

Savannah Resources (SAV LN)

European hard rock lithium trading at 0.1x Aussie/Brazil peers

RECOMMENDATION: BUY

PRICE TARGET: £0.08/sh

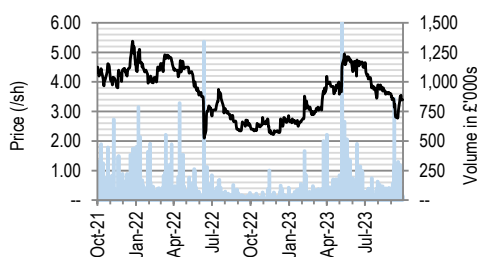
RISK RATING: HIGH

SHARE DATA

Shares basic / FD (m)	1828 / 1828
52-week high/low	5.38 / 2.10
Market cap (£m)	60
Net cash (debt) (£m)	11
1.0xNAV8% @ US\$2000/t (£m)	772
1.0xNAV8% FD (p/sh)	£0.42
P/NAV (x)	0.08x
Average daily value (£'000, 3M)	94.0

FINANCIALS	CY26E	CY27E	CY28E
SC5.5% produced (000t)	85	159	157
Revenue (£)	131	247	245
AISC (US\$/t)	812	859	742
Income (£)	34.3	77.9	89.9
EPS (£/sh)	0.01	0.02	0.03
PER (x)	3.0x	1.3x	1.2x
CFPS (£/sh)	0.02	0.05	0.06
P/CF (x)	2.3x	1.1x	0.9x
EBITDA (£)	78.3	149.7	163.3
EV/EBITDA (x)	2.5x	0.8x	0.1x

SPOT VALUATION	4Q23E	4Q24E	4Q25E
1xNAV8% FD (£/sh)	0.52	0.53	0.35
ROI to 1xNAV (% pa)	298%	152%	81%
SOTP 1xNAV8% US\$2000/t		£m	£/sh
Barroso (Portugal) NPV 3Q23		827	0.26
Central SG&A & fin costs 3Q23	(89.1)	(0.03)	
Exploration	21.9	0.01	
Net cash 1Q20	11.4	0.00	
Cash raised	112.0	0.04	
TOTAL		884	0.28



Source: Bloomberg market data, SCP

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AIM-listed hard rock Li developer with flagship asset in Portugal

Savannah is an AIM-listed lithium developer whose flagship project is the EIA approved, PEA-completed, 28Mt at 1.05% Li₂O Barroso MRE open pit hard rock lithium project in northern Portugal. Barroso is Europe's largest and second most advanced (only second to FS-level Keliber) spodumene lithium project and EIA approval in May 2023 set the goalposts for final permitting in late 2024 / early 2025 to enable 2025 construction start and mid-2026 first production. Once in production, annual output of 191ktpa of 5.5% Li₂O (SC5.5) concentrate is sufficient to supply ~500k EVs per year for a 14-year mine life.

28Mt at 1.05% Li₂O in a low strip open pitable resource

Lithium at Barroso was discovered in the 1980s with spodumene confirmed in the 1990s, then intended for the ceramic industry. The 28Mt at 1.05% Li₂O resource at spot (US\$2.3k/t) is equivalent to 4.4Moz AuEq at 4.9g/t AuEq (US\$287/t payable recoverable), of which 20.5Mt at 0.96% Li₂O falls into the PEA mine plan at a strip ratio of just 5.9:1. We think this resource should translate to a high margin operation that is small footprint but high cash flow.

PEA delineates 14-yr 191ktpa SC5.5, potential for further growth

Using the 2023 PEA inputs, we estimate Barroso generates SCPe US\$210m/yr FCF at spot US\$2.3k/t SC6 (~US\$2.1k/t SC5.5 at 90% payability), for 2.5-yr payback period, and US\$1.26bn NPV_{8%}. Key parameters are 20.5Mt LOM inventory, 14-year mine life at 1.5Mtpa, producing 191ktpa of SC5.5 at net cash costs of US\$292/t and US\$280m initial capex. Mining is open pit at low 5.9:1 LOM strip ratio (vs 30x max for 50% gross margin), and a standard flowsheet achieving 73% overall Li₂O recovery to produce a SC5.5% with low iron content at P₈₀ 150µm. Add location in a developed country with infrastructure, moderate climate and topography and we see a project with low technical risk.

EIS approved and clear path to permit completion (SCPe 2025)

Portugal's Federal Government has expressed clear support for the project and approved the EIA in 2023. This included detailed design review and mutually agreed modifications to reduce environmental social impacts. The next step is the RECAPE, which confirms that the DFS design still complies with the guidelines set in the EIA. While support is stronger at Federal level than local, Barroso has cleared the toughest stage of the permitting process (EIA). Other local projects (wind and hydroelectric) also faced similar challenges but successfully navigated permitting once through the EIA process.

Initiate with Buy rating and 14p/sh PT based on 0.5xNAV_{8%}-\$1,800/t SC5.5

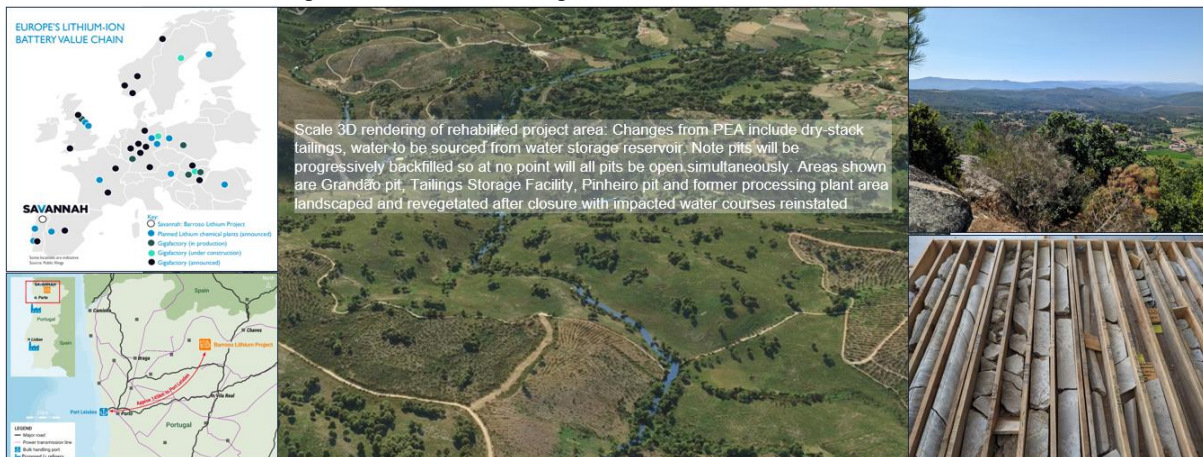
We value Savannah on a SOTP DCF basis at a US\$1,800/t LT SC5.5 price (15% discount to spot), which generates our £827m NAV_{8%}. We assign a 0.5x NAV multiple to generate our 14p/sh PT. We think this is reasonable given recent EIA approval, recent PEA (i.e. cost and capex) update, and how soon final permitting, construction start and first production are.

Investment case

Overview of company

Savannah Resources (AIM:SAV) is a lithium developer with the 28Mt at 1.05% Mina do Barroso open pit hard rock lithium project located in NE Portugal. The project scoping study (updated in June 2023) focused on a 20.5Mt at 0.96% Li₂O subset of the resource, resulting in a 14-year mine life to produce 191ktpa of 5.5% Li₂O concentrate (roughly enough to supply lithium for ~500k EVs/year) at US\$292/t net cash costs and US\$280m initial capex. We like Savannah's value proposition of the largest hard rock lithium project in Europe, a clear path to permitting, SCPe 2.5-year payback period and average US\$165m FCF/year, and is trading at just £60m market cap. We think the valuation discount is due to perceived permitting risk but see recent EIA approval and statements of Government support as indication that the upside outweighs the risks here. We think the current valuation presents an opportunity for investors to buy into a technically simple lithium mine in a safe jurisdiction at a discount.

Figure 1: Map of European gigafactories, project location, 3D rendering of rehabilitated project area, viewpoint looking west, core box showing mineralized intersection from Grandão

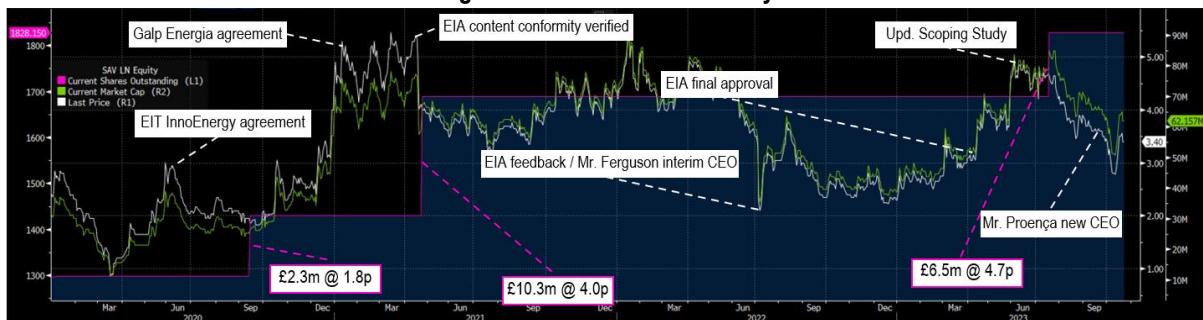


Source: Savannah Resources

History

Company: UK-listed Savannah pivoted from African mineral sands to Portuguese lithium in May 2017, acquiring a 75% interest in Mina do Barroso project in Portugal for A\$1m in cash and 20m shares @ 1p/sh (A\$1.4m total) that could reach a total of £5.8m upon successful completion of specific milestones. **Project:** The lithium deposits were discovered in the 1970s and developed at small scale by French Group Imerys in 2007 for use in the ceramics industry. Crucially, this makes Barroso one of very few licensed lithium projects in Portugal. **Recent:** Savannah moved quickly from Dec 2018 maiden 3.2Mt @ 1.0% Li₂O MRE to June's 2018 PEA of 13Y / 175ktpa SC5.5 mine plan based on 14Mt at 1.1% Li₂O mining inventory. After increasing to 28Mt at 1.05% MRE in June 2019, Savannah pivoted to permitting and development, acquired the remaining 25% of Barroso (US\$11.9m in shares) in April 2019, submitted the EIA in June 2020. After two years of engagement, Savannah received official feedback in July 2022, implemented requested amendments, and received EIA declaration in May 2023 from the Federal environmental regulators. After completing an updated PEA (increased inventory to 20.5Mt at 0.96% Li₂O for 14yr/191ktpa), SAV is targeting DFS + permits in 2024, FID in 2025 and first production in 2026.

Figure 2: Price chart and history

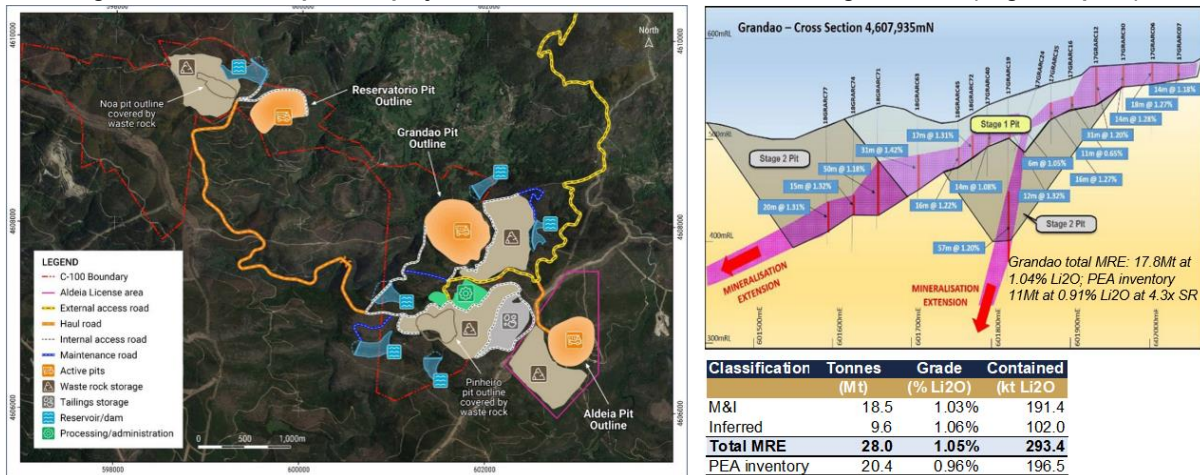


Source: Savannah Resources, SCPe, Bloomberg market data

Free of fatal flaws: 28Mt at 1.05% Li₂O simple open pit, conventional processing hard rock project

At current prices, nearly all hard rock lithium projects work on paper, but at lower prices, fatal flaws (thin deposits, iron contamination, mica issues impacting recoveries) resulted in several hard rock Li bankruptcies. What we like about Savannah's Barroso is we think it is free of these flaws. The 28Mt at 1.05% Li₂O MRE is open pit constrained, spread over five deposits ranging from 10-30m average width that outcrop at surface with good continuity – simple to model and simple to mine. Metallurgy is similarly fortunate with no iron or mica issues. Instead, Barroso is amenable to a conventional flowsheet (DMS and flotation) for 73% recovery producing 5.5% Li₂O spodumene concentrate, within industry standards (eg. Pilbara Minerals produces SC5.2%). The project's advantages of infrastructure (17km to motorway, 1km to grid power, 145km to major port, and 150km to planned 3rd party Li refinery (Estarreja), moderate climate/topography, and location in Western Europe translate to low US\$280m capex for 1.5Mtpa producing 191ktpa of 5.5% Li₂O concentrate (~30% of A\$13bn Mcap Pilbara Minerals' prod'n).

