



## **ATLANTIC LITHIUM LIMITED**

A POTENTIALLY NEAR-TERM  
SPODUMENE CONCENTRATE  
PRODUCER WITH SIGNIFICANT  
UNCOMMITTED OFFTAKE  
OPTIONALITY

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## SHARE CODES

**ASX: A11, AIM: ALL, OTCQX: ALLIF**

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## EXECUTIVE **SUMMARY**

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Given the exceptional infrastructure and simple flowsheet/low opex associated with the Ewoyaa Lithium Project, plus the benefit of being almost fully funded for production, the key catalyst for Atlantic to year-end is receiving approval for a mining permit.

Once approved, the Ewoyaa project can secure an immediate final investment decision from the JV partners and aim for a Q1 2025 production start. Based on RK Equity's future spodumene concentrate price deck, the fair value of Atlantic is between £0.94 and £1.13/share, depending on the annual mining throughput volume (2 mtpa versus 2.7 mtpa) at Ewoyaa.

As only 15km<sup>2</sup> of the overall 560km<sup>2</sup> portfolio has been drill tested to date, there is potential for the mineral resource estimate (and life of mine) to grow beyond the current ~35Mt to over 40Mt, in RK Equity's opinion.

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# ATLANTIC LITHIUM LIMITED

“ATLANTIC”

## AT A GLANCE

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This is a follow-up research note to the one [published in December 2021](#).

Atlantic is a dual-listed lithium pure play company (AIM and ASX) with land packages in both Ghana and Côte d'Ivoire.

The company is rapidly advancing its flagship Ewoyaa hard rock project in Ghana and released a pre-feasibility study (“PFS”) in September 2022. The company plans to release a definitive feasibility study (“DFS”) in Q2 2023. The PFS outlined an 18.9Mt at 1.24% Li<sub>2</sub>O maiden ore reserve and a post-tax NPV8 of US\$1.33B based on an average annualised US\$1,359/dmt SC6 price.

Since the PFS was released, Atlantic has increased the mineral resource estimate (“MRE”) to 35.3Mt at 1.25% Li<sub>2</sub>O. Importantly, 79% or 28Mt of the MRE is now classified in the Measured and Indicated category. With only 15km<sup>2</sup> of the 560km<sup>2</sup> Cape Coast portfolio drilled to date and with some pegmatites open along strike and at depth, we anticipate that the MRE will expand further.

It is encouraging that Atlantic has expanded the MRE whilst maintaining the average lithium grades at a respectable 1.25% Li<sub>2</sub>O; this a hallmark of each MRE upgrade since discovery, demonstrating the robust continuity of mineralisation. Atlantic’s JV partner, Piedmont Lithium Inc. (“Piedmont”), has earmarked its 50% offtake right at Ewoyaa to supply its Tennessee lithium hydroxide facility due for completion in ~2026. My recent Piedmont research note can be found [here](#).

To secure its 50% project ownership, Piedmont has funded the DFS (US\$12M) and will contribute to the project’s construction (US\$70M) plus 50% of costs above US\$70M. There are certain conditions to be met, but it looks almost certain that Piedmont will commit to its share of capital spending to secure its stake, given the valuation uplift on its total investment and security of spodumene concentrate supply in a market that is likely to be undersupplied for years to come.

### RK Equity forecasted metrics for the upcoming DFS:

- Production throughput will increase to ~2.7 mtpa from 2 mtpa with an 11-year mine life – the NPV10 assuming a 2.7 mtpa throughput is substantially greater than the 2 mtpa longer life alternative
- Spodumene concentrate production will increase to ~365 ktpa based on a **lower** spodumene concentrate grade of 5.5%
- The capex cost will increase to ~US\$160M from US\$125M – to reflect inflationary increases and an increased crushing capacity - to be funded by Piedmont (US\$115M) and Atlantic (US\$45M)

Assuming Atlantic can negotiate a pre-payment linked to an offtake agreement, the need for a further US\$45M equity raise to fund its additional capex for the expanded mining throughput to 2.7 mtpa could be eliminated. Atlantic has retained its valuable 50% offtake rights to the Ewoyaa project (and Cape Coast portfolio).

Various spodumene concentrate producers have entered tolling arrangements with Chinese chemical converters for a fixed cost to produce either battery-grade lithium hydroxide or carbonate. This gives the spodumene concentrate producer greater flexibility and ensures the maximum operating margin.

The ability to be a virtually integrated producer has become a viable option for companies producing spodumene concentrate. Atlantic could also partner with a converter in the USA or Europe if lithium hydroxide and carbonate trade at premiums in those locations. Currently, the conditions of the USA’s Inflation Reduction Act (“IRA”) regarding buyer incentives suggest this could be the case.

FIGURE 1: ATLANTIC RELATIVE SHARE PRICE (SOURCE: GOOGLE FINANCE)

Fig. 1



**Near-term Milestones / Catalysts**

- Additional expansion drilling beyond the current resource area – Atlantic has substantial cash assets (US\$11M) to execute an aggressive program in the coming months
- Completion of a DFS by the end of Q2 2023 with the inclusion of a 2.7 mtpa mine throughput that would substantially increase the annual average production to ~365 ktpa SC5.5 and the NPV of the project
- Receipt of a mining permit by the end of 2023
- Announcement of an offtake partner on strong commercial terms

Atlantic has underperformed some of its peers Fig. 1 over the past six months and we do not believe the

market has correctly valued Atlantic on an absolute basis. The Ewoyaa project has exceptional logistics, simple metallurgy, low capex/opex and significant exploration upside potential. **RK Equity sees potential for the MRE to grow to 40 Mt or more.**

The most likely reason for the reduced valuation is perceived permitting and political risk. As the Ghanaian state has a 10% freely carried interest and 98% of staff are locally sourced, plus a long history of successful gold mining projects in the country, we see permitting risk as lower than other global, particularly African, locations. Ghana ranks second for investment attractiveness in Africa, behind Morocco. Mali, the DRC, and Zimbabwe, which have lithium production or development projects, are the three worst political jurisdictions globally, according to the 2021 Fraser Institute survey.

