

21 September 2022

Ticker: GXU CNCash: C\$7mProject: MadaouelaMarket cap: C\$225mPrice: C\$0.27/shCountry: NigerRECOMMEND. (unc.): BUYTARGET (unc): C\$0.70/shRISK RATING: HIGH

In our view, yesterday's Madaouela DFS accomplished its key tasks of i) providing a detailed 'deep dive' study to support debt finance, utility due diligence and potential M&A, maintaining a long life (19-years) and meaningful production profile (2.7Mlbs, 51Mlbs life of mine total) at fundable capex levels, and inflation to manageable levels. The overall mine plan is very similar with a 5% reduction in mine life, slight optimisation of OP/UG to reduce pre-strip, and managing capex, opex and power risk through the addition of 8MW of solar capacity, addition of two VeRo mills (reduced power draw vs SAG mill, doubled capacity to manage availability) to replace the SAG mill, and further detailed study of key areas including molybdenum resource modelling, quote driven cost estimates, and reagent optimisation. Ultimately, a 10% increase in cash costs was unavoidable, but also expected given higher reagent and fuel costs affecting the industry globally. Higher cash costs drove lower like for like NPV but we still view today as a win: Madaouela has never been presented as the lowest cost alternative, but instead provides diversification for western utilities, and security of supply for French or Chinese utilities which consider the downstream benefits of power generation in their criteria. We maintain our BUY rating and lift our modelled uranium price to US\$70/lb, with a maintained C\$0.70/sh price target (prev C\$0.70/sh at 1.0x NAV_{8%-60/lb}). We think this better reflects Goviex's market position, with permitted Madaouela and simple heap leach offering a portfolio of actionable assets at the right time. Post-WNA, with the re-entry of Japan into the fuel market, extension of EU reactors, and expanded nuclear plans in China, we think DFS completed projects with lower technical barriers to entry (like Madaouela which is open pit in early years) are in high demand, and that prices/contracting will accommodate higher cash costs.

DFS confirms scope, manageable capex, detailed engineering wins over modest capex

Goviex released outcomes of the Madaouela DFS (80% GXU, 20% Govt) located 9km SW of Arlit and within 10km of Orano's Somair and Cominak Mines in Niger. The overall production profile has very similar overall LOM production +2% at 51Mlbs over 19 years (prev. 50Mlbs over 20 years)

Figure 1. New and prior DFS parameters

				New				New		
	P	FS	DFS		LFL change	SCPe				
	Reserves	Incl Mo	Reserves	Incl Mo	Base case	Prior	DFS mirror	DFS @60	New	
Uranium price (US\$/Ib U308)	55	>>	65	>>		60	65	60	70	
OP ore inventory (Mt)	7.8	>>	5.4	>>	-30.6%	7.8	5.4	>>	>>	
OP grade (ppm U3O8)	1,000	>>	1,031	>>	3.0%	1,000	1,031	>>	>>	
OP contained (Mlbs U308)	17	>>	12	>>	-28.5%	17	12	>>	>>	
Strip ratio (x)	9.9	>>	9.3	>>	-5.7%	9.9	9.3	>>	>>	
UG ore inventory (Mt)	17.1	>>	20.4	>>	19.0%	17.1	20.4	>>	>>	
UG grade (ppm U308)	995	>>	997	>>	0.2%	995	997	>>	>>	
UG contained (Mlbs U308)	37.6	>>	44.9	>>	19.3%	37.6	44.9	>>	>>	
LOM (years)	20	>>	19	>>	-5.0%	20	20	>>	>>	
Throughput (ktpa)	1,000	>>	1,000	>>		1,000	1,000	>>	>>	
Recovery (% U3O8)	93.1%	>>	92.2%	>>	-1.0%	93.1%	92.2%	>>	>>	
LOM production (Mlbs U308)	50	>>	51	>>	1.6%	50	51	>>	>>	
Avg annual production (Mlbs U308)	2.5	>>	2.7	>>	8.0%	2.5	2.7	>>	>>	
LOM Mo production (kt)		14	1.3	6.0	na		1.3	>>	>>	
Initial Capex (US\$m)	330	347	343	>>	-1.2%	340	343	>>	>>	
Sustaining capex (US\$m)	301	301	277	>>	-8.1%	301	277	>>	>>	
OP mining cost (US\$/t)	2.7	>>	2.1	>>	-23.8%	2.7	2.1	>>	>>	
UG mining cost (US\$/t)	31.7	>>	31.4	>>	-0.9%	31.7	31.4	>>	>>	
Processing cost (US\$/t)	24.9	>>	35.8	>>	43.9%	24.9	35.8	>>	>>	
G&A (US\$/t)	8.0	>>	9.3	>>	16.1%	8.0	9.3	>>	>>	
Cash cost - net of byproduct(US\$/lb)	32.3	22.5	35.8	33.5	10.8%	32.4	35.6	35.4	35.9	
SCPe AISC (US\$/lb)	38.9	29.1	41.2	39.0	6.0%	38.4	40.7	40.4	41.1	
NPV8% (US\$m)	60	117	120	140	na	125	139	74	204	
IRR (%)	11%	14%	13%	13%	na	15%	15%	12%	18%	