Figure 3: Overview of planned project; resource table, cross section through Grandão (largest deposit)



Source: Savannah Resources

Can supply enough Li for 500k EVs/year, Europe needs this project for its EV supply chain

While some investors might see Barroso's location in Portugal as a disadvantage, we think the opposite. Unlike Brazilian or Australian projects that need to ship product to EV production hubs, Barroso is the largest spodumene deposit in Europe, a continent with integrated supply chains and economies that produce ~13 million cars a year (~16% of the global market) with clear designs on EVs. We calculate at ~20% EV penetration rate, Europe's domestic market already accounts for ~180ktpa of LCE demand (~2Mt of SC5.5), with a cumulative 2.1Mt of LCE needed by 2030 to achieve the EU's EV targets. Moreover, Portugal is emerging as a major lithium hub for Europe with two recently EIA approved mining projects (MRE: 28Mt at 1.05% Li₂O Barroso and the 30Mt at 1.0% Li₂O Romano), and two planned lithium refineries (Bonalti/Reed in Esterreja and Galp/Northvolt in Setubal).

Figure 4: European hard rock lithium projects – Barroso is the best size/grade combination

Project	Country	Owners	Type	Product	Annual prodn (ktpa)	Annual LCE (ktpa)	Capex (US\$m)	Reserves/inventory				Resources		Status			
								Type	Mt	Li ₂ O (%)	Li ₂ O (Mt)	Mt	Li ₂ O (%)	Li ₂ O	Permits	FID	Prodn Yr
Keliber Refinery	Finland	Sibanye (79%)	--	Li hydroxide	15	13.2	391	--	--	--	--	--	Permitted	Approved	2025	2025	
Barroso	Portugal	Savannah (100%)	Spodumene	Concentrate	191	26.0	280	OP	21	0.96%	0.20	28	1.05%	0.29	EIA approved	2025	2026
Romano	Portugal	Lusorecurso (100%)	Petalite	Li hydroxide	ND	ND	ND	OP/UG	--	--	--	30	1.00%	0.30	EIA approved	TBD	TBD
Keliber Mine/Concentrator	Finland	Sibanye (79%)	Spodumene	Concentrate	200	27.2	228	OP/UG	17	1.02%	0.17	17	1.02%	0.17	Awaiting EIA	Approved	TBD
Jadar	Serbia	Rio Tinto (100%)	Jadarite	Li carbonate	58	58.0	2400	UG	17	1.81% (1)	0.30(1)	139	1.86%	2.59	Revoked	TBD	TBD
Zinnwald	Germany	Zinnwald (100%)	Zinnwaldite	Li hydroxide	12	10.6	337	UG	32	0.30%	0.10	40	0.76%	0.31	Not submitted	TBD	TBD
Beauvoir	France	Imerys (100%)	Kaolin	Li hydroxide	34	29.9	1090	OP	--	--	--	--	--	--	Not submitted	TBD	2028
British Lithium	UK	Imerys (80%)	Kaolin	Li carbonate	20	20.0	--	--	--	--	--	161	5.36%	0.31	Not submitted	TBD	2030
Wolfsberg	Austria	European Li (100%)	Spodumene	Li hydroxide	8.8	7.7	873	UG	12	0.64%	0.07	13	1.00%	0.13	Not submitted	TBD	2027
Cinovec	Czech Republic	49% EMH / 51% CEZ	Zinnwaldite	Li hydroxide	29	25.9	644	UG	35	0.65%	0.22	708	0.42%	2.97	Not submitted	TBD	TBD

Sources: Savannah Resources - Barroso PEA (2023); Sibanye Keliber project update (2022) and investor presentation (June 2023); Lusorecurso website; Rio Tinto website and 2022 R&R statement; Zinnwald Lithium website and PEA (2022); Imerys EMIL (Beauvoir) website (2023); Imerys British Lithium website (2023). Note Jadar Conversions: 1 Li₂O = 2.473 LCE; 1 LiOH = 0.88 LCE; 11 of 6% Li₂O conc = 0.129 LCE.

Above we show European hard rock lithium projects, both conventional and unconventional (claystone, jadarite). In short, we think Europe needs Barroso in production. Europe has only three conventional spodumene projects: Barroso, Sibanye-Stillwater's (SSW) Keliber project in Finland, and European Lithium's Wolfsberg in Austria (DFS level but pre-EIA). Europe's other projects are unconventional / lower grade mineral types (petalite, claystone or DLE) that do not have precedents in operation today. Barroso and Keliber are each equivalent to ~20% of Europe's current consumption, beyond which Europe lacks conventional lithium projects. The other options in Europe are either low grade brines that require DLE, such as Vulcan (~24ktpa LCE) or Cornish Lithium (8ktpa LCE), Rio Tinto's excellent but now halted Jadar project in Serbia (outside EU), non-spodumene lower-grade petalite, or claystone projects that will require roasting or aggressive leach conditions.

PEA: Manageable US\$280m capex delivers billion-dollar NPV and 77% IRR at prices well below spot

In addition to being strategic importance for Govts/OEMs, Savannah offers excellent returns. Per the 2023 scoping study: US\$953m NPV vs US\$280m capex (incl US\$44m contingency), 1.3-year payback period, and 77% post-tax IRR with US\$121m average annual FCF, all at US\$1,464/t SC5.5 price (US\$1,597/t SC6 price at 91.7% payability), well below the current US\$2.3k/t spot price. This lifts to SCPe US\$165m FCF/year and US\$1.14bn NPV8% at US\$1,800/t SC5.5 (US\$2,000/t SC6) and US\$197m FCF/year and US\$1.39bn NPV8% at spot US\$2,300k/t SC6. Relative to the scale of capital required to get into production: £64m mcap (~US\$80m) plus US\$300-325m of capex and working capital, and already at a spot lithium price less than half of last year's highs, the economics of the project and the stock are a risk-adjusted outlier.

Figure 5: PEA mine plan and SCPe FCF using PEA inputs at US\$1,597/t, US\$2,000/t and spot US\$3,000/t

PEA mine plan	Build	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	LOM
Tonnes mined/processed (kt)		1,300	1,400	1,500	1,500	1,500	1,400	1,600	1,500	1,500	1,500	1,600	1,500	1,400	1,200	20,400
Grade (% Li2O)		1.0%	0.8%	0.8%	0.9%	0.9%	1.0%	1.0%	0.9%	1.0%	1.0%	1.0%	1.0%	1.1%	1.3%	1.0%
Strip ratio (x)		14.4	10.2	4.8	3.3	2.3	5.4	2.0	2.0	8.5	11.8	8.5	5.4	5.1	2.0	5.9
Recovery (%)		79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%	79.4%
Production (ktpa SC5.5)		186	164	180	184	204	192	224	193	225	214	219	212	220	218	2,835
SC5.5 Payability (% of SC6 price)		91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%	91.7%

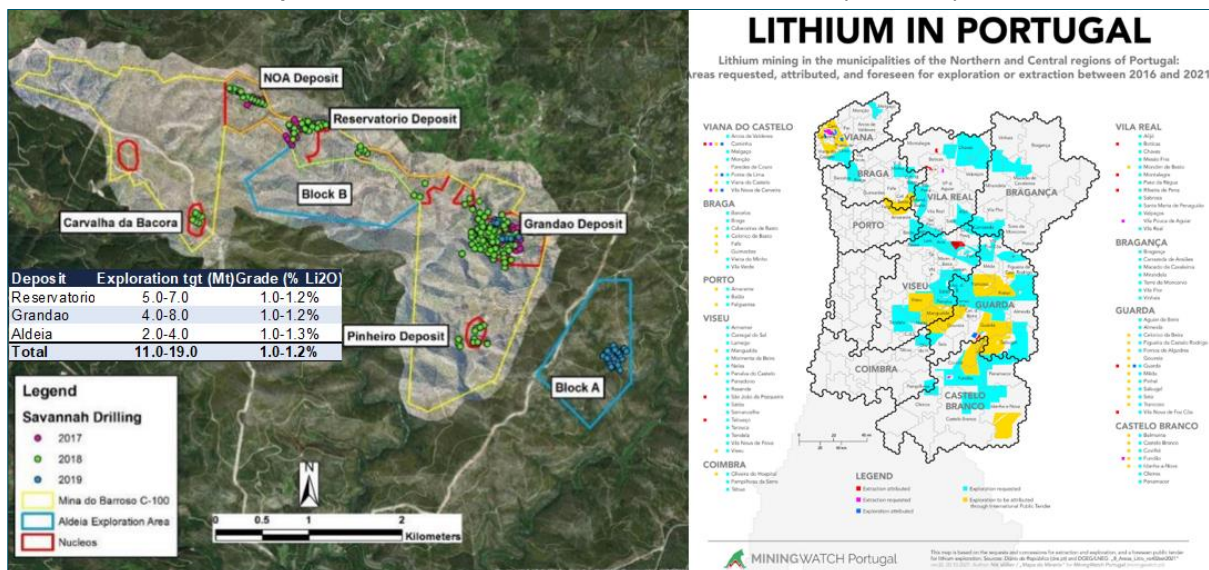
SCP FCF using PEA inputs	Build	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	LOM
FCF at US\$1,597/t SC6 (US\$m)	-\$280	\$118	\$105	\$143	\$156	\$182	\$171	\$203	\$171	\$178	\$152	\$165	\$177	\$191	\$170	\$2,002
FCF at US\$2,000/t SC6 (US\$m)	-\$280	\$169	\$151	\$193	\$206	\$238	\$224	\$265	\$224	\$240	\$211	\$226	\$236	\$252	\$230	\$2,785
FCF at US\$2,500/t SC6 (US\$m)	-\$280	\$233	\$207	\$255	\$269	\$308	\$290	\$342	\$290	\$317	\$285	\$301	\$309	\$327	\$305	\$3,757
FCF at US\$3,000/t SC6 (US\$m)	-\$280	\$296	\$263	\$316	\$333	\$377	\$356	\$419	\$356	\$394	\$358	\$376	\$381	\$403	\$380	\$4,729

Source: Production plan from Savannah, SCPe annual FCF based on PEA inputs

28Mt resource is just the beginning: room to grow at local, license and regional scale

Per our model, adding a year of production at like for like grades, and at a 10:1 strip ratio to be conservative, generates US\$165m of undiscounted FCF at US\$2,000/t SC6 prices, or US\$49m of NPV8% discounted to present, so mine life extension is very accretive to value. The good news here is we think there are multiple sources of life extension or production growth potential. Remember that exploration was constrained by permitting – Savannah chose to pivot from exploration to permitting in 2019, after less than two years of drilling. Moreover, the mine inventory was constrained at conservative prices before the post 2020 boom. At local scale, we expect more of the 28Mt resource to convert to reserves once in operation, this could add another ~5 years of mine life at 1.5Mtpa if the entire 28Mt is mined. Second, there is an 11-19Mt at 1.0-1.2% Li2O exploration target on the licences, based only on surveyed outcropping pegmatites – equivalent to another 7-12 years. Third, Northern Portugal has numerous other pegmatite occurrences that are waiting for exploration licenses.

Figure 6: (A) Map showing 2017-2019 drilling at Barroso with inset exploration target; (B) Map of lithium areas requested, attributed and foreseen for lithium extraction (2016-2021)



Source: Barroso map and exploration from Savannah Resources; Portugal map from Miningwatch Portugal (2021)

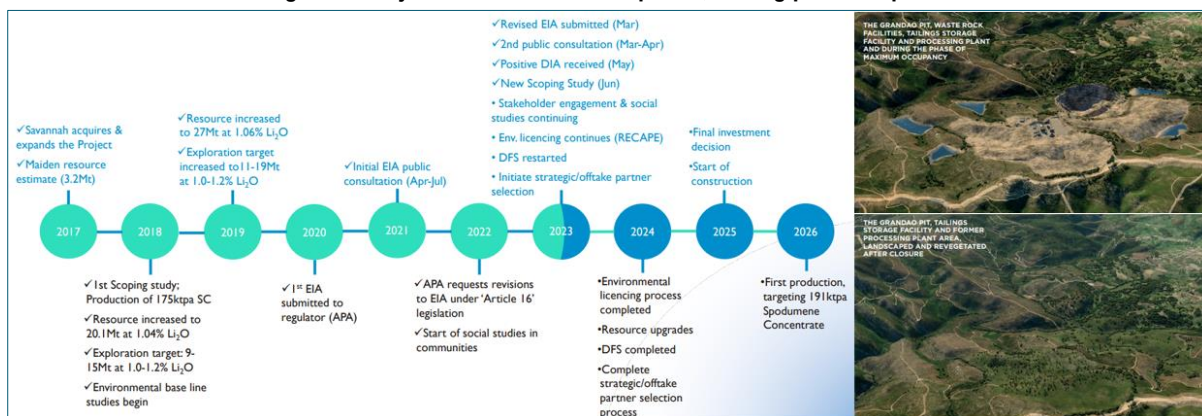
Overlooked by the market, the 2023 EIA approval provides a clear path to permit completion in two years

While peers in Brazil, Australia and even West Africa were lifted by the 2021-2023 lithium boom, we think Savannah was overlooked due to permitting concerns, being UK-listed, and a lack of hard rock peers in Europe. We think most investors simply missed the significance of Barroso’s positive EIS statement (DIA) from the Portuguese Department of Environment (Agência Portuguesa do Ambiente – “APA”). The statement confirms Lisbon’s clear support for the project, which has also been expressed by ministers in recent public comments, as well as providing a clear pathway for the remaining permits.