FIGURE 2: ATLANTIC EXPLORATION TARGETS (SOURCE: COMPANY REPORT)

Fig. 2

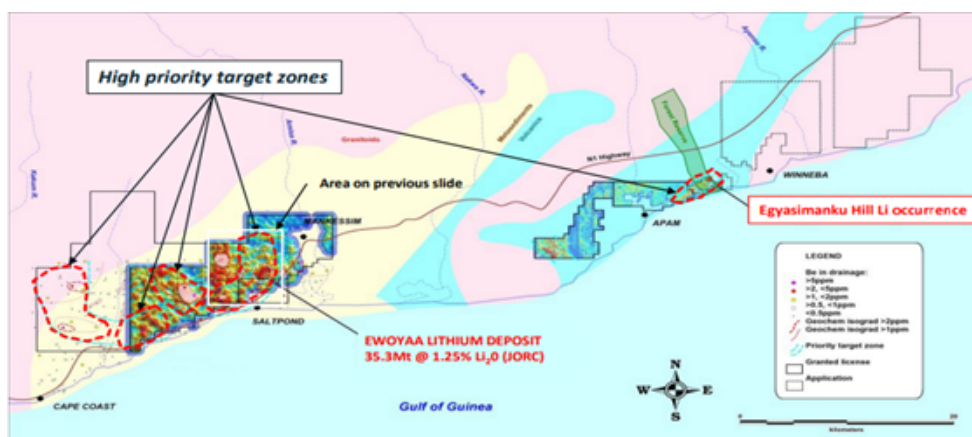


FIGURE 3: SPODUMENE FAIR VALUE ESTIMATE (SOURCE: RK EQUITY)

Fig. 3

	US\$	Note
China spot (VAT incl)	30 000	215 400
China spot (VAT excl)	26 549	
Import Duty (2%)	(339)	
SC6 Total Cost	(16,960)	
Transport from port	(400)	US\$50/t
Conversion cost	(4,565)	RMB 31,500/t
Sustaining capex	(300)	US\$300/t
Net operating margin	3 984	US\$/LiOH
Margin as % (VAT excl)	15.0%	

SC6 (8t/ Li2CO3)	2 050	FOB Port Hedland
Total	16 400	
Freight + Insurance	560	US\$70/t
SC6 Total Cost	-16 960	

LiOH US\$/t VAT (incl)	Operating margin US\$/t (15% of VAT excl)	SC6 Fair Value
20 000	2 655	1 122
22 000	2 920	1 307
24 000	3 186	1 491
26 000	3 451	1 676
28 000	3 717	1 860
30 000	3 982	2 050
32 000	4 248	2 235
34 000	4 513	2 419
36 000	4 779	2 604
38 000	5 044	2 788
40 000	5 310	2 973
42 000	5 575	3 157
44 000	5 841	3 342
46 000	6 106	3 526

We believe that Chinese non-integrated converters using spodumene concentrate as feedstock (not Chinese lepidolite producers) will be the marginal cost producers of lithium chemicals globally.

Assuming those converters require a 15% operating margin (ex VAT), then we can derive the fair value for spodumene concentrate over time.

**RK Equity's long-term lithium hydroxide price forecast is US\$30,000/t (VAT incl). Based on this forecast and the required 15% operating margin (excl VAT), the long-term fair value for spodumene concentrate is US\$2,050/dmt.**

We believe Atlantic has a strong case for a higher long-term price estimate for its DFS than the US\$1,359/dmt used in the PFS.

Global Lithium's recent scoping study referenced Fastmarkets' long-term spodumene concentrate price estimate at US\$2,600/dmt, and Sigma's Updated DFS used ~US\$4,000/t as an average for 5.5% grade spodumene concentrate.

# BATTERY DEMAND / SUPPLY FUNDAMENTALS

FIGURE 4: BATTERY-GRADE SUPPLY-DEMAND ESTIMATES (SOURCE: RK EQUITY)