Source: GoviEx, SCPe; LFL change shows DFS vs PFS reserve case % change except capex which is compared to Mo case as base case now includes Mo circuit; NPV calculated at build start



Optimisations to mine plan and processing plant design but no major changes

The overall scope was maintained with a 1Mtpa mill and processing plant fed by open pit mining in early years with the Miriam and Maryvonne UG mines coming in the middle of the mine life. Mine: Optimisations to the mine plan including changes to the OP mine sequence to reduce pre-strip and detailed resource modelling of molybdenum in the open pit and areas of the UG with higher drill density. The UG mine plan is largely similar with longitudinal retreat room and pillar mining and XRF sorting before the plant. Plant optimisations including replacement of the SAG mill with two VeRo mills (more info here, reduces power draw and mill foundation), and optimisation of the ion exchange circuits. While a relatively new technology we note each VeRo mill is rated at 100-130tph, which provides nearly double the required capacity; this is a healthy redundancy to allow for maintenance. The DFS included addition of an 8MW solar plant and 5MWh battery storage system for US\$14m initial capex to reduce dependence on grid power.

Inflation modest with overall capex budget maintained, cash cost +11%, AISC +6%

The capex budget saw a 1% decrease to US\$343m with the increase associated with the solar plant offset by optimisations in detailed design, including savings on the SAG mill foundations with the inclusion of the VeRo mills. Opex saw lower mining quote driven unit costs for mining, but higher processing costs driven by reagent prices including significantly higher sulphur and sulphuric acid prices, driving an 11% increase in LOM cash costs and 6% increase in AISC.

Our view: Accomplishes goals of managing inflation while delivering a buildable project

Recall our thesis for GoviEx which centres on the following premises: I) The key advantage to African projects is short lead time to production rather than cost positioning; II) GoviEx adds scale (key to utilities and potential M&A) with a permitted flagship project in Madaouela and attractive second project in Mutanga; and III) the unique factor here is the board and management which has the experience and gravitas needed to deal with the large stakeholders (utilities, African governments and international governments) needed to support and build uranium mines. In short, the uranium and nuclear energy business operate on the radar of major world powers, which requires miners to be able to deliver a technically well engineered project, and then manage government, utility and stakeholders needed to contract, finance, build and operate.

Today's DFS accomplished the key goals which was to delineate enough production over long enough time (19 years @ 2.7Mlbspa) to be attractive to utilities or integrated state players (Orano, CNNC, CGN, Japanese and Korean utility SPVs) and with enough engineering detail to support lending, utility and / or M&A due diligence. No, this is not the lowest cost asset globally, but with permits in hand, and low technical barriers to entry (early years open pit only, standard ion exchange processing), it is actionable and in a relatively geopolitically neutral country that can sell to US, European, Japanese, Korean, Chinese and Middle Eastern buyers (which most assets no longer can due to geopolitical polarisation).

Model update: Match DFS outcomes, will refine mine plan with full technical report

We model the high level DFS outcomes, matching US\$343m initial capex, both the OP and UG reserve, LOM sustaining capex, unit costs (mining, processing and G&A), life of mine production, and throughput rate. We model flat 1031ppm OP head grade and 9.3x strip ratio and flat LOM grade for the UG, matching the DFS reserve outputs, for now as a more detailed mine schedule was not provided in the release. Matching the DFS pricing of US\$65/lb, we generate nearly identical outcomes but higher NPV8% at US\$139m vs DFS US\$120m at a like-for-like US\$65/lb uranium price, with the variance likely due to variance in mine scheduling; we will refine this once the full technical report is lodged. We lift our modelled price to US\$70lb which increases SCPe NPV by 47% to US\$204m, showing Madaouela's high torque to the uranium price, and we moderate our NAV multiple to 0.7x, to reflect DFS completion but pending full technical report review as well as mine finance completion.



