Capex: +20.0%	291	274	256	239	221

Source: SCP; all NPVs shown at 7% discount rate, US$60/lb U3O8

Cost benchmarking: Below we benchmark capex and opex against other ISR projects in the US and Australia. Producer data is more reliable but unfortunately the only publicly listed current ISR producer is Kazatomprom, which only reports group level cash costs (US$8.80/lb cash costs in 2021, US$3.83/lb capital costs). The point of the exercise is to benchmark our operating cost assumptions and provide a level of sensitivity to grade and volumes (*note we use ore tonnes, admittedly this is a leaching operation so liquid volumes would be best, but ore tonnes is the only commonly available metric across assets*). Our initial capex estimates are lower than the peer average but this is due to the already built processing plant. Our sustaining capex estimates per tonne are in line, and our recovery, opex estimates per tonne are conservative relative to the peer group. While we expect UEC's Texas operations to be lower recovery or higher cost than peers, given better grades, better access to reagents and more moderate temperature ranges in Texas, we are pleased that economic outcomes are robust even using conservative inputs relative to peer studies.

Figure 19: Cost benchmarking vs peers

		Peers									SCPe	
Asset	**Unit**	**Lost Creek**	**Shirley Basin**	**Lance**	**Crownpoint**	**S Texas**	**Gas Hills**	**Honeymoon**	**Dewey Burdock**	***Peer avg***	**Texas Hub**	**Wyoming**
Location		Wyoming	Wyoming	Wyoming	New Mexico	Texas	Wyoming	S Australia	South Dakota		**Texas**	**Wyoming**
Company		Ur-Energy	Ur-Energy	Peninsula	EnCore	EnCore	EnCore	Boss Energy	EnCore		**UEC**	**UEC**
Study		PEA	PEA	DFS	MRE	MRE	PEA	EFS	PEA		**MRE**	**MRE**
Date		Sep 2022	Sep 2022	Aug 2022	Mar 2022	Dec 2021	Aug 2021	Jun 2021	Dec 2020		**Sep 2022**	**Sep 2022**
U3O8 production rate	(Mlbs pa)	1.2	0.8	0.8	--	1.6	1.0	2.5	1.0	*1.3*	**2.5**	**4.0**
LOM U3O8 production	(Mlbs U3O8)	12.3	6.4	14.4	--	--	6.5	21.8	14.3	*12.6*	**28.4**	**57.0**
M&I grade	(% U3O8)	0.047%	0.230%	0.048%	0.105%	0.104%	0.113%	0.070%	0.116%	*0.104%*	**0.180%**	**0.057%**
Total MRE Grade	(% U3O8)	0.046%	0.230%	0.048%	0.106%	0.117%	0.108%	0.062%	0.111%	*0.103%*	**0.119%**	**0.059%**
U3O8 recovery	(%)	80.0%	80.0%	65.8%	--	--	80.0%	70.0%	80.0%	*76.0%*	**71.3%**	**71.3%**
Initial Capex	(US$m)	--	33.1	8.4	--	--	26.0	80.0	31.4	*22.4*	**25.0**	**--**
Sustaining Capex	(US$m)	224.9	0.9	282.2	--	--	59.0	125.2	157.7	*106.2*	**298.5**	**672.8**
Implied per tonne	*(US$/t)*	*15.3*	*0.6*	*15.5*	--	--	*18.1*	*6.2*	*22.6*	*13.0*	***13.4***	***10.5***
LOM capex per lb	(US$/lb)	18.3	5.3	20.2	--	--	13.1	9.4	13.2	*13.3*	**11.4**	**11.8**
Implied per tonne	*(US$/t)*	15.3	21.7	15.9	--	--	26.0	10.2	27.1	*19.4*	**14.5**	**10.5**
Total opex	(US$/lb)	16.8	16.4	16.3	--	--	11.5	18.5	10.0	*14.9*	**21.0**	**22.7**
Implied per tonne	*(US$/t)*	14.0	66.7	12.8	--	--	22.9	20.1	20.3	*26.1*	**26.7**	**20.2**
Wellfield opex	(US$/lb)	4.7	4.1	--	--	--	3.9	2.0	1.2	*2.6*	**7.9**	**10.6**
Implied per tonne	*(US$/t)*	3.9	16.5	--	--	--	7.8	2.1	2.5	*5.5*	**10.0**	**9.4**
Wellfield sustaining capex	(US$/lb)	16.7	0.1	17.9	--	--	9.1	4.4	8.8	*9.5*	**7.7**	**8.5**
Implied per tonne	*(US$/t)*	13.9	0.6	14.1	--	--	18.1	4.8	17.9	*11.6*	**9.8**	**7.5**
Plant opex	(US$/lb)	7.3	6.0	--	--	--	4.1	16.5	5.1	*6.5*	**11.8**	**10.6**
Implied per tonne	*(US$/t ore)*	6.0	24.3	--	--	--	8.2	18.0	10.5	*11.2*	**15.0**	**9.4**

Source: Company disclosures; SCPe used for UEC production and costs, opex excludes royalties

Athabasca portfolio, Saskatchewan, Canada

UEC's acquisitions of UEX's large Athabasca portfolio and Rio Tinto's high grade Roughrider project makes UEC a major Athabasca player. We think this fundamentally changes UEC's value offering for the better because it means the company is not just a portfolio of attractive projects, it now has the potential to make a game changing exploration discovery. UEC's Athabasca portfolio is one of the largest with >3,000km^2 of exploration ground and in key areas of the Athabasca, namely the east and northeast, and western Athabasca, in known fertile host domains with manageable sandstone cover and good exploration access.

Our view: Of the portfolio, Roughrider is the flagship in our view. Located in the NW Athabasca near existing mills, road and power infrastructure, Roughrider was the subject of a bidding war between Rio Tinto and Cameco for a reason. The exploration upside is obvious given Roughrider's size and grade, and the nearby presence of the Midway and Midway A deposits which indicate a well mineralised corridor. Christie Lake, located between Cameco's flagship McArthur River and Cigar Lake mines, is the next exploration focus given its proximity to world class multi-hundred-million lb deposits. With that said, much of the portfolio is highly interesting, as it's on-basin (less risk of post-emplacement erosion), near basin margins (manageable depth of sandstone cover), and focused on areas near road access corridors.