Fig. 4

Cathode	2020	2021	2022	2023	2024	2025	2026	2027	2028
NMC 111	9	15	20	23	0	0	0	0	0
NMC 532	118	180	256	278	305	331	210	164	158
NMC 622	130	173	153	177	225	248	316	263	198
NCM 711/811/9	70	248	326	432	558	687	947	1382	1782
NCA + NCMA	77	133	184	253	353	476	631	790	950
Next Frontier	0	0	0	0	48	83	158	329	554
LFP	170	387	962	1214	1540	2109	2788	3421	4039
LCO	74	93	77	76	90	99	105	118	127
LMO	84	104	68	76	90	103	105	112	111
<b>TOTAL (KT)</b>	<b>732</b>	<b>1 333</b>	<b>2 047</b>	<b>2 528</b>	<b>3 208</b>	<b>4 136</b>	<b>5 261</b>	<b>6 579</b>	<b>7 920</b>
<b>Effective GWh</b>	<b>394</b>	<b>720</b>	<b>1 051</b>	<b>1 300</b>	<b>1 652</b>	<b>2 109</b>	<b>2 677</b>	<b>3 362</b>	<b>4 057</b>
Carbonate KT LCE	175	286	452	538	655	838	1010	1203	1413
Hydroxide KT LCE	83	179	226	297	392	493	657	856	1040
<b>Cathode KT LCE</b>	<b>259</b>	<b>465</b>	<b>678</b>	<b>834</b>	<b>1 048</b>	<b>1 331</b>	<b>1 667</b>	<b>2 060</b>	<b>2 453</b>
<b>% change</b>		<b>80%</b>	<b>46%</b>	<b>23%</b>	<b>26%</b>	<b>27%</b>	<b>25%</b>	<b>24%</b>	<b>19%</b>
EV sales	3.3	6.8	10.5	14.0	17.8	22.0	27.0	32.5	38.9
<b>% change</b>		<b>103%</b>	<b>56%</b>	<b>33%</b>	<b>27%</b>	<b>24%</b>	<b>23%</b>	<b>20%</b>	<b>20%</b>
EV sales (limit)	3.3	6.8	7.6	12.8	16.8	22.0	26.6	26.9	26.9
<b>% change</b>		<b>103%</b>	<b>12%</b>	<b>69%</b>	<b>31%</b>	<b>31%</b>	<b>21%</b>	<b>1%</b>	<b>0%</b>

Lithium	2020	2021	2022	2023	2024	2025	2026	2027	2028
Carbonate supply	154 646	235 607	367 284	518 346	643 303	841 149	1 008 286	1 068 293	1 113 875
Carbonate demand	175 423	285 668	451 996	537 698	655 214	838 195	1 009 762	1 203 177	1 413 312
<b>Net Carbonate</b>	<b>(20,777)</b>	<b>(50,061)</b>	<b>(84,713)</b>	<b>(19,352)</b>	<b>(11,911)</b>	<b>2,954</b>	<b>(1,476)</b>	<b>(134,884)</b>	<b>(299,438)</b>
Hydroxide supply	88 790	131 280	177 703	262 774	361 278	488 364	641 051	740 608	795 780
Hydroxide demand	83 364	179 222	226 222	296 774	392 382	492 645	657 318	856 474	1 039 900
<b>Net Hydroxide</b>	<b>5,426</b>	<b>(47,943)</b>	<b>(48,519)</b>	<b>(34,001)</b>	<b>(31,104)</b>	<b>(4,281)</b>	<b>(16,267)</b>	<b>(115,866)</b>	<b>(244,120)</b>

The market continues to underestimate the actual demand for battery-grade lithium and overestimate the supply of battery-grade chemicals. Currently, Chinese cathode producers operate well below their normal capacity as they and downstream buyers draw down on their inventories.

During Q1, this has the desired effect of putting pressure on the China carbonate spot market, which is responsible for approximately 25%-30% of total carbonate volumes globally. The look-through effect of a lower China spot market price is lower spodumene concentrate prices. However, due to the availability of excess conversion capacity in China, we have observed a marked increase in tolling arrangements being agreed upon between spodumene producers and non-integrated and partially non-integrated Chinese converters who find themselves without feedstock supply.

The ex-China lithium hydroxide market (contract based) has remained resilient. There is a limit to scaling these tolling arrangements; however, Albemarle and Mineral Resources are building their own conversion capacity in China, which will replace

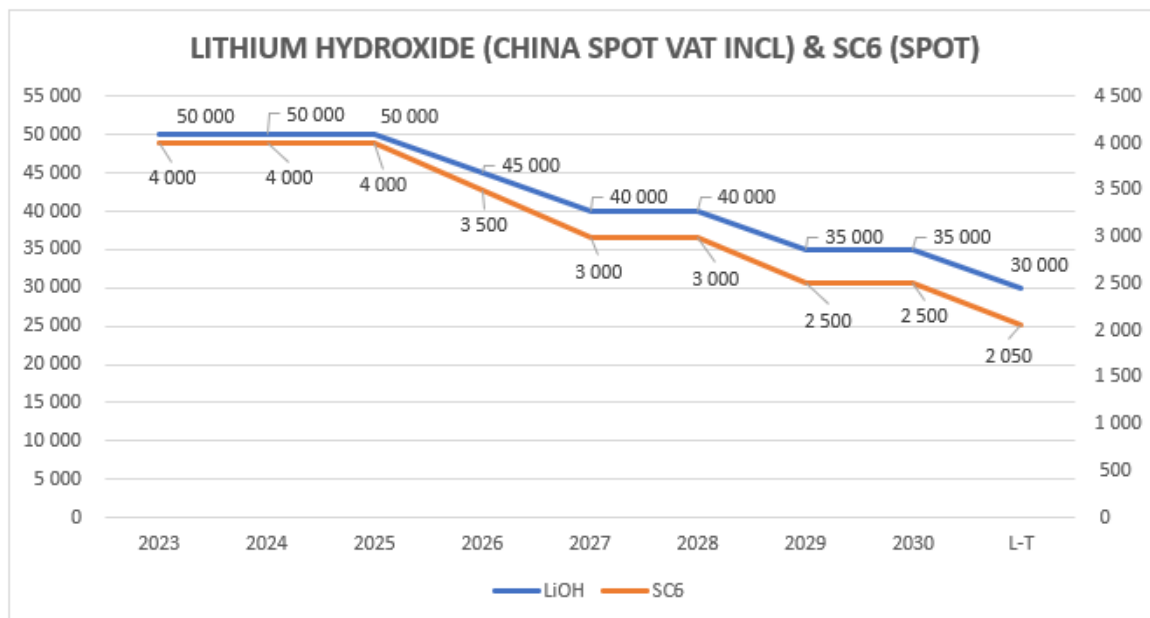
current tolling arrangements, and the conversion capacity being built/planned ex-China is increasing and has the potential to absorb the supply of spodumene concentrate from new producers.