Permitting: The DIA confirmed environmental approval after Savannah and the regulators mutually agreed design amendments. In the current step, the RECAPE, the DFS design is compared to the approved project design, and is approved if it satisfies the terms agreed in the DIA. Following RECAPE completion, the final environmental licence is expected to be awarded within ~60 working days. Other permits are required, such as water and electricity permits, but these are more straightforward to assess whether the project satisfies the regulations.

Land access: Savannah has budgeted €5m to acquire private lands (~25% of the project) or access rights and €10m in annual instalments for communal lands, called Baldios, (75% of the project) in areas where land access is required. The 30-year Mining Lease granted in 2006 safeguards Savannah’s access to land that may be necessary for the development of Barroso but Savannah is pursuing direct agreements with landholders and Baldios groups.

Figure 7: Project timeline – EIA completed, mining permit in place

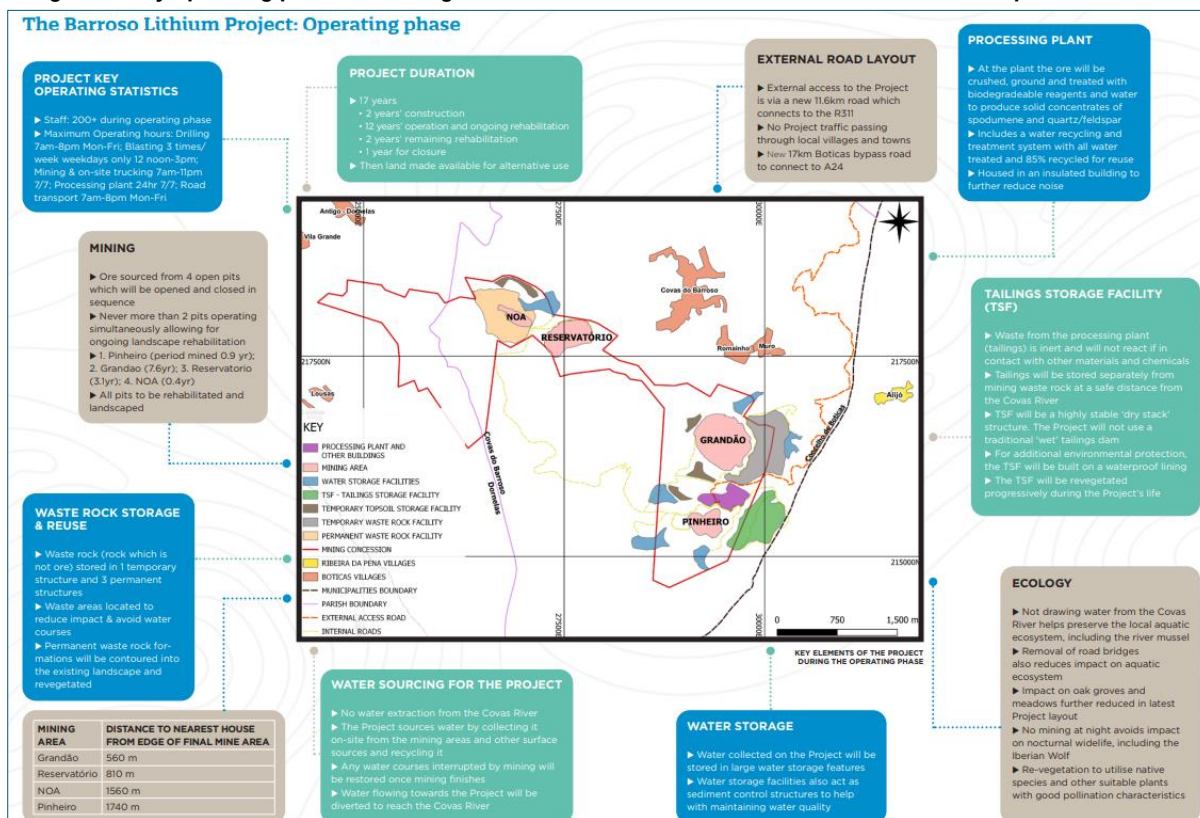


Source: Savannah Resources

Risk vs reality: EIA significantly de-risked permits, land access is the key from here

With the EIA approved, the design has been approved by regulators which is the hardest step in the process. The remaining steps are used to confirm that the final design conforms to the already agreed parameters; this is lower risk in our view. Mutually agreed key design changes included a 17km public bypass road to the A24 motorway and new 11km project access roads to reduce traffic impact, a 1km grid power connection, and water to be sourced from collection basins and recycling (no water to be drawn from the local river). In our view, the key step from here is agreeing to land access, particularly for public lands administered by the local council (Baldios), which comprises 75% of the land access required. The remaining 25% of project land, which is owned by private landowners, has been easier to agree on access agreements thus far. We are bullish here for two reasons. First, other projects including the local wind farms and hydroelectric dam, faced similar opposition but reached land access agreements once the EIA was approved. Second, Savannah has legally obtained land access as there is already an active mining licence, though this is not the preferred course of action. Like many projects, there is local opposition to Barroso, but we think the EIA approval indicates that permitting and project development will go ahead.

Figure 8: Key operating parameters – significant measures taken to minimize externalities and provide benefits



New Portuguese CEO to lead the charge on permit completion, has experience running big business

We think the recent appointment of Emanuel Proença, Savannah's first Lisbon-based Portuguese CEO, is a game changer for Savannah, enhancing its local presence. Mr Proença joins from Prio (a top 20 largest Portuguese company) where he ran the industrial businesses (green fuels, biodiesel, €1.5bn pa revenue). We think a local CEO makes sense because a company / project with high margins in a stable jurisdiction with large domestic banks, should have no trouble attracting capital once permitted, unlike developers in emerging markets. As a result, we think the key skillset here is navigating the local business environment, which Savannah now has covered.

Figure 9: Management and Board

Name	Role	Equity	
		Ownership (%)	Background
Management Team			
Matthew King	Chairman	0.19%	Lawyer, ex-risk management officer at HSBC. Current Non-Exec. Chairman of Funding Circle Ltd
Emanuel Proença	CEO	0.03%	Former CEO of Prio's (a top 20 largest Portuguese Co) industrial businesses incl green fuels and biodiesel
Michael McCarty	CFO	0.07%	Accountant with >10 years experience with mining companies, specialized in fundraising and M&A transactions
Sascha Keen	CSO	0.10%	25 years experience in banking, resources finance and debt advisory with European and Australian institutions
Asa Bridle	Head of IR & BD	undisclosed	Geologist and ex-mining equity analyst with >20 years experience
Sonia Coelho	Environmental Manager	undisclosed	Geologist, 18 years experience in project licensing and environmental management and monitoring
Dale Ferguson	Technical Director, former Interim CEO	0.26%	Geologist, 25 years experience in greenfields, resource delineation, engineering, permitting, mine dev and ops
Board of Directors			
Mary Jo Jacobi	NED	0.03%	Business strategy consultant in EMEA. Ex-advisor to the UK Business committee and special assistant to President
James Leahy	NED	0.08%	32 years experience in financial services, specialized in mining finance for bulk, precious and energy transition meta
Diogo da Silveira	NED	0.06%	Ex-McKinsey Partner with fund's management experience in private equity and venture capital. Current Chair at Floc
Mohamad Sulaiman	NED	undisclosed	Head of Strategy at Towell Group (Omani conglomerate) with experience on boards and the energy sector
Bruce Griffin	NED	0.01%	Current Executive Chairman of Sheffield Resources, mine construction and commissioning experience

Source: Savannah Resources, share ownership from Bloomberg

Other board and management: We highlight Chairman Matthew King, also Chairman of UK lender Funding Circle, Technical Director and former interim CEO Dale Ferguson, an Australian geologist who drove Savannah through EIA success and the PEA update, newly appointed NED Bruce Griffin (mineral sands experience, Exec Director of ASX-listed Sheffield Minerals) who recently oversaw the build of the 10Mtpa Thunderbird min sands project, and recently appointed NED Mohamed Sulaiman (Head of Strategy at the Towell Group, an Omani conglomerate). The exec team includes experienced investment banker Sascha Keen as Chief Strategy Officer and Head of BD/IR Asa Bridle, a London-based former mining equity analyst, both of whom bring dealmaking and mining finance experience.

Valuation

On price, SC6 vs SC5.5, payability: 6% Li₂O concentrate (spod con 6% or SC6 per industry convention) is the standard benchmark product, and most spodumene lookup prices refer to this. Current spot is US\$2.3k, down from a high of US\$6.1k at the end of 2022 / beginning of 2023. Most studies reference lower prices, as prices fell to as low as US\$450/t in 2019 before moving to undersupply from 2020. While SC6 was and remains the benchmark, higher prices and low concentrate availability means concentrates between 5-6% Li₂O are now common.

We model a long-term US\$2,000/t price for 6% Li₂O concentrate, which equates to a US\$1,800/t price for 5.5% Li₂O at SCPe 90% payability (note SC5.5 contains 91.7% as much Li₂O content as SC6). This corresponds to our US\$20k/t long-term LCE price estimate: A US\$20k/t LCE price generates a 15% margin for a converter assuming costs are US\$2,000/t for SC6 plus US\$2,500/t LCE conversion costs and 91% recovery.

Figure 10: Savannah 2023 EA and SCPe base case inputs and economic outputs

	Savannah			SCPe			
	2023 PEA	PEA mirror	Base case	2023 PEA	PEA mirror	Base case	
Total inventory (Mt)	20.50	>>	>>	Initial capex (US\$m)	280	>>	>>
Grade (% Li ₂ O)	0.96%	>>	>>	Sustaining capex (US\$m)	49	>>	>>
Strip ratio (kt)	5.90	>>	>>	Closure (US\$m)	102	>>	>>
Recovery (%)	73%	>>	>>	Mining cost (US\$/t moved)	3.77 ⁽¹⁾	>>	>>
Total production (kt SC5.5)	2,601 ⁽¹⁾	>>	>>	Proc cost (US\$/t ore)	21.66 ⁽¹⁾	>>	>>
Annual throughput (ktpa)	1,500	>>	>>	G&A & community (US\$/t ore)	4.33 ⁽¹⁾	>>	>>
Annual production (ktpa)	191	>>	>>	Royalty (%)	4.0%	>>	>>
SC6 price (US\$/t)	1,597	1,597	2,000	C1 cash cost (US\$/t SC5.5)	292	>>	>>
Payability (%)	91.7%	91.7%	90.0%	AISC net of byproduct (US\$/t SC5.5)	409	408	422
SC5.5 price (US\$/t)	1,464	1,464	1,800	LOM opex (US\$m)	1,066	>>	>>
LOM SC5.5 revenue (US\$m)	3,808	3,808	4,682	LOM AISC (US\$m)	1,063	>>	1,097
Byproduct mica prodn (ktpa)	459 ⁽¹⁾	459	>>	LOM FCF (US\$m)	1,694	1,730	2,307
Quartz-feldspar received price (US\$/t)	54	54	>>	Disc rate (%)	8.0%	>>	8.0%
LOM byproduct revenue (US\$m)	344 ⁽¹⁾	344	>>	NPV (US\$m)	953	819	1,138
Byproduct credits (US\$/t)	132	132	>>	IRR (%)	77.3%	40.2%	51.1%

Source: Savannah Resources; SCPe; (1) SCPe calculation based on PEA document

Mine plan and assumptions: We base our modelled production on the PEA, with construction start in 2025 and first production in 2H26. We mirror PEA prices, unit costs and inputs to generate like for like matching LOM revenue, opex and FCF. This generates matching LOM capex, opex, and FCF, although we note 14% variance in NPV8%, likely due to capex and tax timing. We then apply our US\$2,000/t price assumption, which lifts NPV to SCPe US\$1.14bn and lifts IRR to 51.1%.