Figure 20: Uranium reserves and resources

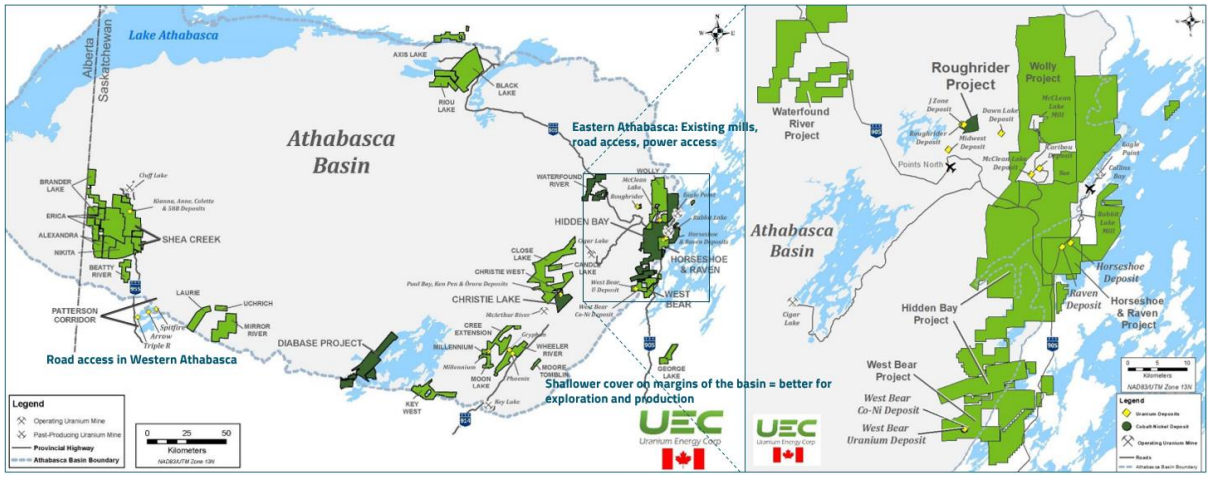
Project Area	UEC Ownership	M&I			Inferred			Total		
		Tonnes	Grade	U3O8	Tons	Grade	Lbs U3O8	Tons	Grade	Contained
	(%)	(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)	(kt)	(% U3O8)	(k lbs)
Roughrider (historical)	100%	394	1.980%	17,207	162	11.432%	40,730	556	4.728%	57,937
Horseshoe-Raven	100%	10,294	0.154%	35,044	1,109	0.111%	2,718	11,403	0.150%	37,762
Christie Lake	83%	--	--	--	289	3.192%	20,340	289	3.192%	20,340
Shea Creek	49%	2,069	1.483%	67,662	1,272	1.005%	28,192	3,341	1.301%	95,854
Wheeler River	5%	1,809	3.312%	132,100	82	1.659%	3,000	1,891	3.241%	135,100
Millennium	15%	1,142	3.015%	75,900	412	3.193%	29,000	1,554	3.062%	104,900
Total Attributable		**262**	**3.118%**	**17,990**	**66**	**3.097%**	**4,500**	**328**	**3.113%**	**22,490**

Source: UEC, UEX Corp historical disclosure, Hathor Resources historical dislosure

Roughrider (100% UEC, historical 58Mlbs at 4.7% U_3O_8)

Roughrider, acquired in October 2022 for US$80m in cash and US$70m in shares, is one of the largest and highest grade deposits in the world at 58Mlbs at 4.7% U_3O_8 (historical 2009 43-101-compliane MRE by Hathor). Discovered in 2009 by Hathor Exploration, the project is strategic because of its size and grade and location near the McClean Lake and Rabbit Lake uranium mills. The area is highly prospective: Roughrider is located 4km NW and 0.9km NW of the 51.4 Mlb and 17.5Mlb Midwest and Midwest A deposit (Orano-Denison JV). Hathor's exploration success and excitement about the district led to a competitive M&A process between Rio Tinto and Cameco to acquire Hathor, which culminated in Rio Tinto's successful acquisition of Hathor for C$635m in 2011. Prior to its acquisition, Hathor's 2011 PEA delineated 5.0Mlbs pa of production at C$14.44/lb opex and C$567m initial capital with a C$769m post-tax $NPV_{7\%}$ at US$60/lb.

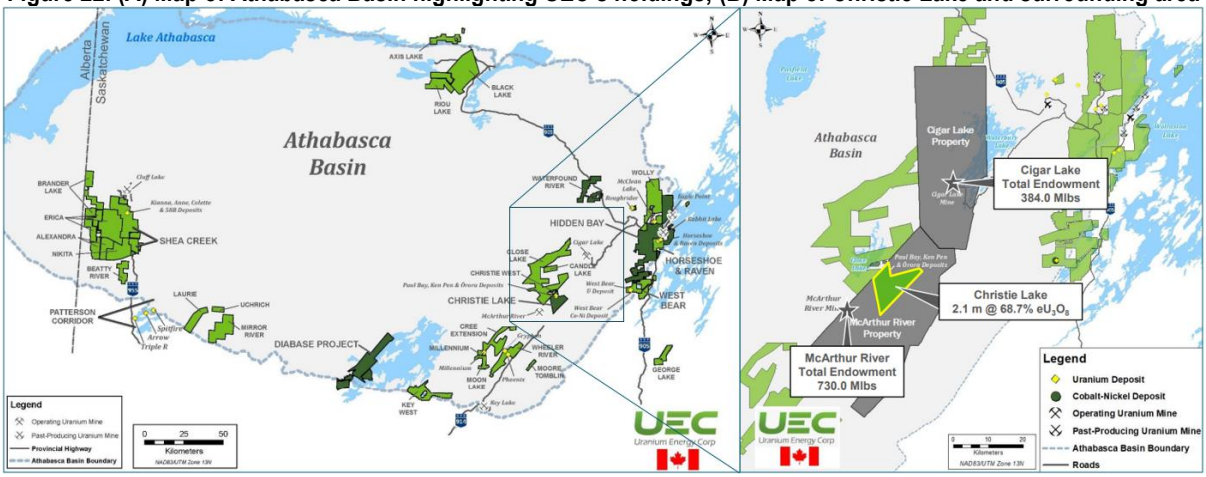
Figure 21: (A) Map of Athabasca Basin highlighting UEC's holdings; (B) Map of Roughrider and surrounding area



Source: UEC, annotated by SCPe

Christie Lake (83% UEC / 13% Denison; 20.3Mlbs at 3.2% U_3O_8; acquired in UEX deal) covering 7,992Ha, is located 9km NE of the McArthur River mine, between Cameco's McArthur River and Cigar Lake land packages. The NW part of the project is cut by the Yalowega Trend Fault, interpreted to be an extension of the P2 fault that hosts the deposits at the McArthur River Mine. The fault is rooted in the basement rocks and extends up to the sandstone. The project hosts three unconformity hosted deposits, Paul Bay, Ken Pen and Orora which are aligned along an NE-trend that is coincident with the CB94-C conductor in a 'string of pearls.'