Areas of interest for the full technical report review: Include the mine plan grade, tonnage and strip ratio profile, unit cost and sustaining capex split (relatively lean mining costs at US\$2.1/t OP and US\$31/t UG albeit assuming owner mining, but reasonably high SCPe US\$10/t UG sustaining capex), ore sorting mass pull / recovery (SCPe 74% mass pull and 96% recovery back calced from DFS outcomes), and molybdenum grade/distribution (we conservatively model the reserves case for now). We expect NPV to come down moderately as discussed with detailed mine plan, but have used a conservative 0.7x NAV multiple to account for this.

Why we like Goviex

- Large, permitted, well drilled flagship with 19-year 2.7Mlb DFS at Madaouela
- Low strip, on infrastructure 2.6 Mlb pa heap leach second project at Mutanga (Zambia)
- Experienced and well connected management to advance portfolio

Catalysts

- 2H22: Madaouela Offtake and finance
- 2023: SCPe Madaouela construction start (price dependent)
- 1H25: SCPe first production at Madaouela
- 1H27: SCPe first production at Mutanga

Research

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		Price / mkt o	cap:	C\$0.27/sh			Market P/NAV:	0.23x		Assets:	Madaouela	
		Rec / PT:		BUY / C\$0.	.70		1xNAV _{2Q20} FD:	C\$1.16/sh		Country:	Niger	
Group-level S	OTP valuation	2Q22	3Q22				Share data					
			US\$m	O/ship	NAVx	C\$/sh	Basic shares (m): 545.1		options (m):	656.4	FD + FF	864.6
Madaoela NP\			173	80%	1.0x	0.34	Commodity price	CY23E	CY24E	CY25E	CY26E	CY27E
Mutanga NPV			209	100%	1.0x	0.41	Uranium price (US\$/Ib)	70.0	70.0	70.0	70.0	70.0
Falea (US\$1.5			66	80%	1.0x	0.13	Ratio analysis	CY23E	CY24E	CY25E	CY26E	CY27E
	& fin costs 3Q22		(70)		1.0x	(0.14)	FD shares out (m)	784.4	792.5	826.0	860.2	864.6
	ine plan (\$1.50/lb)		167	100%	1.0x	0.33	EPS (US\$/sh)	(0.013)	(0.028)	0.069	0.066	0.110
Exploration	1 2022		25	100%	1.0x	0.05	CFPS before w/c (US\$/sh)	(0.01)	(0.01)	0.13	0.13	0.18
Cash and restr	r. cash 2Q22		7		1.0x	0.01	FCFPS pre growth (US\$/sh)	(0.01)	(0.03)	0.03	0.02	0.15
Debt 2Q22					1.0x		FCF/sh (US\$/sh)	(0.32)	(0.16)	0.03	0.02	0.15
ITM options	70.415		16		1.0x	0.03	FCF yield - pre growth (%)	(5%)	(10%)	10%	7%	55%
1xNAV8% US\$			593			1.16	FCF yield (%)	(118%)	(58%)	10%	7% 55%	55%
	d equity issuance		100			0.12	EBITDA margin (%)			55%	55%	55%
	unded8% US\$70/Ib		693			1.03	FCF margin (%)			11%	8%	42%
P/NAV (x):	loo —		Bankind			0.26x	ROA (%)	(3%)	(5%)	11%	10%	17%
Target multipl			Multiple			C\$/sh	ROE (%)	(6%)	(16%)	28%	22%	26%
Target P/NAV	wuuupie		0.70x			0.70	ROCE (%)	(1%)	(2%)	15%	17%	27%
Target price				Here		0.70	EV (US\$m)	204	330	319	308 7. 1v	180
Sources	Madacala DEC	I IC#>>>	CCD -	Uses	ITM oct	lictor.	PER (x)	(21.3)	(9.6)	3.9x	4.1x	2.5x
	Madaoela PFS capex				ITM options		P/CF (x)	nmf	nmf	1.5x	1.6x	1.1x
CCD C-	SCPe contingency		N	_	60% gearing		EV/EBITDA (x)	nmf	nmf CV2AE	2.9x	2.8x	1.1x
scre G8	A + fin. cost to first Au	,			Build Equity		Income statement	CY23E	CY24E	CY25E	CY26E	CY27E
	SCPe working capital	US\$19m US\$495m		-		US\$100m	Revenue (US\$m)			200	200	303