We acknowledge the progress made in the next frontier batteries, such as **sodium ion**, and have increased the cathode production forecast for this emerging technology. With zero lithium used in the cathode, this has reduced our supply-demand deficit but does not change our overall structural deficit forecast. Even allowing for an aggressive scale-up in sodium-ion battery production (which will have its own supply chain challenges), significant new upstream investments are needed in the lithium industry to balance future battery-grade supply and demand.

**Atlantic is one of only a handful of potential new feedstock suppliers and could become a takeover target given its unencumbered production volume and low opex costs.**

FIGURE 5: LITHIUM HYDROXIDE AND SC PRICE FORECASTS (SOURCE: RK EQUITY)

Fig. 5



The RK Equity price deck assumes that upstream funding and permitting will increase for greenfield projects. If these investments don't occur in the next two years, then there is substantial upside risk to the price deck as construction and ramp-up timelines for greenfield projects have not been met.

We don't view lepidolite as the major future supply threat in the market, given it is generally lower grade and ESG, waste removal and raw material supply issues. We believe spodumene concentrate processed by Chinese non-integrated converters will remain the marginal cost producer for the foreseeable future. The shortest (and lowest capex) route to increased chemical supply is processing spodumene concentrate in China.

This thesis has recently been validated by [Albemarle and Mineral Resources' joint venture](#) company (MARBL). Developing new conventional brine projects is critical and will add to supply in time; however, the timeline to qualify battery-grade material from the start of pond construction is realistically 4-6 years as an absolute minimum. Spodumene is the answer in the near- to medium-term, and within spodumene concentrate projects,

dense media separation ("DMS") only projects are the lowest capex and quickest to market.

Typically, a DMS project can be constructed in 12 months and commissioned and ramped to nameplate after a further 6-9 months.

Based on our models, the current Atlantic share price (~33p) is discounting a flat long-term spodumene concentrate price of only ~US\$985/dmt, approximately 75% below the current spot and average contract price.

**My fair value estimate for Atlantic is between £0.94 and £1.13/share (P/NPV 0.8x) once a mining permit has been received and a final investment decision has been made (forecast Q4 2023). The higher fair value price assumes Atlantic and Piedmont will increase capex and the annual mine throughput to 2.7 mtpa in the DFS due Q2 2023.**

This valuation range excludes any upside for the Côte d'Ivoire portfolio, and further plant throughput beyond 28 Mt. Atlantic has only drilled 3% of its 560 km<sup>2</sup> Cape Coast land package.

FIGURE 6: ATLANTIC VERSUS SIGMA LITHIUM METRICS (SOURCE: RK EQUITY, COMPANY REPORTS)

Fig. 6

	Sigma	Ewoyaa	%	Atlantic	%
MRE (MT)	85.6	35.3	41.2%		
Production Method Permitted	DMS	DMS			
Annual Avg Production	624 000	365 000	58.5%	182 500	29.2%
Life of Mine	13	11	84.6%		
Opex (C1) US\$/t	289	248	85.8%		
Market Cap (US\$Bn)	3.9			0.3	7.7%

If we compare Atlantic versus Sigma Lithium (“Sigma”) on a like-for-like basis there are a number of similarities.

However, Sigma is fully permitted and targeting first production in April 2023. I view Sigma as a benchmark for where Atlantic can trade once it has received its mining permit and construction is well underway, notwithstanding the significantly longer trucking distance to port required for Sigma.

Based on the estimated annual average production metrics above (assuming a 2.7 mtpa throughput for Ewoyaa), Atlantic could trade as ~4x its current valuation – in line with Sigma. That valuation corresponds to the £1.32/share fair value estimate using a P/NPV ratio of 0.8x.

**What if scenario – Fair value price sensitivity to a changing long-term (2031 onwards) spodumene concentrate price**

FIGURE 7: FAIR VALUE SENSITIVITY ANALYSIS (SOURCE: RK EQUITY)

Fig.7

SC Price / dmt (2031-)	1200	1800	2400	3000	3600	4200	4800
Fair value (2 mtpa)	0.80	0.90	1.00	1.10	1.20	1.30	1.40
Fair value (2.7 mtpa)	1.00	1.10	1.20	1.30	1.40	1.50	1.60