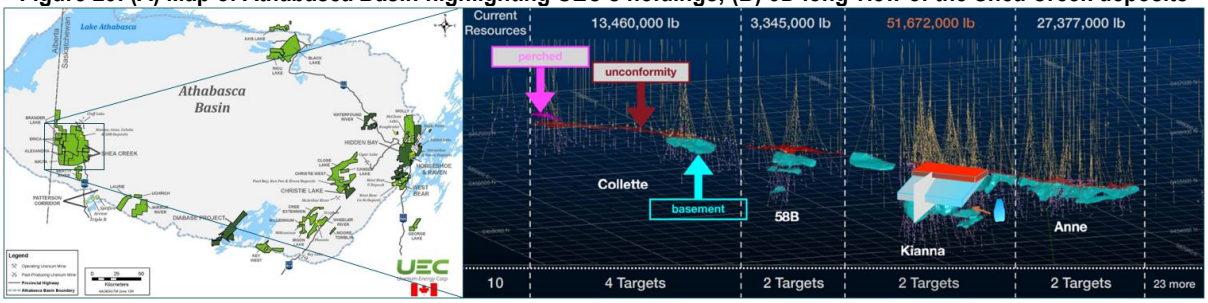
Figure 22: (A) Map of Athabasca Basin highlighting UEC's holdings; (B) Map of Christie Lake and surrounding area



Source: UEC, annotated by SCPe

Shea Creek (49% UEC**;** 51% Orano**;** 95.9Mlbs at 1.30% U_3O_8; acquired in UEX deal) is located in the western Athabasca Basin, 15km south of the Cluff Lake mine and mill (now deconstructed and rehabilitated), which produced 64.2Mlbs at 0.92% U_3O_8 from 1980-2002. All weather Highway 955 runs through the property and the property has access to an airstrip on the former Cluff Lake property. Four deposits (Collette, 58B, Kianna and Anne) have been discovered over a 3km strike length along the Saskatoon Lake Conductor (SLC), a 40-80m thick N-NW trending and W-SW dipping graphitic pelitic gneiss unit that is spatially associated with mineralisation. Depth of mineralisation ranges from 650-800m below surface. Mineralisation ranges from breccia hosted mineralisation which straddles the unconformity as pitchblende-coffinite fragments, and basement mineralisation is also present, most extensively at the Kianna Deposit. While mineralisation remains open at Shea Creek. The resource was last updated in 2013, and UEX changed focus to Christie Lake in 2015.

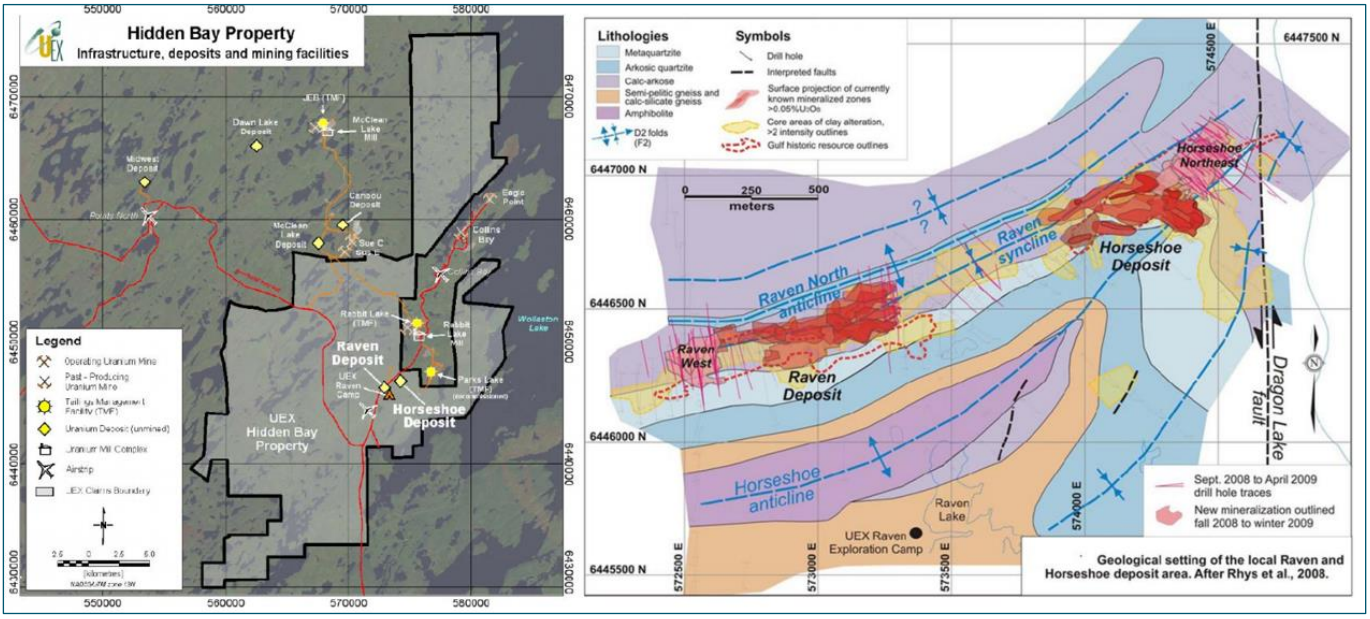
Figure 23: (A) Map of Athabasca Basin highlighting UEC's holdings; (B) 3D long view of the Shea Creek deposits



Source: UEC, annotated by SCPe

Horseshoe-Raven and West Bear (both 100% UEC): The two projects are contiguous licenses that were acquired by UEX from Cameco, located 5km south of Cameco's Rabbit Lake Mill. The properties were part of Cameco's Rabbit Lake land package; the Rabbit Lake open pit mine produced from 1975-1984 and the mill continued operating until 2013 processing ore from the Collins Bay and Eagle Point Mines. Horseshoe (23.9Mlbs at 0.2% U_3O_8) is defined over 800m strike from 100-450m depth while Raven (13.8Mlbs at 0.1% U_3O_8). Is defined over 750m from 100-300m depth. The Athabasca sandstone is eroded and is not present over these licenses. West Bear hosts anomalous Co-Ni mineralization with a December 2019 MRE of 5.12Mlbs Co and 5.66Mlbs Ni at 0.19% Co and 0.21% Ni. Mineralization occurs from 30-110m below surface hosted in faults in the graphitic package, similar to fault hosted uranium deposits like NexGen's Arrow / Fission's PLS in the Western Athabasca, albeit Ni-Co deposits of that magnitude have not yet been encountered in the Athabasca.