Figure 11: SCPe production and financial forecasts

Year (to 31 Dec)	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E
6% Li ₂ O concentrate price (US\$/t)	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Payability for SC5.5 (%)	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
5.5% Li ₂ O concentrate price (US\$/t)	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Exchange rate (1£ in US\$)	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
SC5.5 production / sales (kt)	--	85	159	157	166	177	180	190	190	190	200	198	197	197	200	116
C1 cost (US\$/t)	548	528	398	270	214	191	181	181	272	392	412	327	257	189	136	--
AISC (US\$/t)	579	602	471	336	274	246	236	237	330	454	476	388	312	236	177	--
Revenue (US\$m)	--	163	309	306	324	343	349	366	368	368	386	382	380	379	382	221
COGS	-62	-116	-96	-80	-73	-69	-71	-71	-88	-115	-119	-102	-86	-71	-34	--
G&A	-3	-6	-6	-6	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-4	--
EBITDA (US\$m)	-6	98	187	204	238	263	273	289	273	263	255	271	285	303	182	182
D&A	--	-14	-26	-26	-28	-29	-30	-31	-32	-32	-33	-33	-33	-33	-33	-19
Financing costs	-9	-13	-12	-12	-12	-12	--	--	--	--	--	--	--	--	--	--
Net income (US\$m)	-16	44	98	110	132	148	165	175	176	164	156	152	162	172	184	111
Shares out	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183
EPS (US\$/sh)	-0.00	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
EBITDA margin (%)	--	60%	61%	67%	73%	77%	78%	79%	79%	74%	68%	67%	71%	75%	79%	82%
Cash flow from ops (US\$m)	-16	40	108	138	159	176	195	205	207	194	186	184	196	206	218	146
Cash flow from investing (US\$m)	-187	-96	-12	-11	-11	-11	-10	-10	-11	-11	-12	-13	-12	-11	-9	-5
Cash flow from financing (US\$m)	350	140	--	--	--	-210	--	--	--	--	--	--	--	--	--	--
Ending cash	153	236	333	459	607	562	747	942	1,138	1,322	1,495	1,667	1,851	2,046	2,255	2,397
Debt	210	210	210	210	210	--	--	--	--	--	--	--	--	--	--	--

Source: SCPe

Outcomes: Savannah is highly profitable at our LT US\$1,800/t SC5.5 price assumption (equals US\$2,000/t SC6 x 90% payability), generating a 73% LOM EBITDA margin and average US\$245m EBITDA per year. The mine plan is weighted towards higher strip ratio and lower grades in early years but still generates US\$190-200m EBITDA/year / US\$100-120m FCF/year run rate in its first two full years of production, moving to a net cash position by the second year of production. Average annual FCF is US\$165m at our forecasted SC5.5 price.

Valuation build-up: We value Savannah on a sum-of-the-parts basis. We value Barroso on a DCF methodology using a discount rate of 8%. This generates an NPV of US\$1.03bn / £827m. We then add US\$25m for exploration, add 1Q23 cash of £11.4m. Finally, we subtract £94m for SG&A (we estimate £2-3m per year pre-production and £5m per year once in production) at an 8% discount rate. This generates a FD NAV of £766m or 42p/sh. Adding in our funding assumptions (incl. SCPe US\$140m or £112m of equity), we generate a fully diluted and funded NAV of £878m or 28p/sh at 1x NAV.

Figure 12: SCPe SOTP NAV build-up

Group-level SOTP valuation	2Q23	3Q23	Commodity price		
	£m	O/ship	NAVx	£/sh	
Barroso (Portugal) NPV 3Q23	827	100%	1.00x	0.45	2023E 2024E 2025E 2026E 2027E
Central SG&A & fin costs 3Q23	(89)	-	1.00x	(0.05)	SC6 price (US\$/t) 3,800 2,000 2,000 2,000 2,000
Ounces outside mine plan (US\$25/oz)	2	-	1.00x	0.00	Ratio analysis 2023E 2024E 2025E 2026E 2027E
Exploration (US\$25m)	20	100%	1.00x	0.01	FD shares out (m) 1723.8 1828.1 2823.2 3154.8 3154.8
SCPe cash	11	-	1.00x	0.01	
SCPe debt	(0)	-	1.00x	(0.00)	
1xNAV8% US\$2000/t	772			0.42	
*above diluted for options but not fundraises, fellow diluted for build raise					
Cash raised	112	-	1.00x	0.04	
1xNAV8% US\$2000/t - Fully Funded	884			0.28	

Source: SCPe

Peer valuations: Below we highlight lithium hard rock development projects across jurisdictions. What stands out to us is how much cheaper Savannah is than its peers, even those located in Africa. Australian, Brazilian, and Australian peers trade at 6-12% of in-situ value and are currently the best regarded jurisdictions. Canadian developers (with economic studies) trade at 1.1-5.5% of in-situ value while African developers trade at 2.2-4.1% of in-situ value. Savannah is trading at just 0.8% of spot in-situ value, well below peers. While we can understand that permitting may be a factor, we note that Savannah's permit timelines are shorter than many Canadian projects and less uncertain than some of the African developers in our view, making the value trade compelling to us.

Figure 13: Lithium developers comp table

Company	Australia			Brazil			North America					Africa			Europe	
	Pilbara	Liontown	Core	Sigma	Latin	Alkem	Patriot	Piedmont	Sayona	Critical El.	Frontier	RockTech	AVZ	Leo Lith.	Atlantic	Savannah
Project	Pilgang	Kathleen V	Finiss	Groto d C	Collina	James Bay	Corvette	Carolina	NAL	Rose	PAK	Georgia Lk	Manono	Goulamin.	Ewoyaa	Barroso
Location	WA, Austr.	WA, Austr.	NT, Austr.	MG, Brazil	MG, Brazil	Quebec	Quebec	N Carol'a	Quebec	Quebec	Ontario	Ontario	DRC	Mali	Ghana	Portugal
Stage	Prod'n	Constr	Constr	Constr	'23 PEA	'21 DFS	Pre-MRE	'21 DFS	Restart	'22 DFS	'21 PEA	22 PFS	'20 DFS	Constr	'22 PFS	23 Scoping
Start-up	2019	Mid '24	Mid '23	Mid '23		Mid '24	TBD	2026	Mid '23	Mid '26	Mid '27	Mid '27	TBD	Mid '24	Mid '25	Mid '26
Resource (Mt)	305	156	31	86	45	110	109	44	102	34	58	15	400	109	35	28
Resource (% Li ₂ O)	1.10%	1.40%	1.31%	1.43%	1.34%	1.30%	1.42%	1.08%	1.06%	0.98%	1.51%	0.91%	1.65%	1.45%	1.25%	1.05%
Reserve (Mt)	159.0	68.5	10.6	54.8	45.2	37.3	-	18.3	29.2	26.3	22.9	7.3	93.0	52.0	25.6	20.5
Reserve (% Li ₂ O)	1.20%	1.34%	1.30%	1.44%	1.24%	1.27%	-	1.10%	0.96%	0.92%	1.46%	0.82%	1.58%	1.51%	1.22%	1.05%
Reserve (Mt SC6)	31.8	15.3	2.3	13.2	9.3	7.9	-	3.3	3.5	4.0	5.6	1.0	18.4	6.5	2.6	3.6
Ownership	100%	100%	100%	100%	100%	100%	100%	100%	75%	100%	100%	100%	75%	50%	50%	100%
Mine type	OP	OP + UG	OP + UG	OP	OP/UG	OP	OP	OP	OP	OP	OP	OP	OP+UG	OP	OP	OP
Throughput (Mtpa)	6.3	3.0	1.0	2.60	3.60	2.0	0.9	1.9	1.5	1.6	0.9	1	4.5	2.3	2.0	1.5
Product	SC6 con	SC6 con	SC5.8 con	SC5.5 con	SC5.5 con	SC6	SC6 con	SC6 con	SC6 con	SC6 con	SC6 con	SC6 con	SC6 con	SC6 con	SC6 con	SC5.5 con
Prod'n (ktpa SC)	580	500	175	531	405	311	-	242	163	173	200	101	700	506	255	191
EV (US\$m)	4,870	2,638	357	2,694	511	3,673	797	488	405	215	142	74	1,720	333	168	60
EV/reserve (\$/t)	153	172	156	205	55	multi-asset	--	146	116	53	26	74	94	51	65	17
EV/reserve insitu (%)	6.8%	7.6%	6.9%	9.1%	2.4%	--	--	6.5%	5.1%	2.4%	1.1%	3.3%	4.1%	2.2%	2.9%	0.7%
EV + capex/insitu	153	218	194	221	88	501	-	441	135	142	148	260	123	90	113	82
EV + capex / prodn (\$/t)	8,397	6,656	2,549	5,464	2,021	12,730	-	6,100	2,907	3,302	4,137	2,571	3,237	1,161	1,149	1,548
Risks evaluation																
Avg Thickness	7-25m	8-9m	5-25m	12-35m	2-10m	5-60m	20-120m	2-10m	0.4-10m	2.5-20m	4.5-100m	1.5-16m	170-370m	15-35m	20-60m	10-30m
Capex (US\$m)	--	690	89	207	308	286	--	988	69	357	685	186	546	255	125	236
Processing	DMS	Flotation	DMS	DMS	DMS	DMS	DMS	DMS+Fl	Flotation	Flotation	DMS	DMS+Fl	DMS	Flotation	DMS	DMS+Fl
Recovery (%)	71%	81%	72%	65%	67%	70%	79%	77%	68%	85%	84%	80%	60%	80%	50%	73%
Offtake	Gang/POS esla, Ford, Lua, Transan			LG	No	Producer	No	Tesla	Piedmont	No	No	No	Sh. Chen.	Ganfeng	Piedmon.	No

Source: Company data, SCP, Factset; PEA inventory used for reserve calculations for Savannah and Latin Resources; EV/insitu calculated at US\$2,260/t SC6; Liontown EV pro forma A\$760m debt package

Initiate with BUY rating and 8p/sh price target based on 0.2xNAV 8%- \$1,800/t SC5.5

We think Savannah is worth multiples of its current market cap based on DCF, peer EV-insitu, and producer valuation multiples. We initiate with a 0.2x NAV8% multiple on fully diluted but prefunded NAVPS, which is equivalent 0.5x fully funded (at the current share price), 1.3% EV-insitu or 3.8x EBITDA in production, all undemanding multiples vs where peers trade. We think the company was simply overlooked in the past three years due to few catalysts during the EIA process, a lack of marketing, and few peers on AIM. The recent EIA approval now provides a clear pathway to permitting in 2024, construction start in 2025, and first production in 2026, all much more exciting for the market. With lithium stocks now cheaper, and permitting now de-risked, we think now is a great opportunity to revisit Savannah, as it is in the current Liontown-Sigma-Leo Lithium generation on "this cycle" development projects, but far cheaper than peers despite an equivalent project.

Where producers trade: Finally, to preview where Savannah may trade in 2-3 years once in production, above we show the lithium pure play producers at consensus forecast multiples. The peer group grades at weighted average multiples of 1.7x NAV, 5.3x 2024E EBITDA and a 5.9% 2024E FCF yield. We estimate LOM average US\$245m EBITDA and US\$135m FCF for Savannah at group level. Even at conservative 5x EBITDA and a 10% FCF yield, both more conservative than the peer range, we estimate that Savannah would trade at >US\$1bn market cap from 2027E onwards at these multiples, equating to a 35% annualized return from 2024-2026 and increasing thereafter with cash flow generation.

Figure 14: Lithium producers comp table

Ticker	Sh Px	Market Cap	EV	P/NAV	EV/EBITDA			Price/CFPS			FCF yield			
					2022a	2023e	2024e	2022e	2023e	2024e	2022e	2023e	2024e	
	US\$/sh	US\$m	US\$m	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	
Albemarle	NYSE:ALB	138.68	16,274	18,620	1.5x	5.4x	4.7x	5.5x	9.2x	6.1x	5.8x	1.8%	0.1%	4.1%
SQM	NYSE:SQM	51.69	14,404	15,252	2.6x	2.6x	3.7x	3.9x	4.2x	6.1x	5.0x	18.1%	9.4%	12.9%
Ganfeng	HK:1772	3.98	11,238	13,534	na	4.2x	8.5x	7.8x	4.5x	7.3x	5.2x	7.1%	-2.4%	4.1%
Pilbara	ASX:PLS	2.26	6,802	4,890	3.5x	7.7x	2.3x	4.5x	12.8x	3.6x	13.9x	5.8%	27.7%	0.8%
Allkem	ASX:AKE	6.54	4,181	3,858	1.1x	7.1x	4.4x	4.4x	11.8x	6.1x	6.4x	6.5%	7.1%	6.2%
Livent	NYSE:LTHM	15.83	2,845	2,927	1.6x	8.0x	5.1x	4.5x	7.1x	8.5x	7.1x	2.7%	0.7%	3.2%
Lithium Argentina	NYSE:LAAC	6.17	987	743	na	na	106.2x	3.7x	na	(26.5x)	14.4x	na	-14.7%	-6.0%
75th Percentile					2.6x	7.6x	6.8x	5.0x	11.1x	6.7x	10.5x	7.0%	8.2%	5.1%
Mean					2.1x	5.8x	19.3x	4.9x	8.3x	1.6x	8.3x	7.0%	4.0%	3.6%
Weighted Average					1.7x	4.9x	6.7x	5.3x	7.4x	5.6x	6.7x	7.8%	5.6%	5.9%
Average excluding high and low					1.9x	6.1x	5.3x	4.6x	8.1x	5.8x	7.7x	5.5%	3.0%	3.7%
Median					1.6x	6.2x	4.7x	4.5x	8.1x	6.1x	6.4x	6.1%	0.7%	4.1%
25th Percentile					1.5x	4.5x	4.1x	4.1x	5.1x	4.8x	5.5x	3.4%	-1.1%	2.0%

Source: Bloomberg market data

While there's a range in multiples within the peer group, reflecting both the fact that many companies are investing in expansions and also significant volatility in prices, we think intrinsic DCF analysis, pre-production peer comps and producer peer comps all suggest that Savannah could be a >US\$1bn market cap, trading at just US\$80m and with US\$300-350m capital to fund, all together less than 2.5x annual FCF versus 14-year mine life.