## ATLANTIC - 2 MTPA DFS MODEL (AUTHOR ESTIMATE)

	May-23	Jun-24	Dec-25	Dec-26	Dec-27	Dec-28	Dec-29	Dec-30	Dec-31	Dec-32	Dec-33	Dec-34	Dec-35
240 200 000 Waste/t			4 200 000	8 600 000	11 600 000	10 600 000	20 000 000	19 600 000	25 400 000	15 000 000	30 200 000	25 000 000	17 400 000
8.55 W:O			3.0	4.3	5.8	5.3	10.0	9.8	12.7	7.5	15.1	12.5	8.7
28 100 000 Crusher Feed/t			1 400 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000
Total Material			5 600 000	10 600 000	13 600 000	12 600 000	22 000 000	21 600 000	27 400 000	17 000 000	32 200 000	27 000 000	19 400 000
28 000 000 Ore Processed/t			1 300 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000
1.21% Grade %			1.33%	1.27%	1.12%	1.14%	1.28%	1.29%	1.31%	1.14%	1.24%	1.11%	1.20%
61.5% Recovery %			61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%
5.6% Li Concentrate			189 881	278 946	246 000	250 393	281 143	283 339	287 732	250 393	272 357	243 804	263 571
3 717 346 Price USD			4 000	3 500	3 500	3 000	3 000	2 500	2 050	2 050	2 050	2 050	2 050
DSO & Feldspar credits			40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
9 864 Revenue US\$			759.5	976.3	861.0	791.2	883.4	748.3	629.9	553.3	598.3	539.8	580.3
(7,550) Costs			(121.2)	(91.5)	(166.5)	(158.1)	(200.0)	(189.2)	(202.5)	(157.8)	(217.5)	(193.5)	(168.9)
7 437 EBITDA (US\$MM)			638.4	884.8	694.5	633.1	683.4	559.1	427.4	395.5	380.8	346.3	411.4
(126.0) Depreciation			(25.2)	(25.2)	(25.2)	(25.2)	(25.2)	0.0	0.0	0.0	0.0	0.0	0.0
EBT			613.2	859.6	669.3	607.9	658.2	559.1	427.4	395.5	380.8	346.3	411.4
Accumulated tax loss		(47.0)	566.2										
35% Tax			(198.2)	(300.9)	(234.3)	(212.8)	(230.4)	(195.7)	(149.6)	(138.4)	(133.3)	(121.2)	(144.0)
Capex		(90.0)	(36.0)										
4 859 After tax cash		(90.0)	404.2	583.9	460.2	420.3	453.0	363.4	277.8	257.1	247.5	225.1	267.4
10.00% DCF (US\$MM)		(80.9)	314.7	413.3	296.1	245.9	240.9	175.7	122.0	102.7	89.9	74.3	80.2
NPV (US\$MM)			2 294										
45% (PLL effective)			1 032										
Shares in issue (MM)			725										
Per share US\$			1.42										
Cash US\$ per share			0.03										
US\$/share total			1.46										
GBP per share (£)			1.18										
P/NPV 0.8x			0.94										

Based on a 2 mtpa throughput and a 15-year mine life the NPV is £1.18/share using the RK Equity price deck

We assume that Atlantic will produce a 5.5% spodumene concentrate with a 61.5% recovery rate

Valuing Atlantic on a P/NPV of 0.8x we derive a £0.94/share valuation for Atlantic once a mine permit is received and a final investment decision is made

## ATLANTIC – 2.7 MTPA DFS MODEL (AUTHOR ESTIMATE)

	May-23	Jun-24	Dec-25	Dec-26	Dec-27	Dec-28	Dec-29	Dec-30	Dec-31	Dec-32	Dec-33	Dec-34	Dec-35
248 490 000 Waste/t			5 250 000	11 610 000	15 660 000	14 310 000	27 000 000	26 460 000	34 290 000	20 250 000	40 770 000	33 750 000	19 140 000
8.80 W:O			3.0	4.3	5.8	5.3	10.0	9.8	12.7	7.5	15.1	12.5	8.7
28 250 000 Crusher Feed/t			1 750 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 200 000
Total Material			7 000 000	14 310 000	18 360 000	17 010 000	29 700 000	29 160 000	36 990 000	22 950 000	43 470 000	36 450 000	21 340 000
28 000 000 Ore Processed/t			1 500 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 700 000	2 200 000
1.22% Grade %			1.33%	1.27%	1.12%	1.14%	1.28%	1.29%	1.31%	1.14%	1.24%	1.11%	1.20%
61.5% Recovery %			61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%	61.5%
5.5% Li Concentrate			223 077	383 425	338 138	344 176	386 444	389 463	395 501	344 176	374 367	335 119	295 200
3 809 086 Price USD			4 000	3 500	3 500	3 000	3 000	2 500	2 050	2 050	2 050	2 050	2 050
DSO & Feldspar credits			40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
10 479 Revenue US\$			892.3	1342.0	1183.5	1072.5	1199.3	1013.7	850.8	745.6	807.5	727.0	645.2
(5838.6) Costs			(140.7)	(116.9)	(217.5)	(205.0)	(261.8)	(247.0)	(264.7)	(204.2)	(285.0)	(252.4)	(183.9)
8 100 EBITDA (US\$MM)			751.6	1225.1	965.9	867.5	937.5	766.6	586.1	541.4	522.5	474.6	461.3
(160.0) Depreciation			(32.0)	(32.0)	(32.0)	(32.0)	(32.0)	0.0	0.0	0.0	0.0	0.0	0.0
EBT			719.6	1193.1	933.9	835.5	905.5	766.6	586.1	541.4	522.5	474.6	461.3
Accumulated tax loss		(47.0)	672.6										
35% Tax			(235.4)	(417.6)	(326.9)	(292.4)	(316.9)	(268.3)	(205.1)	(189.5)	(182.9)	(166.1)	(161.5)
Capex		(110.0)	(50.0)										
5287.5 After tax cash		(110.0)	466.2	807.5	639.1	575.1	620.6	498.3	380.9	351.9	339.6	308.5	299.8
10.00% DCF (US\$MM)		(98.8)	363.0	571.6	411.2	336.4	330.0	240.9	167.4	140.5	123.3	101.8	90.0
			NPV (US\$MM)	2 777									
			45% (PLL effective)	1 250									
			Shares in issue (MM)	725									
			Per share US\$	1.72									
			Cash US\$ per share	0.03									
			US\$/share total	1.76									
			GBP per share (£)	1.42									
			P/NPV 0.8x	1.13									