Figure 24. (A) Location of the Horseshoe and Raven Deposits and (B) Regional Geology



Source: UEX Corporation

Millennium (15.05% UEC, 69.9% Cameco, 15.05% Denison; 104.9Mlbs at 3.06% U_3O_8): Millennium is a high-grade underground deposit located 36km north of Cameco's Key Lake Mill, which processes ore from the McArthur River mine. Cameco purchased Orano's (then named AREVA) 27.94% stake in the project in 2012 for C$150m. According to the Environmental Assessment for the project, the mine is expected to produce 150-200tpa of ore (~8.0-12.5Mlbs based on M&I grades) per year over a 10-year mine life utilizing a shaft-accessed underground mine. Cameco's filings also reference the orebody's characteristics as facilitative of bulk extraction mining methods, similar to Eagle Point, indicating potential for a low-cost stoping operation.

Figure 25. Cameco overview of the Millennium project

Location	Saskatchewan, Canada
Cameco's share	69.9%
Mine type	Underground
Estimated resources (Cameco's share)	53.0 million lbs (indicated), average grade U_3O_8: 2.39% 20.2 million lbs (inferred), average grade U_3O_8: 3.19%
Product	Uranium concentrates
Discovered	2000
Other possible features	• Off-site processing • Employment: about 150 at full production • Estimated life of mine: 10 years

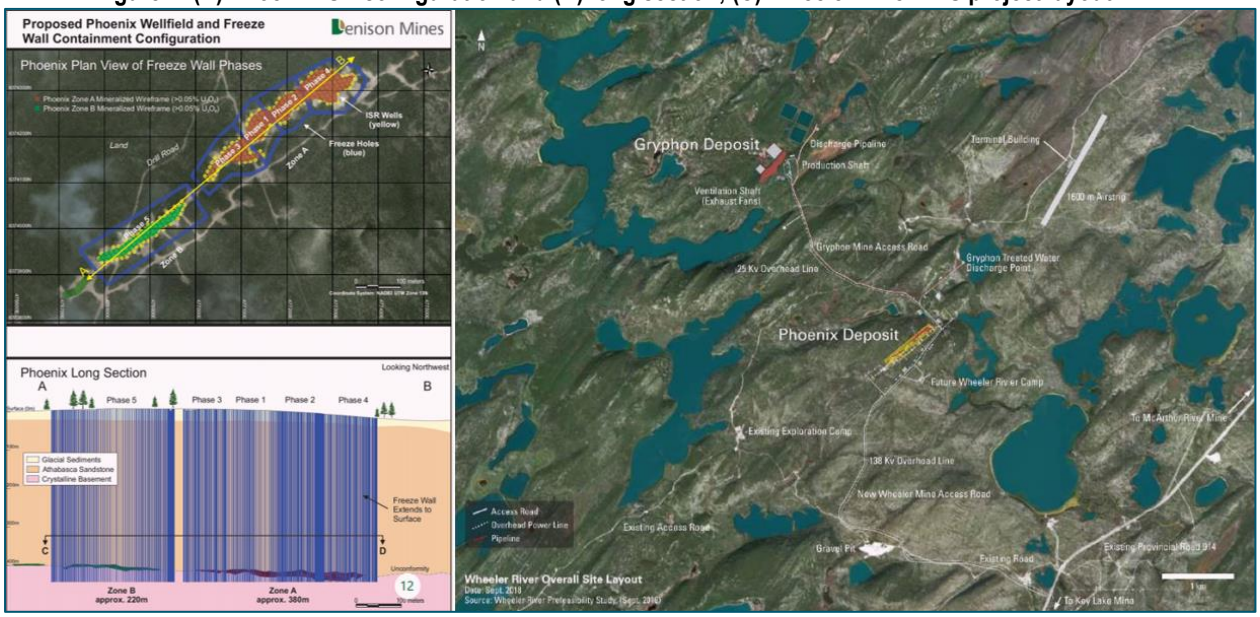
The Cree Extension-Millennium project is a Cameco-operated joint venture located in the southeastern portion of the Athabasca Basin, approximately 35 km north of the Key Lake operation.

The project includes the Millennium deposit which was discovered in 2000. We own 69.9% of the project.

Source: Cameco

Wheeler River (5% UEC, 95% Denison Mines): Wheeler River consists of two deposits: Phoenix and Gryphon, located 14km and 11km east of the Millennium deposit in the eastern Athabasca Basin. **Phoenix** is a high grade unconformity hosted deposit with a total resource of 71.3Mlbs at 18.5% U_3O_8 including a high grade core of 59.9Mlbs at 43.2% U_3O_8. The 2018 PFS envisaged a co-development with Phoenix to be mined via in-situ leaching and processed at a precipitation plant built on site. Per the PFS, LOM production at Phoenix was 6.0Mlbs per year at C1 cash costs of C$4.33/lb (US$3.33/lb) and AIC of C$11.57/lb (US$8.90/lb) with C$322.5m of initial capex for an NPV8% of C$930.4m (at UxC's forward curve prices US$29-45/lb). **Gryphon** is basement hosted and envisaged to be mined as a long-hole stoping operation with ore to be processed at the McClean Lake Mill. The PFS envisaged a 6.5-year mine life producing 7.6Mlbs per year at C1 cash costs of C$15.21/lb (US$11.70/lb) and AISC of C$29.67/lb (US$22.82/lb) including C$623m of initial capex for an NPV8% of C$561m.