1,000			V multi		tal proceeds	∪5⊅495M	COGS (US\$m)			(84)	(84)	(130)
	ivity to gold price and di				¢00/II	\$90/lb	G&A & central	(2)	(5)	116	116	173
	V Mines (C\$m)	\$50/lb	\$60/lb	\$70/lb	\$80/lb	700.00	G&A & central	(2)	(5)	(5) (35)	(5) (35)	(5) (45)
	0% discount	-62 -47	116	283	449 510	615	Depreciation			(35)	(35)	(45)
	% discount	-47 -28	147	329	510	691 778	Impairment & other (US\$m)	 (5)	(1/1)	(20)	 (10)	(1/.)
	% discount	-28 -7	183	381	580	778	Net finance costs (US\$m)	(5) 	(14)	(20)	(19)	(14)
	% discount		224	441 510	659	877	Tax (US\$m) Minority interest (US\$m)					(14)
	% discount	19 48	272	510	749	989	Minority interest (US\$m)					
	% discount	48 \$50/lb	\$60/lb	589	853 \$80/lb	1,118	Net income attr. (US\$m)	(7)	(19)	111	111	95 168
	ation (C\$/sh)	\$50/lb	\$60/lb	\$70/lb	\$80/lb	\$90/lb	EBITDA Cash flow	(5) CV23E	(8) CV24E	111 CV25E	111 CV26E	168
	D.50xNAV	neg	0.30	0.50	0.75	0.95	Cash flow Profit/(loss) after tay (US\$m)	CY23E (10)	(22)	CY25E	CY26E	CY27E
	D.60xNAV	neg	0.35	0.60	0.90	1.15	Profit/(loss) after tax (US\$m)	(10) 5	(22) 15	57 55	57 55	95 60
	0.70xNAV	neg	0.40	0.70	1.05	1.35	Add non-cash items (US\$m)	5	15	55 (19)	55 0	60 (10)
	D.80xNAV 1.00xNAV	neg	0.45	0.80	1.20	1.55	Less wkg cap / other (US\$m)			(19)		(10)
Valuation ove		neg Today	0.55 1Q23E	1.05 1Q24E	1.50 1Q25E	1.95 1 Q25E	Cash flow ops (US\$m) PP&E (US\$m)	(5) (240)	(103)	93 (51)	111 (76)	145 (2)
Mines NPV (US		Today 423	1Q23E 433	1Q24E 727	1Q25E 896	1Q25E 898	Other (US\$m)	(240)	(103)	(51)	(/6)	(2)
	S\$M) n costs (US\$m)	423 (70)	433 (70)	/2/ (64)	896 (46)	(3)	Cash flow inv. (US\$m)	(240)	(103)	(51)	(76)	(2)
Net cash at (U		(70) 7	(70) (46)	(64) (170)	(46) (152)	(3) (134)	Debt draw (repayment) (US\$m)	100	100	(51)		(100)
Other Assets	* *	/ 274	(46) 274	(170)	(152) 274	(134) 274	Equity issuance (US\$m)	100	100	11	2	(100)
1xNAV (US\$m	•	635	592	767	973	1,036	Other (US\$m)	95	(15)	(35)	(20)	(15)
P/NAV (us\$m	,	0.2x	592 0.3x	767 0.2x	973 0.2x	0.2x	Cash flow fin. (US\$m)	297	86	(24)	(18)	(115)
1xNAV (x):	DX FD (C\$/ςh)	1.21	0.3x 0.97	1.25	1.52	0.2x 1.55	Net change post forex (US\$m)	52	(24)	18	18	28
ROI to equity h		1.21 348%	90%	1.25 66%	1.52 54%	1.55 42%	FCF (US\$m)	52 (250)	(24) (125)	18 22	18 16	28 128
ROI to equity r	· · · · · · · · · · · · · · · · · · ·	348% Mt	90% ppm U308		EV/Ib	→∠ /0	Balance sheet	(250) CY23E	(125) CY24E	CY25E	76 CY26E	128 CY27E
	l. & inf Madoeula	46	1,351	138.4	0.76		Cash (US\$m)	54	30 30	48	66 66	95
	I. & INT Madoeula I. & inf Total Attr	46 149	614	201.6	0.76		Cash (US\$m) Accounts receivable (US\$m)	54	30 	48 8	8	95 12
cr Suited Ind		149 25	614 845	201.6 46.4	0.52 2.27		Accounts receivable (US\$m) Inventories (US\$m)			8 21	8 21	12 33
	C. VCJ	25 CY25E	845 CY26E	46.4 CY27E	2.27 CY28E	CY29E	PPE & exploration (US\$m)	 312	 415	21 431	21 472	33 429
Group 2P Rese	00%)	CIZDE		2.8	2.8	2.6	Other (US\$m)	312	415 0	431	0	429
Group 2P Rese Production (10		7.9	70		4.0	۷.۷	Total assets (US\$m)			U		568
Group 2P Rese Production (10 Madaouela (00	00mlbs U308)	2.8	2.8		26	n /-			/. /. F	EOO	FET	2014