Catalysts

- 2H23: 60-hole 3,235m drilling programme
- 1H24: 166-hole, 10,200m drilling programme and mid-year MRE update, maiden reserve
- 2H24: DFS completion, permit completed, offtake selection
- 2025: FID, construction start
- 2H26: First production

Why we like Savannah

1. Largest conventional spodumene hard rock project in Europe with 28Mt at 1.05% Li2O
2. Simple open pit mining and conventional processing for 191ktpa SC5.5 production (~500k cars per year, ~30% of A\$11bn mcap Pilbara Minerals annual production)
3. Huge value gap: Generates US\$1.2bn NPV8% at spot prices vs £60m (US\$80m) market cap

Risks

Geology: The deposits have been drilled to 20-40m spacing and show good continuity and widths, ranging from 30m average width at Grandão to 10m at the smallest deposit, NOA. We think risks are low with regards to resource estimation, grade reconciliation, and mine-ability as the deposits are wide enough to mine using bulk open pit methods, with low grade variation.

Mining: As noted the deposits are wide enough to mine using bulk methods and outcrop, making them amenable to open pit mining. Other aspects of mining execution are low risk in our view. The country rock is competent, the project is located in a Mediterranean climate with low rainfall and moderate temperatures, and the contemplated volumes (average ~10Mtpa of rock, peaking at ~18Mt in one year) are small to moderate for an open pit operation. Good access to the project, developed country infrastructure, and large contractors available in country are also beneficial. We expect mining to be low cost and low risk to execute.

Processing: Testwork by Nagrom Metallurgical in Australia confirmed low iron (a key impurity) in the concentrate. The flowsheet includes DMS (pre-concentration), followed by mica flotation and then spodumene flotation, achieving 73% recovery and 5.5% Li₂O concentrate, both in line with industry standards. Conversion tests at ANSTO also achieved good results (95.1-98.7% Li extraction in 90m bake at 1100°C. Concentrate specs are in line including P80 of 150um, not excessively fine.

Infrastructure: We think this is a very low risk as much of the non-mining infrastructure needed for a successful project are already in place. This includes grid power access within 1km, road access to site, and just 27km distance to the major highway to the port of Leixões (145km) which is the largest port in Northern Portugal (3.6m people, €62bn GDP).

Permitting: Although we think this is less of a risk than the market is currently implying, we think permitting and land access are major project challenges. To be specific, we think the required permits are largely de-risked with an existing mining lease in place, and the positive EIA decision in May 2023. The greater challenge in our view is land acquisition. Private lands (25% of the land required) appear to be easier with great progress already. Baldios lands (public commons = 75% of required land) are more challenging as there is some local opposition against the project. There are legal avenues for land access but Savannah and the Portuguese Government have expressed preference for a voluntary agreement for access if possible.

Offtake: While Savannah has not yet committed to offtake contracts, we think this is an opportunity, rather than a risk. Barroso produces a standard spec product and benefits from numerous planned European lithium conversion facilities and a deficit of European lithium supply – both working in Savannah's favour.

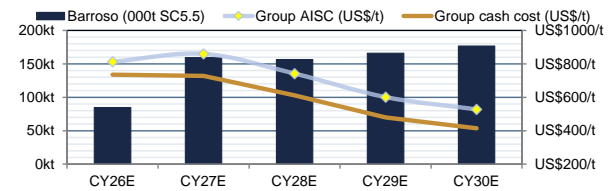
Ticker: SAV LN	Price / mkt cap: 0.03/sh, £60m	Market P/NAV: 0.08x	Assets: Barroso
Author: J Chan / K Kompis	Rec / 0.5xNAV PT: BUY / £0.08	1xNAV 3Q23 FD: £0.42/sh	Country: Portugal

Group-level SOTP valuation					Resource / Reserve					
	2Q23	3Q23				Mt	M&I %	kt Li2O	kt SC6	EV/t SC6
	£m	O/ship	NAVx	£/sh						
Barroso (Portugal) NPV 3Q23	827	100%	1.00x	0.45	Barroso MI&I	28.00	66%	293	4887	212
Central SG&A & fin costs 3Q23	(89)	-	1.00x	(0.05)	PEA Inventory	20.50	80%	198	3295	315
Ounces outside mine plan (US\$25/oz)	2	-	1.00x	0.00	SCPe Inventory	20.50	80%	198	3295	315
Exploration (US\$25m)	20	100%	1.00x	0.01						
SCPe cash	11	-	1.00x	0.01						
SCPe debt	(0)	-	1.00x	(0.00)						
1xNAV8% US\$2000/t	772			0.42						
*above diluted for options but not fundraises, fellow diluted for build raise										
Cash raised	112	-	1.00x	0.02						
1xNAV8% US\$2000/t - Fully Funded	884			0.17						
	P/NAV multiple			Target (£/sh)						
Price Target - fully diluted pre-funded	0.20x			0.08						

1xNAV sensitivity to SC6 price and discount / NAV multiple					
1xNAV asset (£m)	SC6: \$1,500/t	\$1,750/t	\$2,000/t	\$2,250/t	\$2,500/t
5% discount	710	907	1,105	1,302	1,500
6% discount	638	820	1,002	1,184	1,365
7% discount	574	742	910	1,078	1,245
8% discount	517	672	827	983	1,138
10% discount	420	554	687	821	954
Valuation (£/sh)	0.03	0.03	0.04	0.05	0.06
0.10xNAV	0.03	0.03	0.04	0.05	0.06
0.20xNAV	0.05	0.07	0.08	0.10	0.12
0.30xNAV	0.08	0.10	0.13	0.15	0.18
0.40xNAV	0.10	0.14	0.17	0.20	0.23

Valuation over time					
	4Q22E	4Q23E	4Q24E	4Q25E	4Q26E
Mines NPV (US\$m)	903	976	1,054	1,138	1,431
Cntrl G&A & fin costs (US\$m)	(82)	(86)	(90)	(94)	(98)
Net cash at 1Q (£m)	7	9	4	(46)	(92)
1xNAV (£m)	828	899	968	998	1,240
1xNAVPs FD (£/sh)	0.48	0.52	0.53	0.21	0.24
P/NAV (x):	0.07x	0.06x	0.06x	0.16x	0.14x
ROI to equity holder (% pa)	1348%	298%	152%	58%	48%

Barroso 1xNAV sensitivity					
Barroso NPV8% (£m)	SC6: \$1,500/t	\$1,750/t	\$2,000/t	\$2,250/t	\$2,500/t
12.0% discount	341	457	573	689	805
10.0% discount	420	554	687	821	954
8.0% discount	517	672	827	983	1,138
5.0% discount	710	907	1,105	1,302	1,500
Barroso NPV8% (£m)	453	608	763	919	1,074
Cost per tonne + 20.0%	485	640	795	951	1,106
Cost per tonne + 10.0%	517	672	827	983	1,138
No change	517	672	827	983	1,138
Barroso NPV8% (£m)	610	781	952	1,122	1,293
10.0% grade reconciliation	610	781	952	1,122	1,293
0.0% grade reconciliation	517	672	827	983	1,138
-10.0% grade reconciliation	424	564	703	843	983



Production (100%)					
	CY26E	CY27E	CY28E	CY29E	CY30E
Barroso (000t SC5.5)	85	159	157	166	177
Barroso cash cost (US\$/t)	548	528	398	270	214
Barroso AISC (US\$/t)	579	602	471	336	274
Group (000t)	85	159	157	166	177
Group cash cost (US\$/t)	735	728	612	480	414
Group AISC (US\$/t)	812	859	742	601	528

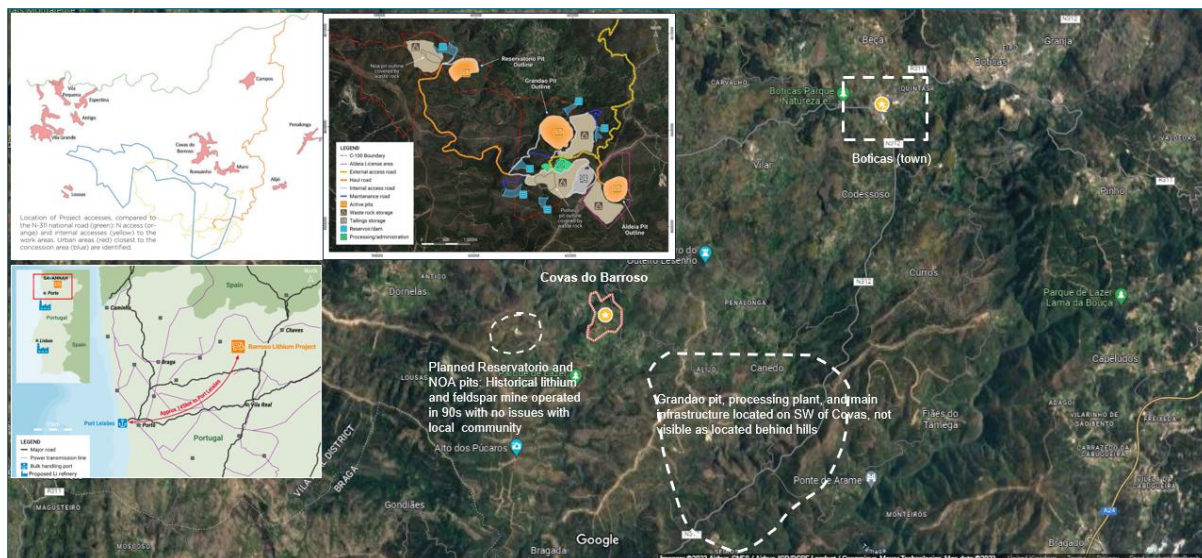
Source: SCP estimates

Commodity price					
SC6 price (US\$/t)	2023E	2024E	2025E	2026E	2027E
SC6 price (US\$/t)	3,800	2,000	2,000	2,000	2,000
Ratio analysis	2023E	2024E	2025E	2026E	2027E
FD shares out (m)	1758.6	1828.1	5222.1	5222.1	5222.1
EPS (C\$/sh)	(0.002)	(0.003)	(0.002)	(0.002)	0.007
CFPS before w/c (C\$/sh)	(0.00)	(0.00)	(0.00)	0.01	0.02
FCFPS pre growth (C\$/sh)	(0.00)	(0.00)	0.01	0.01	0.02
FCFPS (C\$/m)	(0.00)	(0.00)	(0.03)	(0.01)	0.02
FCF yield pre growth (%)	(6%)	(8%)	(98%)	(18%)	52%
FCF yield (%)	(6%)	(8%)	(98%)	(18%)	52%
EBITDA margin (%)	-	-	-	60%	61%
FCF margin (%)	-	-	-	(24%)	36%
ROE (%)	(13%)	(22%)	(10%)	22%	33%
ROA (%)	(13%)	(22%)	(4%)	10%	21%
ROCE (%)	(13%)	(22%)	(4%)	23%	40%
PER (x)	(16.6)	(12.1)	(12.9)	5.0x	2.2x
P/CF (x)	(16.4)	(12.1)	(31.7)	3.8x	1.7x
EV/EBITDA (x)	(13.8x)	(11.2x)	(40.9x)	3.4x	1.3x
Income statement	2023E	2024E	2025E	2026E	2027E
Revenue (£m)	--	--	--	131	247
COGS (£m)	--	--	--	(50)	(93)
Gross profit (£m)	--	--	--	81	155
Expenses (£m)	--	--	(4)	(3)	(4)
Impairment & other (£m)	--	--	--	--	--
Net finance costs (£m)	--	--	(8)	(11)	(10)
Tax (£m)	--	--	--	(22)	(41)
Minority interest (£m)	--	--	--	--	--
Net income attr. (£m)	--	--	(11)	45	101
Cash flow	2023E	2024E	2025E	2026E	2027E
Profit/(loss) after tax (£m)	(4)	(5)	(13)	34	78
Add non-cash items (£m)	--	--	8	11	21
Less wkg cap / other (£m)	(1)	--	--	(15)	(13)
Cash flow ops (£m)	(4)	(5)	(5)	31	86
PP&E (£m)	--	--	(149)	(77)	(9)
Other (£m)	--	--	--	--	--
Cash flow inv. (£m)	--	--	(149)	(77)	(9)
Debt draw (repayment) (£m)	--	--	168	--	(44)
Equity issuance (£m)	6	--	112	--	--
Other (£m)	--	--	--	--	--
Cash flow fin. (£m)	6	--	280	--	(44)
Net change post forex (£m)	2	(5)	126	(46)	33
Balance sheet	2023E	2024E	2025E	2026E	2027E
Cash (£m)	9	4	130	84	116
Accounts receivable (£m)	--	--	--	11	20
Inventories (£m)	--	--	--	8	15
PPE & exploration (£m)	18	18	168	233	221
Other (£m)	1	1	1	1	1
Total assets (£m)	28	23	298	336	374
Debt (£m)	--	--	176	176	132
Other liabilities (£m)	0	0	0	4	8
Shareholders equity (£m)	23	23	135	135	135
Retained earnings (£m)	5	(0)	(13)	21	99
Minority int. & other (£m)	--	--	--	--	--
Liabilities+equity (£m)	28	23	298	336	374
Net cash (£m)	9	4	(46)	(92)	(16)
Net debt to NTM EBITDA (x)	nmf	nmf	0.6x	0.6x	0.1x

Barroso, Northern Portugal – 100% owned

Savannah Resources' 100%-owned Barroso project is located in NE Portugal, within the municipality of Boticas (population ~5,000). The site is 145km by road from Porto (~1h 40 mins by car) and the nearby industrial port of Leixões, 180km to the planned Esterreja lithium refinery (Bondalti and Reed Advanced Materials JV), and 500km to the planned Setubal refinery (Aurora Lithium – Galp/Northvolt JV). The project comprises the C100 Mining Lease (see outlined in red in the below figure), which is 100% owned by Savannah and totals 5.42km².