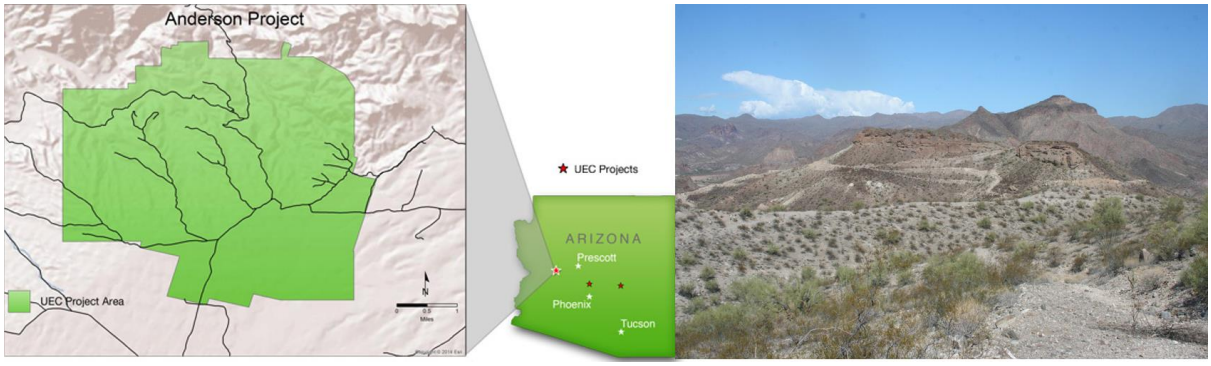
Figure 1: (A) Phoenix ISR configuration and (B) long section; (C) Wheeler River PFS project layout



Other assets

Anderson (100% UEC) located in west-central Arizona, 75 miles NW of Phoenix, hosts an SK1300-compliant Indicated resource of 32Mlbs at 0.099% U_3O_8. The project was first discovered in the 1950s and was mined for ~11kt of ore between 1955-1959. The bulk of resource drilling was carried out in the 1970s, with some additional RC drilling in the 2000s to confirm prior work. UEC acquired the project in 2014 and completed a PEA in July 2022, which estimated US$44m initial capex and US$8m of pre-production operating costs for a heap leach operation producing 1Mlbs per year at US$30.68/lb cash cost (excluding severance taxes). The study assumed heap leach followed by ion change on site, with loaded resins shipped to Energy Fuel's White Mesa processing plant in Blanding, Utah for elution, drying and packaging.

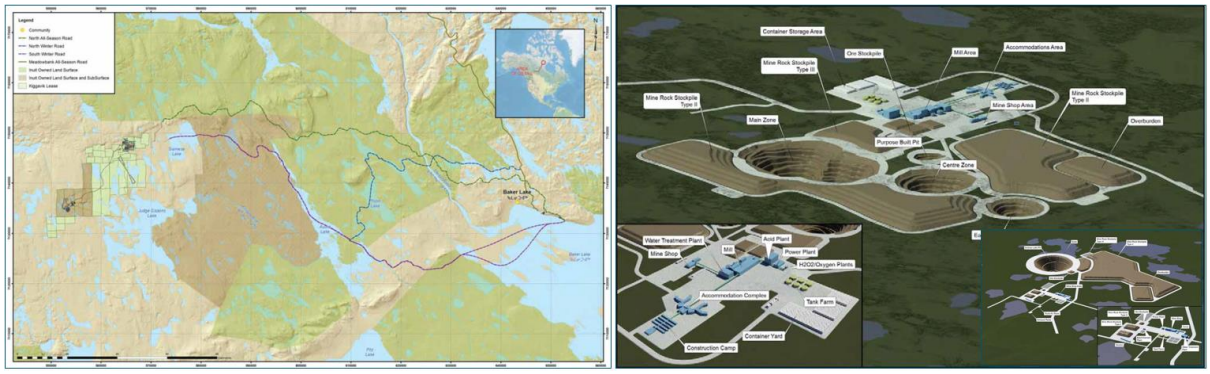
Figure 26: (A) Map of Anderson project area and



Source: UEC

Kiggavik (66.19% Orano, 16.9% UEC, 16.9% Denison): Kiggavik is a large scale unconformity-related open pit-able project with a total resource of 132Mlbs at 0.54% U_3O_8. The project is located in Nunavut Territory, 80km west of the community of Baker Lake. The project was first identified in the 1970s and was acquired by AREVA in 1993. In 2007 field studies and engineering resumed. Orano advanced Kiggavik to final permit decision in 2015 but the Nunavut Impact Review Board (NIRB) denied the permit on the grounds that the project start date was not specified; (Orano chose not to specify due to uncertain market conditions). The NIRB finding made clear that the project parameters were acceptable and the decision could be reconsidered at a later date when the project start date is more certain. The proposed project scope includes four open pits and an underground mine, feeding a dedicated milling facility, producing 107Mlbs over a 14-year mine life including 12 years of steady state averaging 8.6Mlbs per year.

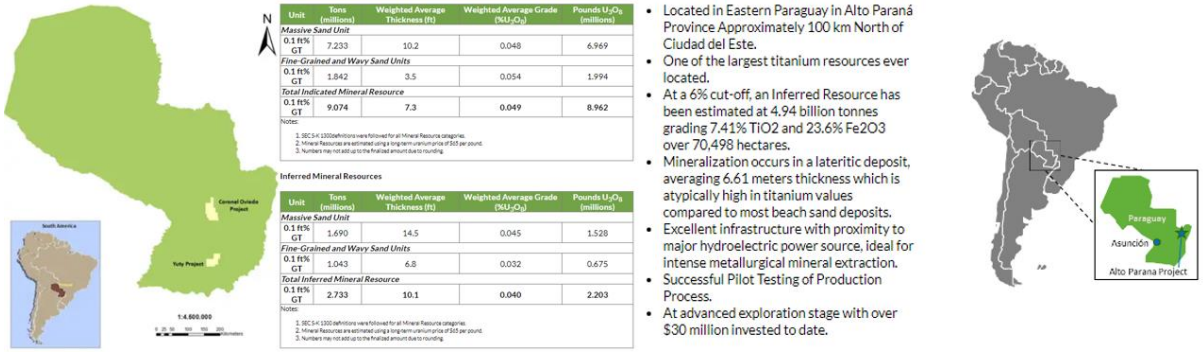
Figure 2: (A) Map of Kiggavik; (B) Proposed site layout for Kiggavik (3 pits and plant) and Sissons (1 pit, 1 UG connected by 18km road) sites



Source: AREVA environmental filings

Paraguay Assets: UEC's has a portfolio of Paraguay assets, from 2012- including the 1,740km^2 Yuta ISR project (11.2Mlbs at 0.043% U_3O_8) in southern Paraguay, the 2,023km^2 Oviedo project ISR uranium project, and the 4,940Mt at 13.5% ilmenite Alto Parana hard rock titanium project. The ISR uranium projects were acquired in 2012 and Alto Parana was acquired in 2017. At this time, we believe this portfolio offers optionality but do not expect it to form part of UEC's near term production strategy.