Based on a 3 mtpa throughput over a 11-year mine life the NPV is £1.42/share using the RK Equity price deck

We assume that Atlantic will produce a 5.5% spodumene concentrate with a 61.5% recovery rate

Valuing Atlantic on a P/NPV of 0.8x we derive a £1.13/share valuation for Atlantic once a mine permit is received and a final investment decision is made

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# KEY FEATURES OF THE EWOYAA PROJECT

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## 1. EXCEPTIONAL INFRASTRUCTURE

- Multiple high voltage power lines adjacent to the site.
- Sealed bitumen road within 1km of the deposit footprint.
- 110km from deposit footprint to Takoradi port.
- New 800m dry bulk jetty with 16m draft constructed.
- 600m of quay wall completed; bauxite and manganese export with up to 40Mtpa capacity.
- Grid power adjacent to deposit footprint, fed by hydro power and 20MW solar plant (capacity to 40 MW) adjacent to Egyasimanku Hill deposit.

FIGURE 8: ATLANTIC VERSUS SIGMA LITHIUM METRICS (SOURCE: RK EQUITY, COMPANY REPORTS)

Fig. 8



## 2. SIMPLE FLOW SHEET

Atlantic's flow sheet does not include a flotation circuit and is DMS only. Aside from reducing capex and opex considerably, this should ensure a smooth

and short ramp-up in production once the plant is commissioned.

FIGURE 9: ATLANTIC PROCESS FLOW SHEET (SOURCE: COMPANY REPORT)

Fig. 9

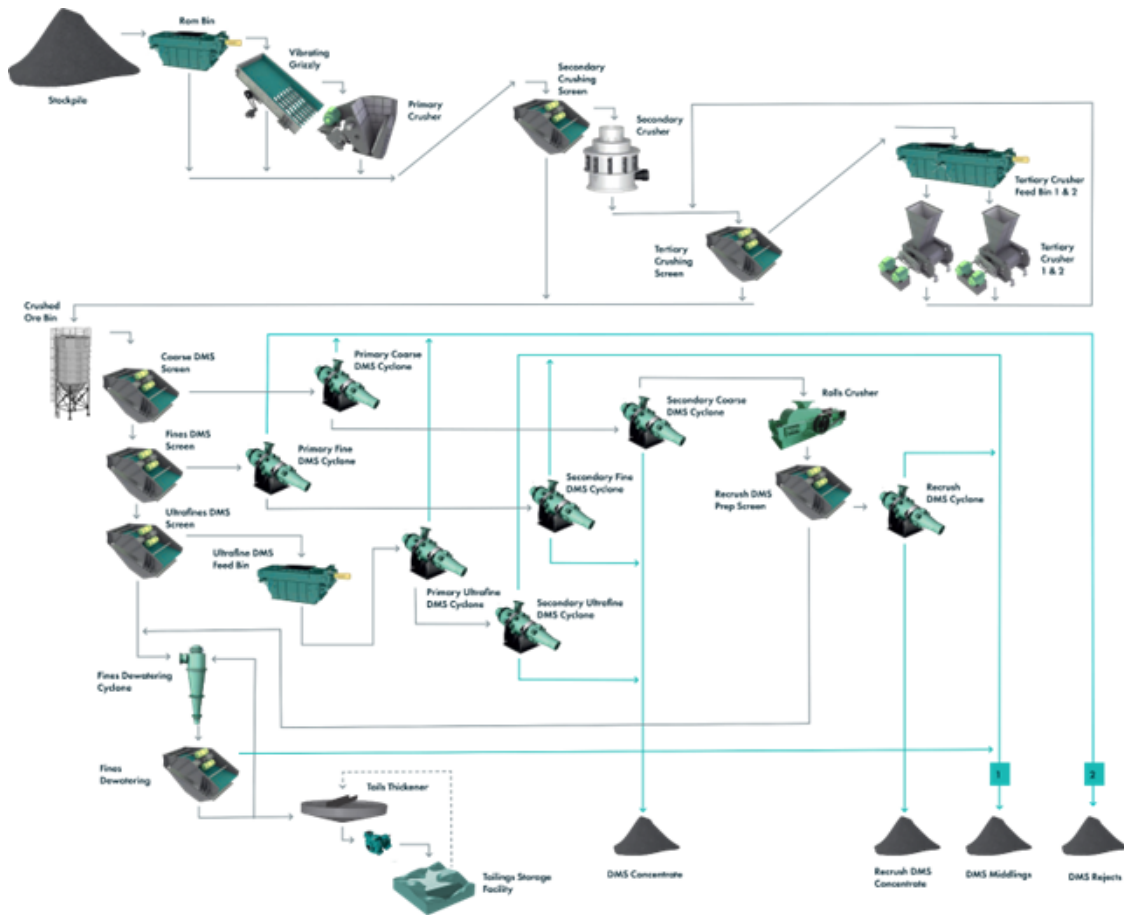


FIGURE 10: CORPORATE SNAPSHOT (SOURCE: COMPANY REPORTS)