Figure 15: Map of local area showing location of Boticas (town), Covas (village), and planned project infrastructure



Source: Google Maps, annotated by SCP, inset maps from Savannah Resources

Infrastructure and logistics: The project is accessed by paved roads and located 28km by road from the A24 motorway. The region has grid power of which ~73% is from renewable sources, which averaged ~9.8 euro cents per kWh. A 1km connection is required from site to the grid. As part of the EIA approval, Savannah agreed to build a new 11.5km access road to site and a new 17km Boticas bypass road to access the A24 motorway. Water will be recycled, supplemented by water collection and storage on site to satisfy fresh water needs, as some water is lost as moisture content in the concentrate product. Mining will not occur at night and there will be three blasts per week (between 12-3pm Monday-Friday). Tailings will be dry stacked, with a waterproof liner, and progressive rehabilitation of the TSF and the pits (no more than two simultaneously).

History: Pegmatite veins were first reported in 1986 and spodumene was first confirmed in 1996. The project was developed by French industrial mineral producer Imerys in 2007, which commenced mining at a small scale in 2007, with production intended for the ceramics industry. During that time mining operations took place with no social issues. Operations stopped in the late 2000s as Imerys opted in favour of its Spanish mines. In 2016 Australian PE firm Slipstream Resources acquired the projects and vended them into Savannah in 2017. Savannah commenced exploration in late 2017, quickly grew the resource to 27Mt at 1.06% Li₂O by April 2019, consolidated 100% ownership of the project in 2019 and then submitted the EIA and mine plan in June 2020. In May 2023 the EIA was approved (DIA), advancing the project to the RECAPE stage of the permitting process.

Geology

Regional scale: The region is characterised by a large field of granitic outcropping pegmatites and aplite-pegmatite dykes of 1-50m width. The pegmatite dykes are mainly intruded into the granitic rocks of the region while aplite-pegmatite dykes are hosted by low to medium grade metasedimentary rocks of Silurian age. **Local scale:** Lithium mineralization occurs predominantly in the form of spodumene bearing pegmatites, hosted in metapelitic and mica schists and occasionally carbonate schists of ~458-393Ma. The spodumene is believed to be formed from metamorphosed petalite, which occurred when thicker piles (of sediments) were subjected to greater pressure. Locally there are more than 1,000 occurrences of pegmatites, most are lithium bearing, with some varying between petalite and spodumene.

Takeaways: The region is well endowed in granites with the right conditions for lithium bearing pegmatites. Though petalite (lower grade than spodumene) bearing pegmatites are found in the region, there are areas of enriched grade where petalite metamorphosed to spodumene. Thus, Barroso is valuable as a rare higher grade deposit in the region, but exploration upside in Portugal is high given the presence of Li bearing granites.

Resource

Barroso has a JORC-compliant resource of 28Mt at 1.05% Li₂O for a total of 293.4kt Li₂O at a 0.5% Li₂O cut-off, Measured and Indicated resources account for 65% of total Li₂O. The MRE is based on 31,000m of drilling (RC: 21,889m / DD: 9,515m), primarily from 2017 through 2019. The resource estimate includes five deposits of 0.6-17.7Mt of ore. The largest is Grandão (17.7 Mt @ 1.04% Li₂O), which extends over 650m along strike, 500m wide with a thickness up to 50m. Deposit widths vary from 50m at Grandão, up to 40m at Reservatorio, 25m at Aldeia and ~10m at Pinheiro and NOA (which are a smaller % of the MRE and inventory). The resource estimates are wireframe constrained at 0.5% Li₂O, grade was estimated using ordinary kriging. Indicated resources are drilled 20-40m spacing by 40m cross sections. Indicated resources were extrapolated up to 60m past drill holes, inferred were extrapolated up to 120m.

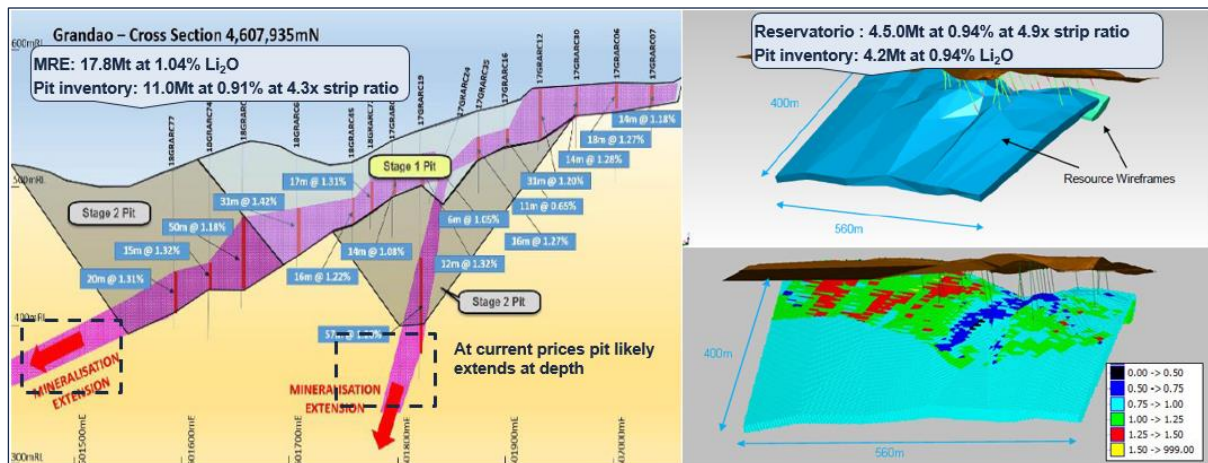
Figure 16: Barroso current JORC MRE as of June 2023

Deposit	PEA Inventory					M&I			Inferred			Total Resource		
	Tonnes (Mt)	Grade (% Li ₂ O)	Contained (kt Li ₂ O)	Waste (Mt)	SR (x)	Tonnes	Grade	Contained	Tonnes	Grade	Contained	Tonnes	Grade	Contained
Grandao	11.0	0.91%	99.8	47.7	4.3	13.0	1.0%	132.9	4.8	1.0%	48.9	17.8	1.0%	181.8
Reservatorio	4.5	0.94%	42.4	22.2	4.9	3.5	0.9%	33.0	0.7	0.9%	6.5	4.2	0.9%	39.5
Pinheiro	1.3	0.99%	12.9	11.2	8.6	--	--	--	2.0	1.0%	20.0	2.0	1.0%	20.0
NOA	0.5	0.90%	4.5	2.8	5.6	0.4	1.2%	4.2	0.3	1.0%	2.9	0.6	1.1%	7.1
Aldeia	3.1	1.19%	36.9	36.6	11.8	1.6	1.3%	21.3	1.8	1.3%	23.7	3.4	1.3%	45.0
Total	20.4	0.96%	196.5	120.5	5.9	18.5	1.0%	191.4	9.6	1.1%	102.0	28.0	1.0%	293.4

Source: Savannah Resources; as at June 2023; reported at a 0.5% Li₂O cut-off grade

Takeaways: The resource shows good continuity with consistent dip at the major deposits. The resource to mine inventory conversion was quite conservative at 67% of the resource, which results in a low 5.9x strip ratio. At current prices we think there would be an additional stage of the pits, particularly Grandão, although for now we model 14-years of steady state to match the engineering study. The deposits are drilling rather than geologically constrained, as exploration was largely stopped in 2019 to focus on permitting and given weaker markets, and there is an 11-19Mt at 1.0-1.2% Li₂O exploration target including 5-7Mt at 1.0-1.2% at Reservatorio, 4-8Mt at Grandão, and 2-4Mt at Aldeia.

Figure 17: Cross sections through Grandão and Reservatorio



Source: Savannah Resources

Mining and Processing

Mine Planning: The PEA envisions 1.5Mt of ore mined/processed per year at a 0.96% Li₂O diluted grade, at an overall 5.9:1 strip ratio over a 14-year LOM. Mining will be conducted by contractor-owned trucks and excavators, starting with a fleet of three dozers when mining the Pinheiro and Grandão deposits, and scaling up to four when Reservatorio comes in production. Only two active pits are planned at any one time to minimize surface disturbance, and pits will be progressively rehabilitated. The project has been designed to minimize visual impact and low-lying areas will be used for waste rock facilities and the processing plant. The planned pits are shallow with maximum single pit depth of 170m at Grandão. **Takeaways:** We think mining should be low risk to execute due to relatively small (max material movement ~18Mt in one year) and shallow pit, moderate topography and climate, and strong contractor support and labour and equipment availability in Portugal. The deposits show good continuity, thus we don't see high risk of unplanned mining dilution.

Figure 18: Schematic of Grandão pit and processing plant (Yr 9); (B) Project plan view showing rehabilitation plan

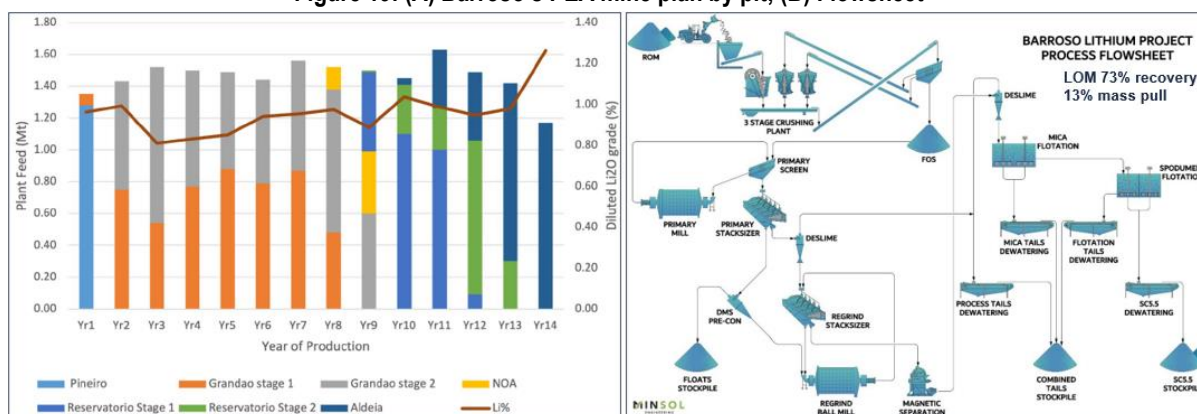


Source: Savannah Resources

Processing

The process plant was designed in consultation with Minsol (Perth), who have extensive experience with Australian lithium hardrock processing plants. The flowsheet uses standard components with crush, grind, DMS pre concentration followed by regrind, mica flotation to produce ceramic by-product, and spodumene flotation to produce 5.5% Li₂O concentrate (SC5.5). Overall process Li₂O recovery is 73% and we calculate 13% LOM mass pull. The plant is designed for 1.5Mtpa which assumes 85% availability and US\$108m of capex is budgeted for the processing plant in the PEA. Concentrate specifications are standard with P80 150µm (not excessively fine) and low iron content. Beta spodumene conversion tests from 49kg of Grandão concentrate were positive with 96% Li conversion to beta spodumene at 1,075°C for 30-50 minutes, standard refining conditions. Tailings will be thickened and dry stacked in a lined tailings storage facility, minimizing the environmental footprint of the operations. The reagents that will be used in this flowsheet (oleic acid, soda ash, flocculant and more) are considered environmentally friendly and meet the European Reach requirements.