Figure 3: (A) Map of Paraguay uranium assets; (B) Yuta MRE table; (c) Alto Parana titanium project overview



Source: UEC

Corporate and Financial Summary

Share structure: As at 14 November 2022, UEC had 367.1m shares outstanding. At 31 October 2022 there were a total of 1.6m RSU/PSUs outstanding and 9.3m options outstanding at a weighted average exercise price (WAEP) of US$1.63/sh. We base our per share valuation on a fully-diluted, fully-funded assumed share count of 377.8m fully diluted, fully funded shares outstanding.

Balance sheet: UEC reported US$21m of cash 31 October 2022. In addition, it holds 15m shares of Uranium Royalty Corp (TSXV:URC) for US$33m of market value @ C$3.00/sh of Uranium Royalty Corp. US$52.5m of U_3O_8 (1.05Mlbs @ US$50.25/lb) and 0.76Mlbs of uranium (US$42m at spot, US$52m @ SCPe LT US$60/lb). UEC has 5.5Mlbs of future uranium purchase agreements at a weighted average price of US$37.30/lb. At spot this generates US$60m of future value (lbs * spot price - purchase price) which increases to US$125m at our LT spot price estimate of US$60/lb.

Funding: We estimate sustaining capital only for Wyoming (minimal/nil restart capital) plus US$15m of capex for Texas, US$28m of working capital, and US$15m per year of G&A plus mineral property maintenance expenditures. Assuming new uranium purchases are sold in the same year, at spot US$48/lb we calculate peak financing of US$55m in FY25 which is less than the combined value of UEC's URC holdings plus 0.77 Mlbs of uranium inventory currently on the balance sheet. We assume capex is funded by inventory sell down rather than equity dilution, although in practice this is at management's discretion. UEC currently has an ATM equity offering active with US$15m raised since the end of July 2022.

Financials: At US$60/lb both assets generate >50% asset level EBITDA margins which results in group EBITDA margins of 43-57% once both operations reach steady stage. At spot US$48/lb this drops to 33-45%, still healthy levels. Free cash flow per year averages US$110m once both operations reach steady state, more than enough to sustain current valuations while leaving the large Athabasca portfolio as purely upside. Moreover, per our estimates this can be funded purely by physical uranium inventory sell down, although we think management may consider holding the uranium and funding through external capital depending on market conditions and outlook.

Figure 27: SCPe cash flow and balance sheet estimates

Year (to 31 July)	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E
Texas production/sales (Mlbs)	--	--	--	--	0.6	1.3	1.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Wyoming production/sales (Mlbs)	--	--	--	0.5	1.3	1.3	2.6	3.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Physical uranium purchases (Mlbs)	1.0	0.8	1.7	0.9	0.6	0.1	--	--	--	--	--	--	--	--	--	--
Physical uranium sales (Mlbs)	--	--	(2.8)	(1.6)	(0.6)	(0.1)	--	--	--	--	--	--	--	--	--	--
Revenue - includes physical uranium sales (US$m)	--	23	159	127	151	159	243	345	386	386	386	386	386	386	386	386
COGS (US$m)	--	(16)	(93)	(92)	(73)	(69)	(114)	(160)	(172)	(172)	(172)	(172)	(167)	(167)	(167)	(167)
G&A (US$m)	(17)	(25)	(20)	(18)	(18)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
EBITDA (US$m)	(17)	(21)	46	18	60	77	117	172	202	202	202	202	207	207	207	207
Net income (US$m)	(15)	5	44	12	36	45	67	101	117	102	103	104	109	110	111	112
EPS (US$/sh)	(0.070)	0.019	0.135	0.033	0.098	0.124	0.182	0.273	0.315	0.275	0.275	0.277	0.289	0.292	0.294	0.296
EBITDA margin (%)	--	*(92%)*	*29%*	*14%*	*40%*	*48%*	*48%*	*50%*	*52%*	*52%*	*52%*	*52%*	*54%*	*54%*	*54%*	*54%*
Uranium (purchases) sales (US$m)	(29)	(37)	94	59	13	2	--	--	--	--	--	--	--	--	--	--
Cash flow from ops excl physical uranium (US$m)	(13)	(16)	(22)	(45)	47	81	101	159	187	178	179	180	185	186	187	187
M&A/equity investments (US$m)	(4)	(110)	(80)	--	--	--	--	--	--	--	--	--	--	--	--	--
Capex (US$m)	(0)	(1)	--	(8)	(33)	(58)	(58)	(65)	(85)	(70)	(70)	(70)	(70)	(70)	(70)	(70)
FCF (US$m)	(42)	(17)	(22)	(54)	15	24	43	94	102	108	109	110	115	116	117	117
FCFPS (US$/sh)	(0.175)	(0.059)	(0.059)	(0.146)	0.040	0.064	0.117	0.255	0.277	0.289	0.291	0.292	0.305	0.307	0.310	0.312
Net cash (US$m)	34	33	52	58	85	111	157	252	354	466	577	693	807	923	1,040	1,157
ND/NTM EBITDA (x)	--	--	--	--	(1.1)	(0.9)	(0.9)	(1.2)	(1.8)	(2.3)	(2.9)	(3.4)	(3.9)	(4.5)	(5.0)	(5.6)
Debt borrowed (repaid) (US$m)	(10)	(10)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Equity Raised (US$m)	95	168	28	--	--	0	4	--	--	4	2	5	--	--	--	--
Total assets (US$m)	170	354	724	732	766	811	882	987	1,105	1,211	1,316	1,425	1,534	1,643	1,754	1,866
Total liabilities (US$m)	18	27	105	101	99	99	100	103	104	104	104	104	104	104	104	104
Total equity (US$m)	151	327	653	665	701	747	817	918	1,035	1,141	1,246	1,356	1,464	1,574	1,685	1,796
Ending shares out (m)	237	290	367	367	367	367	370	370	370	374	375	376	376	376	376	376
ROCE (%)	(11%)	1%	6%	2%	5%	6%	8%	11%	12%	11%	10%	9%	9%	8%	8%	7%
ROIC (%)	(15%)	1%	8%	2%	6%	7%	10%	16%	18%	19%	19%	19%	20%	20%	20%	20%
ROE (%)	(10%)	2%	7%	2%	5%	6%	8%	11%	11%	9%	8%	8%	7%	7%	7%	6%
Wyoming EBITDA (US$m)	--	--	--	15.9	44.1	44.1	78.2	100.9	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1
Texas EBITDA (US$m)	--	--	--	--	20.9	42.8	51.3	83.4	83.4	83.4	83.4	83.4	88.4	88.4	88.4	88.4

Source: SCPe; UEC historicals

Government and stakeholders:

Ownership: UEC owns 100% of the Texas ISR, Wyoming ISR and Roughrider deposit, which we deem the core assets. Part owned assets include 5% of Denison's Wheeler River project, 15% of Cameco's Millennium deposit and 49% of the Shea Creek deposit in the Western Athabasca. While world class in their own right, given the minority ownership, we think UEC could rationalize its minority ownership stakes in the future.