Group 2P Rese Production (10 Madaouela (00 Mutanga (000	00mlbs U308) Imlbs U308)			1.5	2.6 36.28	2.4 37.35		367	200	508	567	
Production (10 Madaouela (00 Mutanga (000 Group cash co	00mlbs U308) Imlbs U308) st (US\$/lb)	 24.70	 26.96	1.5 29.41	36.28	37.35	Debt (US\$m)	100	200	200	200	100
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (US	00mlbs U308) Imlbs U308) st (US\$/lb) S\$/lb)	 24.70 32.00	 26.96 31.75	1.5 29.41 42.31	36.28 50.09	37.35 43.63	Debt (US\$m) Other liabilities (US\$m)	100 108	200 141	200 136	200 121	100 112
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (US	00mlbs U308) Imlbs U308) st (US\$/lb)	 24.70 32.00	 26.96 31.75	1.5 29.41 42.31	36.28	37.35 43.63 US\$40/oz	Debt (US\$m) Other liabilities (US\$m) Shareholders equity (US\$m)	100 108 388	200 141 389	200 136 400	200 121 403	100 112 403
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (U: 8mlbs 6mlbs	00mlbs U308) Imlbs U308) st (US\$/Ib) \$\$/ b Madaouela (000mlb)	 24.70 32.00	 26.96 31.75	1.5 29.41 42.31	36.28 50.09	37.35 43.63 3) US\$40/oz US\$30/oz	Other liabilities (US\$m) Other liabilities (US\$m) Shareholders equity (US\$m) Retained earnings (US\$m)	100 108 388 (242)	200 141 389 (264)	200 136 400 (207)	200 121 403 (150)	100 112 403 (55)
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (US 8mlbs 6mlbs 4mlbs	00mlbs U308) Imlbs U308) st (US\$/lb) S\$/lb)	 24.70 32.00	 26.96 31.75	1.5 29.41 42.31	36.28 50.09	37.35 43.63 8) US\$40/oz US\$30/oz US\$20/oz	Debt (US\$m) Other liabilities (US\$m) Shareholders equity (US\$m) Retained earnings (US\$m) Minority int. & other (US\$m)	100 108 388 (242) 12	200 141 389 (264) 12	200 136 400 (207) 12	200 121 403 (150) 12	100 112 403 (55) 12
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (US 8mlbs 6mlbs	00mlbs U308) Imlbs U308) st (US\$/Ib) \$\$/ b Madaouela (000mlb)	 24.70 32.00	 26.96 31.75	1.5 29.41 42.31	36.28 50.09	37.35 43.63 3) US\$40/oz US\$30/oz	Debt (US\$m) Other liabilities (US\$m) Shareholders equity (US\$m) Retained earnings (US\$m) Minority int. & other (US\$m) Liabilities+equity (US\$m)	100 108 388 (242) 12 367	200 141 389 (264) 12 479	200 136 400 (207) 12 542	200 121 403 (150) 12 586	100 112 403 (55) 12 572
Group 2P Rese Production (10 Madaouela (00 Mutanga (000 Group cash co: Group AISC (US 8mlbs 6mlbs 4mlbs 2mlbs	00mlbs U308) Imlbs U308) st (US\$/Ib) \$\$/ b Madaouela (000mlb)	 24.70 32.00	26.96 31.75	1.5 29.41 42.31	36.28 50.09	37.35 43.63 8) US\$40/oz US\$30/oz US\$20/oz	Debt (US\$m) Other liabilities (US\$m) Shareholders equity (US\$m) Retained earnings (US\$m) Minority int. & other (US\$m)	100 108 388 (242) 12	200 141 389 (264) 12	200 136 400 (207) 12	200 121 403 (150) 12	100 112 403 (55) 12

Source: SCP estimates

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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 reevaluation 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 September 2022					
BUY:	50				
HOLD:	1				
SELL:	0				
UNDER REVIEW:	0				
TENDER:	0				
NOT RATED:	0				
TOTAL	51				

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



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