Figure 19: (A) Barroso's PEA mine plan by pit; (B) Flowsheet



Source: Savannah Resources, June 2023 PEA

Takeaways: The plant uses standard processes and achieves standard recoveries (Pilbara use 75% at Pilgangoora) relative to peers. This stage (DMS and flotation) of the process is light on reagents, and Savannah have taken care to make the design as environmentally friendly as possible including dry stack tailings, recycled water, grid power (majority renewable) and European Reach compliant reagents.

Product and logistics

The primary product is 5.5% Li₂O concentrate. While SC6 was initially the industry standard, concentrates grading between 5-6% are now common. Savannah assumed 92.7% payability (of benchmark SC6 prices) for SC5.5. The PEA also assumes ~459ktpa of ceramic by-product is produced from the DMS and rougher flotation circuit, which is sold for US\$53.5/t totalling US\$344m over the life-of-mine or 8% of LOM revenue. At spot prices this falls to 6% of LOM revenue or a US\$132/t by-product credit (32% of operating costs).

Economics

The PEA delineated a 14-year mine life producing an annual average of 191ktpa of SC5.5 at a sale price of US\$1,464/t (US\$1,597/t for SC6 and 91.7% payability for SC5.5), plus 459ktpa of ceramic mica at US\$53.5/t for total US\$4.15bn LOM revenue or US\$297/year. Op costs included US\$3.77/t mined at a 5.9:1 LOM strip ratio, US\$21.66t processing, US\$4.33/t G&A, a 4% royalty, and US\$13.9/t freight costs (US\$0.096 per t per km) for total LOM US\$1,066m operating costs, US\$76m/year or US\$424/t SC5.5 before by-product credits, US\$292/t net of credits. The PEA also estimates US\$280.3m of initial capex (including US\$44.4m or 19% contingency), US\$49.0m (US\$3.5m per year) of sustaining capex and US\$101.5m of LOM closure costs (US\$7.3m per year). This results in LOM US\$1694m FCF, or US\$121m per year, which drives US\$953m NPV8% and a 77.3% IRR.

Figure 20: Summary of 2023 PEA and SCPe assumptions and outcomes

	Savannah		SCPe	
	2023 PEA	PEA mirror	Base case	
Total inventory (Mt)	20.50	>>	>>	
Grade (% Li ₂ O)	0.96%	>>	>>	
Strip ratio (kt)	5.90	>>	>>	
Recovery (%)	73%	>>	>>	
Total production (kt SC5.5)	2,601 ⁽¹⁾	>>	>>	
Annual throughput (ktpa)	1,500	>>	>>	
Annual production (ktpa)	191	>>	>>	
SC6 price (US\$/t)	1,597	1,597	2,000	
Payability (%)	91.7%	91.7%	90.0%	AISC net of byproduct (US\$/t SC5.5)
SC5.5 price (US\$/t)	1,464	1,464	1,800	409
LOM SC5.5 revenue (US\$m)	3,808	3,808	4,682	LOM opex (US\$m)
Byproduct mica prodn (ktpa)	459 ⁽¹⁾	459	>>	1,066
Quartz-feldspar received price (US\$/t)	54	54	>>	LOM AISC (US\$m)
LOM byproduct revenue (US\$m)	344 ⁽¹⁾	344	>>	1,063
Byproduct credits (US\$/t)	132	132	>>	LOM FCF (US\$m)
				1,694
				Disc rate (%)
				8.0%
				NPV (US\$m)
				953
				IRR (%)
				77.3%

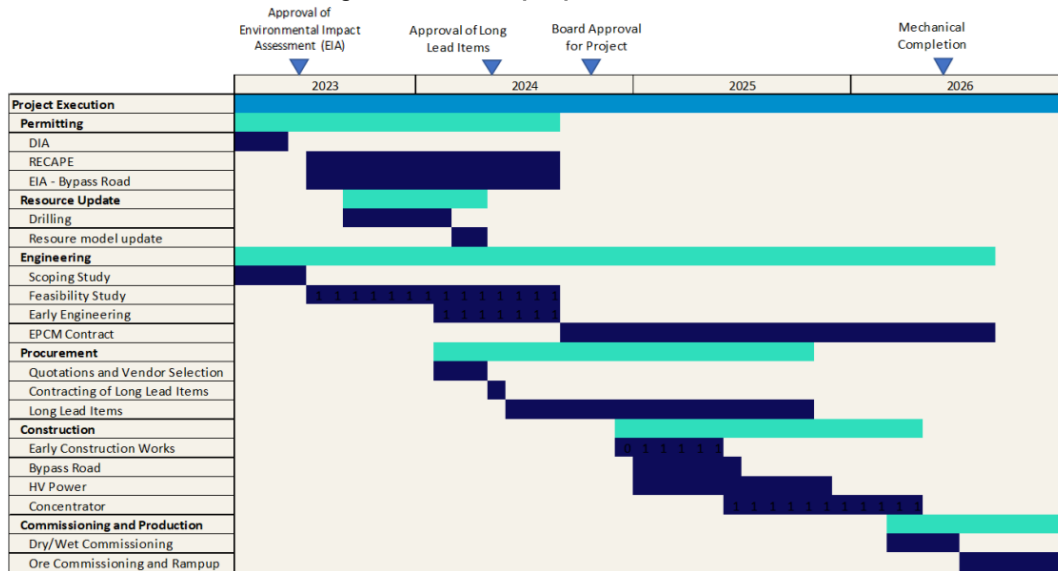
Source: Savannah Resources; SCPe; (1) SCPe calculation based on PEA document

What we model: We match the PEA mine plan for tonnes, grade and recoveries leaving mine life extension as upside. We think the unit costs in the study are quite reasonable, if not conservative, thus we match the study operating costs. Given prices have been well above the US\$1,464/t price modelled in the study, we lift pricing to our long-term US\$1,800/t SC5.5 price (US\$2,000/t SC6 x 90% payability). This lifts NPV to US\$1,138m with an SCPe 51.1% IRR.

Timeline

With the EIA completed, Savannah plans to complete infill drilling in the remainder of 2023 to mid-2024 to upgrade inferred tonnes to M&I for maiden reserves by mid-2024. The includes an initial 60-hole / 3,235m programmed in Q4 2023, followed by 166-holes / 10,200m in H1 2024 to grade mineralization for reserve inclusion. Feasibility study is guided for 2H24, to enable offtake, permitting completion (confirming the FS design still complies with the terms of the approved EIA), FID and construction start in 2025, and first production in mid-2026.

Figure 21: Planned pre-production timeline



Source: Savannah Resources

Corporate and Financial Summary

Share structure: As at July 31, 2023, Savannah Resources had 1,688.96m shares outstanding and 43.4m options outstanding at a weighted average exercise price of £0.063/sh. Subsequent to period end, Savannah raised £6.5m (139.19m shares at £0.0467/sh) for a pro forma total of 1,828.15m shares which we use as our basic share count. We assume a total of US\$140m (or £109m) of equity (448m shares) for the mine and plant build which assumes new shares are issued at 0.2x NAV, in line with our target price and multiple. We base our per share valuation on a fully-diluted, fully-funded assumed share count of 2,276m fully diluted, fully funded shares outstanding.

Funding assumptions: Including £4.8m at end of June 2023, plus £6.5m raised in July, Savannah had £11.4m of cash and no debt reported at end of July 2023 with £3.2m annualized burn rate in 1H23. Funding assumptions: We match PEA's estimate of US\$280m of capex and add US\$60m for G&A and working capital for a total funding requirement of US\$340m. Savannah's first priority is securing capital from industry partners with potential structures that may include offtake with associated funding or in the form of a prepay. However, to be conservative, we assume the project is funded with US\$140m of equity and US\$220m of debt at 12% cost of capital for a total US\$350m funding package, plus US\$14m existing cash, which provides a total contingency of US\$25m or 17%. This is on top of the US\$44m of contingency included in the US\$280m capex estimate. This leaves a lithium prepay, offtake finance, or selling DSO during ramp up (these are ways that other developers have reduced funding requirements) as upside.

Financials: We forecast an average EBITDA margin over LOM of 73% over our modelled operating horizon. We estimate an average steady state FCF per year of ~US\$174m, which we think could justify a US\$1.2-1.7bn valuation, assuming 10-15% FCF yield or US\$1.5-2.0bn at a 5-6x EBITDA multiple. Returns on capital are attractive at 15-40% ROCE in the first ten years, with 26% ROE over the initial 5 years.

Figure 22: SCPe cash flow and balance sheet estimates

Year (to 31 Dec)	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E
Revenue (US\$m)	--	--	--	--	163.3	309.3	306.0	323.6	343.1	348.8	366.4	367.9	368.0	385.7	381.8	380.1	379.1	381.6	220.6
EBITDA (US\$m)	-3.4	-4.4	-6.3	-6.3	97.8	187.2	204.2	237.5	263.0	272.7	288.6	289.2	272.6	262.8	255.4	270.7	285.1	302.7	182.0
Net income (US\$m)	-4.4	-3.6	-4.5	-6.3	-15.7	44.3	98.0	112.7	137.3	156.3	165.4	175.1	175.5	164.2	156.3	151.6	162.2	172.0	183.6
EPS (US\$/sh)	-0.00	-0.00	-0.00	-0.00	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.03
EBITDA margin (%)	--	--	--	--	60%	61%	67%	73%	77%	78%	79%	79%	74%	68%	67%	71%	75%	79%	82%
Cash flow from ops (US\$m)	-2.4	-5.2	-6.3	-15.7	39.8	108.0	140.6	164.7	184.6	195.2	205.0	206.9	194.4	185.9	184.5	196.4	206.0	217.9	146.4
Cash flow from investing (US\$m)	--	-186.9	-96.0	-11.8	-11.4	-10.8	-10.5	-10.1	-10.3	-10.6	-11.1	-12.4	-12.8	-12.0	-10.8	-9.3	-4.8	--	--
FCF (US\$m)	-2.4	-192.0	-102.3	-27.5	28.4	97.1	130.1	154.6	174.2	184.5	193.9	194.5	181.6	173.9	173.7	187.0	201.2	217.9	146.4
FCFPS (US\$/sh)	-0.00	-0.00	-0.00	-0.07	-0.02	0.06	0.07	0.08	0.10	0.10	0.11	0.11	0.10	0.10	0.09	0.10	0.11	0.11	0.07
Net cash (US\$m)	9.0	11.5	5.2	-57.3	-113.6	-17.4	111.9	265.7	439.8	624.9	819.6	1,015.8	1,199.1	1,372.6	1,544.3	1,728.6	1,923.8	2,132.3	2,273.9
NDINTM EBITDA (x)	nfmf	nfmf	nfmf	0.6	0.6	0.1	-0.5	-1.0	-1.6	-2.2	-2.8	-3.7	--	--	--	--	--	--	--
Debt borrowed (repaid)(US\$m)	--	--	210.0	210.0	-52.5	-105.0	-105.0	-105.0	-52.5	--	--	--	--	--	--	--	--	--	--
Equity raised (US\$m)	--	7.6	--	140.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total assets (US\$m)	33.0	34.7	28.5	362.8	412.1	462.0	520.6	604.0	707.4	872.4	1,047.6	1,223.2	1,388.8	1,547.4	1,699.3	1,860.1	2,030.7	2,213.1	2,320.9
Total liabilities (US\$m)	1.4	0.0	0.0	210.0	215.1	167.1	112.9	59.1	6.1	5.7	5.8	5.9	7.3	9.5	9.8	8.4	7.1	5.9	2.8
Total equity (US\$m)	31.6	34.7	28.4	152.7	197.0	295.0	407.7	545.0	701.3	866.7	1,041.8	1,217.3	1,381.5	1,537.9	1,689.5	1,851.7	2,023.6	2,207.2	2,318.1
Ending shares out (m)	1,689.0	1,758.6	1,828.1	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3	3,164.3
ROCE (%)	-10.8%	-12.6%	-22.0%	-4.1%	23.6%	40.2%	38.7%	35.1%	33.3%	28.0%	24.7%	21.2%	17.4%	14.9%	13.2%	12.9%	12.5%	12.2%	7.0%
ROIC (%)	-15.0%	-18.8%	-26.9%	-3.0%	27.0%	51.5%	60.2%	75.2%	89.4%	100.4%	115.7%	127.8%	132.1%	138.8%	153.2%	193.4%	252.8%	359.8%	368.2%
ROE (%)	-11.3%	-13.0%	-22.0%	-10.3%	22.5%	33.2%	27.7%	25.2%	22.3%	19.1%	16.8%	14.4%	11.9%	10.2%	9.0%	8.8%	8.5%	8.3%	4.8%

Source: SCPe for estimates, Savannah financials for actuals

Government and stakeholders:

Ownership: Savannah Resources owns 100% of the Barroso lithium project. There are no third-party royalties on the project.