Tax: The corporate profit tax rate in the USA is 21%. Wyoming and Texas have no state corporate income tax thus we use a 21% effective profit tax rate. Severance taxes in Texas on uranium are sliding scale, we model a 4% royalty on revenue in lieu of severance tax and a 0.75% revenue royalty in lieu of Texas Franchise Tax. For Wyoming we model a 5% state mineral royalty. We model 7% total royalties incl. govt and private at both ops.

Permitting: Texas and Wyoming both have fully licenced/permitted processing plants totalling 4.0 / 2.5 Mlbs pa, respectively with 85% and 51% of contained lbs permitted for ISR extraction, respectively. We believe this is more than sufficient to permit the remaining deposits in time for their extraction. The Athabasca assets are still in the resource expansion stage and exploration permits are not a major concern in our view.

ESG Considerations

Uranium is the key input into nuclear power, which is the lowest carbon intensity source of power generation, and a reliable backbone of domestic generating capacity, accounting for 19% of US energy generation in 2021.

Environmental: UEC operates in well regulated jurisdictions (Texas, Wyoming, Saskatchewan) with rigorous operating and restoration requirements. Groundwater used in ISR operations is not suitable for human consumption and is classified as industrial use only. Process water is reclaimed at a water treatment plant and settling ponds and >95% is returned to source aquifers. The process does not generate waste rock and very small volumes of gangue compared to conventional mining.

Social: The jurisdictions in which UEC operates are supportive of resource development. UEC has the necessary surface use and land use agreements in Texas, Federal lode, state and private land use agreements in Wyoming, and mineral claims in Canada.

Governance: The board currently consists of six members, including a non-Executive Chairman (Spencer Abraham, a former US Senator and 2001-2005 US Secretary of Energy), President and CEO Amir Adnani, and non-executive Directors Ganpat Mani (former ConverDyn CEO); Vincent Della Volpe (pension fund manager), David Kong (Vancouver-based CPA); and Gloria Ballesta (Bogota-based CEO of Content Mode SAS).

Risks

Metallurgy / Wellfield extraction: Detailed metallurgical testing has not been carried out for each of UEC's ISR deposits and the company noted it does not intend to complete feasibility studies or reserves prior to recommencing production. This is more common in ISR uranium mining than hard rock mining, and UEC's ISR development projects are prior producers and/or in districts that have seen ISR production in the past.

Capex: A detailed restart study, either PEA, PFS, or DFS has not been completed, thus capex figures are preliminary. With that said, ISR assets are generally low capex and the projects utilize existing processing plants with the benefit of some production from previously producing wellfields with header house and ion exchange column infrastructure.

Opex: Likewise, while ISR tends to be low cost per tonne of ore, a detailed third-party operating cost study has not been completed at either ISR operation.

Permitting: While both Texas and Wyoming projects have >50% of contained lbs in permitted deposits, our modelled mine plans include production from deposits that have yet to be permitted for ISR extraction. However, we note both Texas and Wyoming have strong precedents for permitting mining operations, including ISR. UEC's Saskatchewan projects require mine permitting and CNSC licensing prior to development and production.

Uranium purchasing strategy: UEC has actively bought and sold physical uranium in the market, including 766klbs of inventory, 5.5Mlbs of future deliveries, and 0.5Mlbs of uranium sales in FY22. The current weighted average price of future uranium delivers is US$37/lb, ~25% below spot, thus the purchases are currently profitable, however this exposes UEC to price risk, and potentially balance sheet risk if prices decrease.

Appendix I: ISR Overview

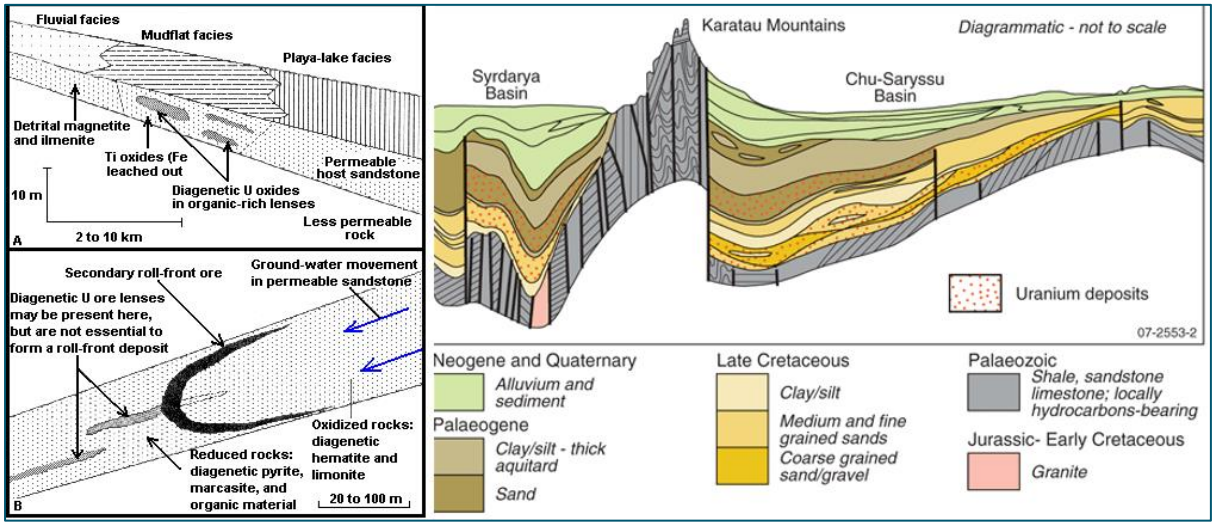
The History

In-situ recovery (ISR), also referred to as in-situ leaching (ISL) was developed in the 1960s as a lower cost means of extracting mineralization than typical hard-rock mining methods, and was widely adopted in the USSR in the 1970s. Solution is injected into the orebody, utilizing the native groundwater to extract the mineralization.