Fig. 10

### CORPORATE SNAPSHOT



#### Capital Structure

Issued Capital: 609.2m

58m  
Options

2.7m  
Performance Rights

669.9m  
Fully-diluted share capital

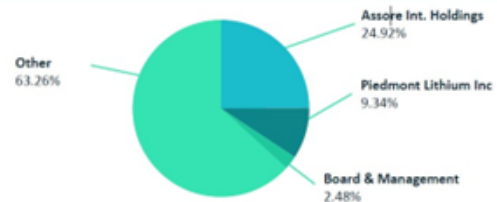
US\$249m  
Market Capitalisation (US\$0.41)<sup>1</sup>

US\$11m  
Cash Balance (31 March 2023)

1. ASX Share price at close of 28 April 2023 (Converted at 0.88)

#### Major Shareholders

Top 20 Shareholders: 68.9%



### 3. LARGELY FUNDED TO PRODUCTION

#### (ASSUMING CAPEX ESTIMATES ARE ACCURATE)

In July 2021, [Piedmont and Atlantic announced](#) a staged investment by Piedmont into Atlantic's Cape Coast lithium portfolio in Ghana, culminating in Piedmont, under certain conditions, fully funding the construction of the Ewoyaa lithium project and receiving 50% of the SC6 per annum and retaining 50% of the mineCo.

It is a testament to the uniqueness of the Ewoyaa project that Atlantic could secure full funding at such an early development stage and still retain 50% of the annual SC6 production. Other suitors were angling for the project, but Atlantic shared Piedmont's vision of an ex-China supply chain.

The total investment by [Piedmont into Atlantic is approximately ~US\\$132M](#), split between a 9.39% Holdco share investment and direct investments into the project subject to staged milestones.

#### Stage 1

Piedmont purchases a 9.91% in Atlantic Lithium Limited (US\$15M) 54 million shares at 20p and a further 3 million shares at 25p  
The total cost was approximately **US\$16M**  
**This stage has been completed.**

#### Stage 2

Sole funding of regional exploration and DFS

(US\$18M)

Piedmont will earn an initial project interest of 22.5% at completion of:

US\$5M for accelerated regional exploration program  
US\$12M to complete the DFS

US\$1M ongoing funding of capex

DFS Criteria – 1.5mtpa to 2mtpa run-of-mine operation; 10-year to 8-year run-of-mine, respectively. **The Stage 2 investment spend has been completed, all expenditure is now shared equally.**

#### Stage 3

Sole funding of capital expenditure to (US\$70M), 50% share of capex above US\$70M

On delivery of the DFS criteria, Piedmont would solely fund the project capex to US\$70M  
Capex cost increases and savings to be shared equally (2 mtpa DFS capex estimate US\$126M, 3 mtpa DFS capex estimate US\$160M)  
If Piedmont fails to fund the capex, then the earned equity (22.5%) SC6 offtake is forfeited  
On completion of Stage 3, Piedmont will hold a 50% project stake  
*The Ghanaian government has an effective free project carry of 10% - Piedmont and Atlantic's final economic interest will be 45%.*

### 4. CAPITAL STRUCTURE

THE ESTIMATED FULLY DILUTED SHARES IN ISSUE ASSUMING AN EQUITY RAISE OF US\$30M:

FIGURE 11: ATLANTIC FULLY DILUTED SHARES IN ISSUE AND MAJOR SHAREHOLDERS (SOURCE: AUTHOR AND COMPANY REPORT)

Fig. 11

	Shares (MM)	Note
Shares in issue	605.7	
Options outstanding	54.5	
Performance rights	2.7	
Equity issuance	62.0	US\$30MM
<b>Fully diluted shares</b>	<b>724.9</b>	

Atlantic is tightly held, Assore Int. Holdings ("Assore") and Piedmont's combined shareholding is ~35%. On 22 November 2022, Atlantic released a notification of change of interests of substantial shareholder – [Assore had increased its stake](#) in the company from

22.65% to 25.06% through on market purchases. Assore has a long and supportive history with Atlantic. The top twenty shareholders collectively control ~73%. I have assumed a ~40p/share issue price to fund the additional capex to process 2.7 mtpa

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## IN CONCLUSION

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Atlantic is well positioned to advance to a final investment decision by the end of 2023 off the back of a completed DFS and receipt of a mining permit.

I anticipate that the DFS will include a plant throughput of ~28Mt / 11-year mine life at a 2.7 mtpa throughput with the potential for a further life extension as the company keeps drilling in its Cape Coast land package. Only 15km<sup>2</sup> of its 560km<sup>2</sup> land package (just ~3%) has been drilled - I see the blue-sky potential for a final plant throughput of ~40MT or more.

My models allow for a further exploration spend by Atlantic – it should be noted that some of that allocation may be applied to its Côte d'Ivoire portfolio. However, Piedmont will match Atlantic's spending in the Cape Coast portfolio, meaning the drilling budget will be doubled if focused on that particular region.

Looking at the capex to market cap ratio of lithium projects globally (particularly for non-conventional flow sheets – sediment and direct lithium extraction), Atlantic's near fully funded position is unique while still in a development phase. The supply-demand outlook for spodumene concentrate is positive, especially given that incumbents elect to keep their feedstock in-house or enter tolling arrangements rather than sell to 3rd parties in China.

By 2025/2026, chemical converters could be built in the US and Europe; as Atlantic has yet to commit to an offtake on its 50% project allocation, the company can maximise that flexibility and potentially secure a premium to the China spot market/contracts. As

Atlantic is in Ghana, the company is an attractive takeout target for both Western and Chinese downstream buyers looking for a secure spodumene supply.

GM, Tesla, LG and Ford have all executed spodumene supply deals in the past few months. I see this trend continuing for Western OEMs. In comparison, Chinese OEMs and battery cell suppliers (CATL, BYD, NIO) are prepared to make direct acquisitions or acquire project stakes and “be miners”.