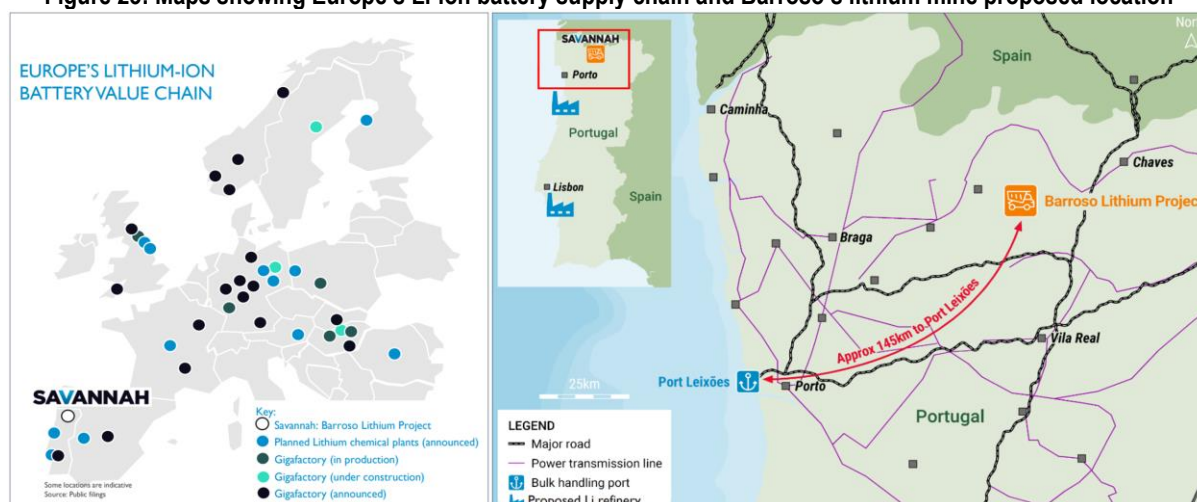
Tax: The corporate profit tax rate in Portugal is 21%, to which a municipal tax of up to 1.5% may be added on taxable profits and a state surtax of 4% on profits less than €7.5m, 5% from €7.5m to €35m and 9% for taxable profits over €35m, with the state surtax to be applied in a staggered way. There is a 3% royalty (scoping study assumes 4%) that is payable to the government of Portugal, with half of it to be paid to the local communities. The royalties could be reduced to 2% if the industrial treatment takes place in Portugal. The PEA forecasted US\$771m of corporation tax over the life-of-mine, which we back calculate to imply a 31.9% effective tax rate. We match this rate in our modelled base case as well as the assumed 4% government royalty instead of the 3% statutory rate.

Permitting: Savannah Resources has already received positive decision on its EIA since May 31, 2023. Next steps on the permitting process include the completion of an Environmental Compliance Report of the Execution Project (RECAPE) and approval from the regulating authorities (Agência Portuguesa do Ambiente– APA). After the approval of the RECAPE, the project will receive the final environmental license (Título Único Ambiental). Other important permits include water and electricity. The permitting process is expected to be completed in time (i.e. all permits necessary for construction commencement received) for 2H24 financial investment decision.

ESG Considerations

Our view is that Savannah Resources should rank high in ESG-sensitive portfolios for both industrial and geopolitical reasons. First and foremost, lithium is the core element of the energy transition and Barroso is Europe's largest spodumene project. CALB and EU-based Northvolt have announced plans to build two new Li-ion battery plants in Portugal (in addition to one operating already), and as such Barroso could be the first lithium mine to feed the currently Li import-dependent European EV supply chain. In 2021, Savannah published and adopted an ESG statement which recognizes the adverse impacts of mining and restates Savannah's commitment to adopting measures to mitigate these impacts. Given Barroso's strategic value in the EU energy transition agenda, the recently approved EIA from the Portuguese environmental regulator and the short-term path to production, we think that with the right reporting and goal setting, Savannah Resources could get a gold/AAA ESG rate from independent agencies.

Figure 23: Maps showing Europe's Li-ion battery supply chain and Barroso's lithium mine proposed location



Source: Savannah Resources

Environmental: Savannah has gone above and beyond to minimize the environmental impacts of the project, with examples to include (i) a closed water system where water is collected/stored/treated and recycled on site with no water taken from the river, (ii) dry-stack tailings and site infrastructure out of sight lines to reduce environmental impact and (iii) extensive rehabilitation plan to backfill the mined-out areas and revegetate after mining operation cease. Once detailed engineering is complete and sizing of the fleet and equipment is determined, Savannah will examine the potential of a fully electric fleet, however that also depends on the maturity of the available technologies. Suggestions to further minimize the environmental footprint could be renewable power generation or securing a hydro (or solar) electricity contract and monitor and track the CO₂ emissions of the operation.

Social: Savannah estimates that Barroso will generate 300+ direct and ~2000 indirect jobs in the local area, which is facing population decline. The updated Economic & Social impact study (April 2023) forecasted that the project will increase Portugal's gross national production by €420m during the construction phase and by €210m per year during the production period. Savannah has also committed to community programs such as the Benefit Sharing Plan, the creation of a community foundation (€500k/year) to contribute to community-led initiatives. Savannah has also pledged to minimize negative impact on local communities, including progressive rehabilitation, fully restoring the landscape post closure (supported by environmental bonding), building bypass roads to ensure no traffic impact, and scheduling activities (including only 3 blasts per week) to minimize noise. While we can understand that some of Covas's population are not in favour of development, we think opposition to projects is unavoidable, and that much effort has been taken to do the right thing here. Moreover, we think the economic benefits, community revitalization, and conscientious operating practices will be appreciated once in operation.

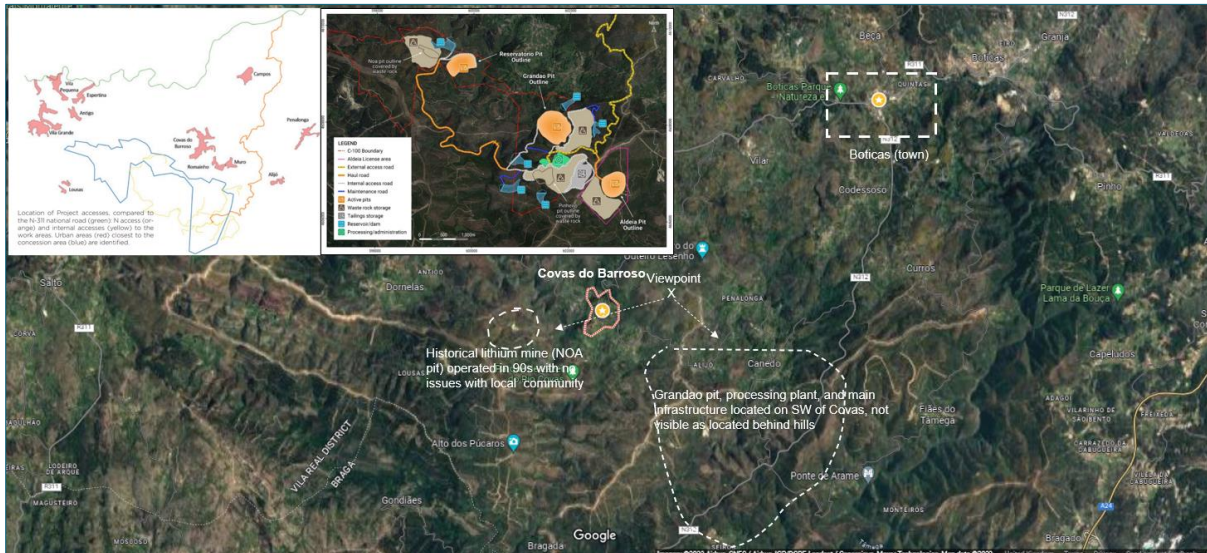
More widely, we think the successful development of the first lithium mine in Europe will be an important step in establishing a European lithium and EV metal supply chain, which is badly needed for both economic and geostrategic regions. The EU has recognized this in its Critical Raw Materials Act, which set goals of extracting 10%, processing 40% and recycle 15% of the EU's annual consumption of critical raw materials (incl. lithium) by 2030.

Governance: The board currently consists of eight members, including Matthew King as Chairman (lawyer with extensive experience in risk management at HSBC), Emanuel Proenca as CEO (ex-CEO of Prio Supply – largest producer and supplier of biofuels in Portugal), Dale Ferguson as Technical Director (geologist, with broad range of experience spanning from exploration to mine construction and development, permitting and engineering studies) and five non-executive directors. We anticipate board growth as Barroso enters development and production. Savannah also has a corporate governance statement which acknowledges the adoption of several governance policies including audit/risk, code of conduct and anti-bribery.

APPENDIX: SITE VISIT

We visited site in early July 2023. Site is a ~1.5-hour drive from Porto, mostly on major motorways with the final ~20 minutes on well maintained two-lane local roads. The local municipality and largest nearby town share the name of Boticas, and there are several hotels including a 4-star hotel, restaurants, shops, a community centre and a high street in Boticas. Nearer to the planned mine site is the village of Covas do Barroso (~80 people).

Figure 24: [Repeat] Map of local project area incl. locations of Boticas, Covas, and planned project infrastructure

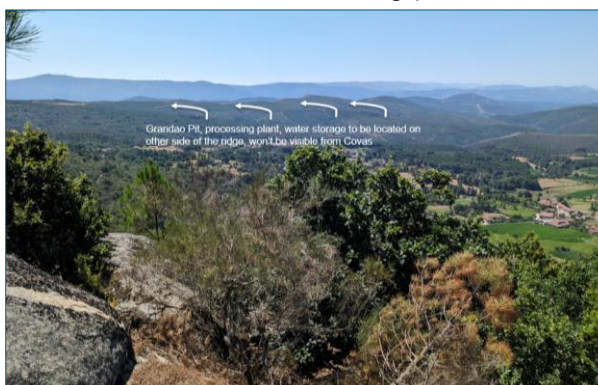


Source: Google Maps, annotated by SCP, inset maps from Savannah

Site activity was limited from mid-2019 through 2023 as Savannah’s focus was on getting EIA approval. The company maintains an office in Boticas to manage community liaison and visitor activity, and a nearby core shed and geological facility (approx. 5 minute drive between the two). Site is a ~20 minute drive from the field office. Now that approval has been granted, drilling should resume in the coming weeks, focused on infilling the deposits to upgrade inferred to indicated for reserve inclusion for the DFS.

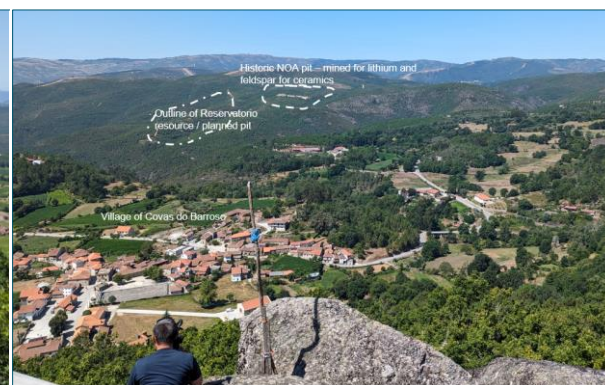
As shown in the two pictures below, the infrastructure including the processing plant, Grandão Pit and Pinheiro pit that form the first 8.5 years of the mine plan, are not visible from Covas, as they are located on the other side of the ridge. Reservoir comes into the mine plan in year 8.5 through year 14 and this is located nearer to the village of Covas. Overall we came away more confident in the guided permitting timelines. Despite the rhetoric in the press, the representative office was calm, the visual impact of the mine from the village only coming in year 9, and we note that mining previously took place, albeit at smaller scale, without any issues in the 2000s.

Figure 25: View looking S-SE towards Grandão (on the other side of the ridge)



Source: SCP

Figure 26: View looking SW towards Covas and Reservoir



Source: SCP

Figure 27: Spodumene core from Reservatorio



Source: SCP

Figure 28: Scale model or prior PEA design showing Covas and pit locations



Source: SCP

Our view: We had two main interests in our site trip. As previously discussed, permitting was the key one and we were pleased with the outcome. Community relations are cordial with better relations in Boticas and more opposition in Covas, however the opposition is through legal channels and the existing mining leases guarantee Savannah's right to land access. Given support from Lisbon inherent in EIA approval, and local opposition to other now completed projects including the hydro and wind power in the region, we think that opposition is more driven by fear of change than project specific concerns.

Our other focus was on confirming no fatal flaws and we were satisfied with this exercise. Core showed good continuity, and no obvious geotechnical issues. The infrastructure around site is excellent, including roads and nearby power, and the climate and topography are moderate. Metallurgy exceeded expectations including ability to produce 6% concentrate for ~1-2% recovery loss and potential to coarsen grind size from 150um to 212um. The source of the good met results is a large difference in density between the spodumene and host metasediments, which lends to easy separation. From a technical perspective, we think this is a straightforward project to build and operate, particularly at current prices, as mining and processing are conventional, and the host settings (climate, topography, infrastructure, human capital) are all favourable.

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HOLD:	0
SELL:	0
UNDER REVIEW:	0
TENDER:	0
NOT RATED:	0
TOTAL	55

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