Geology:

Uranium deposits amenable to ISR occur in permeable sand or sandstones, confined above or below by impermeable strata and were formed by the lateral movement of groundwater bearing uranium minerals through the aquifer, precipitated by a fall in oxygen content (reduction) on an oxidation/reduction interface. Uranium minerals typically occur as uraninite (oxide) or coffinite (silicate). The deposits can be extensive sheet-like bodies, or crescent shaped deposits formed in paleovalleys (roll-front). Exploration should identify the paleochannels including by identifying structures that influence paleovalley formation. Resistivity contrasts are often useful for identifying the oxidation/reduction boundaries that caused precipitation.

Figure 28: Diagenetic and roll front U-mineralisation, (B) Cross-section of Chu-Sarysu and Syrdarya basins of Kazakhstan



Source: (A) USGS, (B) Geoscience Australia

Operating considerations

Tonnes and grade are lesser drivers of costs and economics than for hard rock mines. Porosity (flow rates), permeability and host rock composition (high carbonates = higher acid consumption or requires alkaline lixiviant) drive reagent choice / consumption which is a material cost driver. Weather (requirements for heating and other cold-management practices) and pump distances are also considerations.

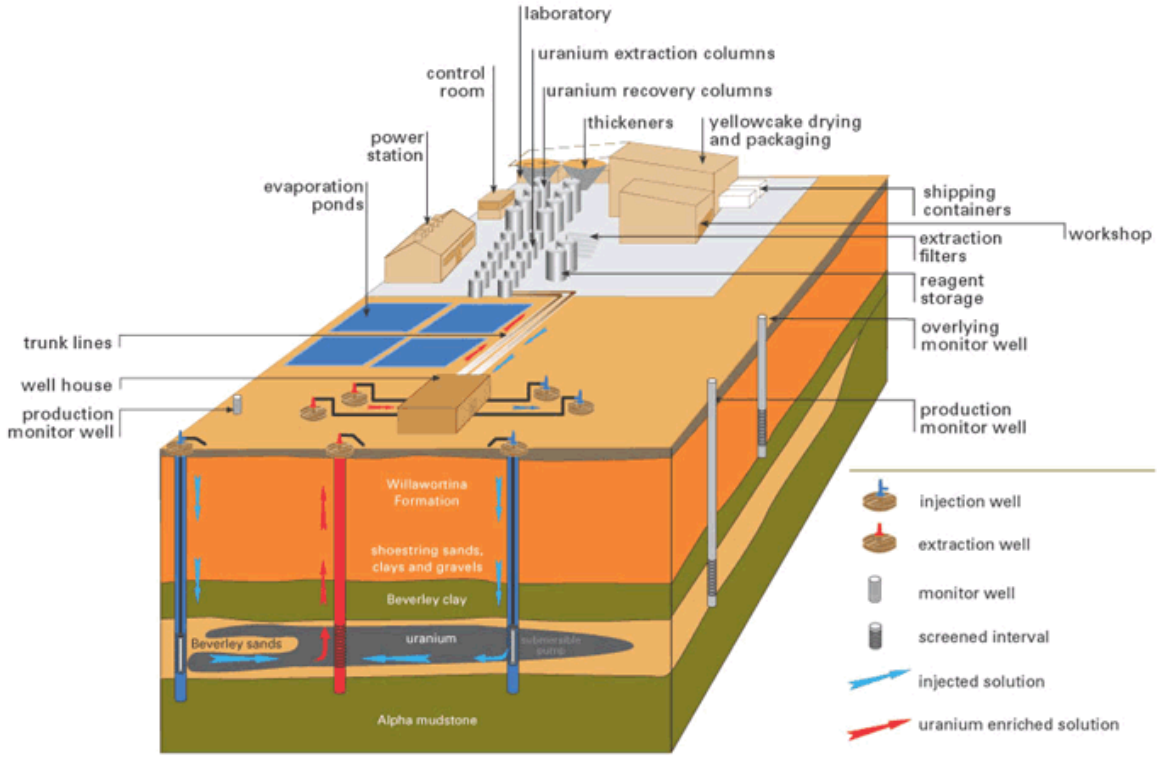
Lixiviant

Typically, low-pH lixiviant is preferred as better recoveries (70-90% for acidic vs 60-70% for alkaline) are achieved. In Australia, hydrogen peroxide is used while in Kazakhstan, sulphuric acid is used. If there is significant acid consuming materials in the orebody (typically limestone or gypsum), an alkaline leach is used, usually sodium bicarbonate in the USA. Kazakh orebodies often have high carbonate levels but high concentrations of sulphuric acid are used to overcome this, roughly 5x the reagent consumption levels of the Beverly Mine in South Australia. Lixiviant regimes are a key driver of economics. Kazakh operations benefitted significantly from the high availability of sulphuric acid post 2010 through the expansion of hydrocarbon, copper and zinc refining/smelting in country, which created the high availability of low-cost sulphuric acid that enabled the rapid growth of uranium production in Kazakhstan.

IX vs SX

Ion exchanges (IX) is typically lower capex and operating cost. SX is preferable under two circumstances: high uranium tenors (concentrations) or if there are high concentrations of nitrates or chlorides in the pregnant leach solution. Since ISR operations are typically lower uranium tenor (than for example an Athabasca hard rock facility), IX is typically preferred for ISRs. Remote ion exchange satellite plants are common in the US and at Four Mile in Australia to commercialize small orebodies distant from a central processing plant.

Figure 29: Representative diagram of the Beverly ISR operation



Source: (A) USGS, (B) Geoscience Australia

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TENDER: The analyst recommends tendering shares to a formal tender offering

UNDER REVIEW: The stock will be placed under review when there is a significant material event with further information pending; and/or when the research analyst determines it is necessary to await adequate information that could potentially lead to a re-evaluation of the rating, target price or forecast; and/or when coverage of a particular security is transferred from one analyst to another to give the new analyst time to reconfirm the rating, target price or forecast.

NOT RATED ((N/R): The stock is not currently rated

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Summary of Recommendations as of January 2023	
BUY:	52
HOLD:	1
SELL:	0
UNDER REVIEW:	1
TENDER:	0
NOT RATED:	0
TOTAL	54

[1] As at the end of the month immediately preceding the date of issuance of the research report or the end of the second most recent month if the issue date is less than 10 calendar days after the end of the most recent month