Atlantic has a committed partner in Piedmont and has limited funding needs; if a downstream customer wants Atlantic's offtake rights, it will likely need to bid outright for the company or pay full market price for the spodumene.

My battery-grade chemical supply-demand models forecast continued tightness, which will likely worsen over time and reach severe levels as Atlantic achieves fully ramped production (2026 onwards).

In my opinion, Atlantic securing a mining permit in late 2023 for the Ewoyaa project will be a major catalyst for a re-rating.

**Given the exceptional infrastructure available to Atlantic and the low capex/opex, I believe receiving a mining permit and a positive final investment decision would essentially de-risk the project, and a P/NPV10 valuation ratio of 0.8x would be justified. Using that valuation metric, the fair value of Atlantic on a fully diluted basis is between £0.94 - £1.13/share with a blue-sky upside target of £1.26/share.**

# APPENDIX

## THE RESOURCE

FIGURE 12: ATLANTIC PROJECT MAP (SOURCE: COMPANY REPORT)

Fig. 12

ATLANTIC HAS ONLY DRILLED 15KM<sup>2</sup> OF ITS 560KM<sup>2</sup> CAPE COAST PORTFOLIO. DEPENDING ON WHETHER ATLANTIC WISHES TO PURSUE ITS 100% OWNED CÔTE D'IVOIRE PORTFOLIO, I HAVE ASSIGNED A DRILLING BUDGET FOR ATLANTIC THAT PIEDMONT WOULD MATCH IF THE DRILLING WERE ON THE CAPE COAST.

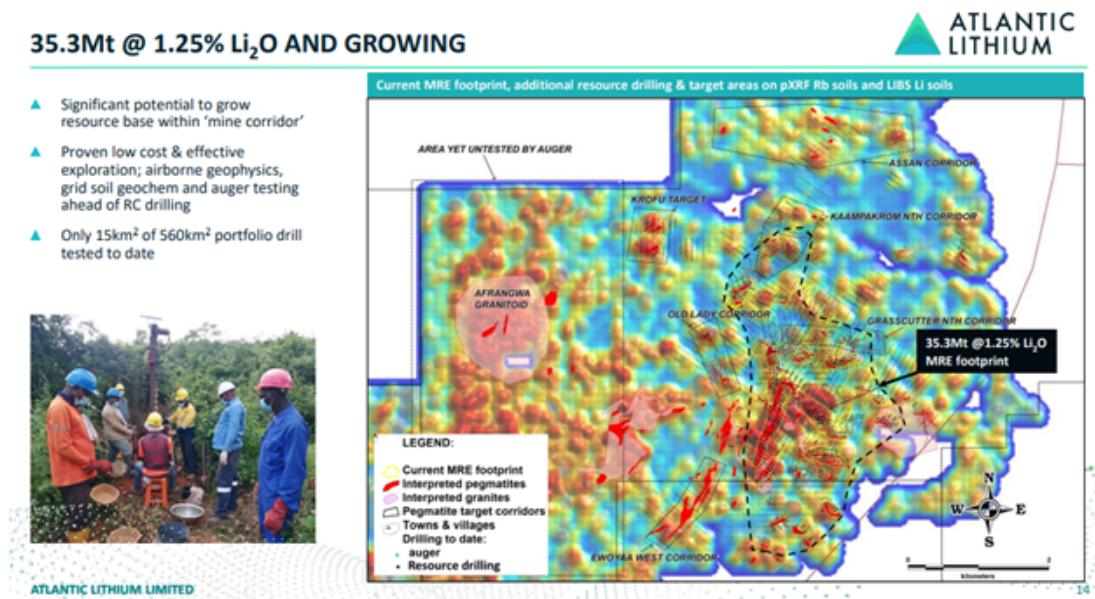


FIGURE 13: ATLANTIC PROJECT MAP (SOURCE: COMPANY REPORT)

Fig. 13

THE MOST RECENT MINERAL RESOURCE ESTIMATE (1 FEBRUARY 2023) HAS SUBSTANTIAL TONNAGE IN THE MEASURED AND INDICATED CATEGORY (79%), POST THE LATEST INFILL DRILLING CAMPAIGN.

Table 1: Ewosaa Mineral Resource Estimate (0.5% Li<sub>2</sub>O Cut-off)

Type	Measured Mineral Resource		
	Tonnage Mt	Li <sub>2</sub> O %	Cont. Lithium Oxide kt
Primary	3.5	1.37	48
<b>Total</b>	<b>3.5</b>	<b>1.37</b>	<b>48</b>
Type	Indicated Mineral Resource		
	Tonnage Mt	Li <sub>2</sub> O %	Cont. Lithium Oxide kt
Weathered	0.5	1.09	5
Primary	24.1	1.26	302
<b>Total</b>	<b>24.5</b>	<b>1.25</b>	<b>307</b>
Type	Inferred Mineral Resource		
	Tonnage Mt	Li <sub>2</sub> O %	Cont. Lithium Oxide kt
Weathered	1.8	1.13	20
Primary	5.6	1.17	66
<b>Total</b>	<b>7.4</b>	<b>1.16</b>	<b>86</b>
Type	Total Mineral Resource		
	Tonnage Mt	Li <sub>2</sub> O %	Cont. Lithium Oxide kt
Weathered	2.2	1.12	25
Primary	33.1	1.25	415
<b>Total</b>	<b>35.3</b>	<b>1.25</b>	<b>440</b>

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