Speculative
See key risks on page 5.
Speculative securities may not be suitable for Retail clients

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Alpha HPA (A4N)

HPA First attracts distinguished investors

Recommendation
Buy (unchanged)
Price
$0.21
Valuation
$0.35 (unchanged)
Risk
Speculative

GICS Sector

Materials

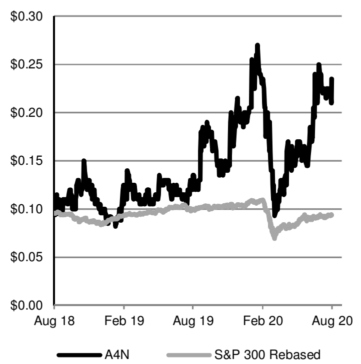
Expected Return	
Capital growth	67%
Dividend yield	0%
Total expected return	67%

Company Data & Ratios	
Enterprise value	$135m
Market cap	$143m
Issued capital	680m
Free float	85%
Avg. daily val. (52wk)	219,763
12 month price range	$0.09-$0.28

Price Performance

	(1m)	(3m)	(12m)
Price (A$)	0.25	0.15	0.12
Absolute (%)	-6.00	62.07	95.83
Rel market (%)	-7.49	48.85	100.21

Absolute Price



SOURCE: IRESS

MOU signed to support marketing, offtake & financing

A4N has announced the signing of a memorandum of understanding (MOU) with Traxys North America to support the development of its HPA First Project. The MOU paves the way for definitive agreements covering project financing, product marketing, offtake and logistics support. It introduces a partner with a strong understanding of, and relationships in, the lithium-ion battery supply chain. Traxys and its affiliates have the capacity to provide multi-faceted financing solutions including debt, equity, offtake credit and working capital facilities. Together with A4N's Orica Ltd relationship, HPA First now has MOUs covering key technical, commercial and financing components. The progression of these MOUs to definitive agreements will be key value catalysts.

Traxys: Owned by Carlyle Group & Moore Capital founder

Traxys is privately held, owned by its management, the Carlyle Group (NASDAQ: CG) and affiliates of Louis M. Bacon, the founder of Moore Capital Management. Along with strong lithium-ion battery supply chain credentials, the group has a joint venture with UK-based resources investor, Pallinghurst Group, focussed on responsibly sourced battery materials projects. Traxys' interest in the HPA First Project further highlights both the quality of the project and the supportive supply-demand fundamentals expected in high purity alumina markets. The group's involvement has the potential to support other senior financers to the project including Australian Government and commercial lenders. We believe it also adds valuable competitive tension to A4N's future financing and product offtake negotiations.

Investment thesis: Speculative Buy, Valuation $0.35/sh

Our Buy, Speculative recommendation is supported by the potential for A4N's HPA First Project to generate significant free cash flow through supplying 4N (+99.99%) high purity alumina (HPA) to the high-growth lithium-ion battery manufacturing sector. The HPA First technology has passed rigorous due diligence by third party technical consultants and has attracted the attention of leading battery material supply chain participants. A4N provides value leverage to the electric vehicle and renewable energy sectors. Our A4N risked and diluted A4N valuation is $0.35/sh (unchanged).

A4N is a development company with prospective operations and cash flows only. Our Speculative risk rating recognises this higher level of risk and volatility of returns.

Earnings Forecast

Year ending 30 June	2021e	2022e	2023e	2024e
Sales (A$m)	-	-	57	197
EBITDA (A$m)	(2)	(2)	27	123
NPAT (reported) (A$m)	(2)	(16)	(1)	67
NPAT (adjusted) (A$m)	(2)	(16)	(1)	67
EPS (adjusted) (¢ps)	(0.2)	(1.4)	(0.1)	5.7
EPS growth (%)	na	na	na	na
PER (x)	-94.7x	-15.6x	-373.3x	3.7x
FCF Yield (%)	-56%	-93%	-4%	17%
EV/EBITDA (x)	-67.5x	-67.5x	5.0x	1.1x
Dividend (¢ps)	-	-	-	3.0
Yield (%)	0%	0%	0%	14%
Franking (%)	-	-	-	-
ROE (%)	-2%	-10%	0%	42%

SOURCE: BELL POTTER SECURITIES ESTIMATES

HPA First attracts distinguished investors

MOUs now cover all key HPA First Project components

A4N has announced the signing of an MOU with Traxys North America which further supports the development of its HPA First Project. The MOU provides the framework for A4N and Traxys to progress towards definitive agreements on:

- Product marketing and offtake;
- Trade finance and logistics support;
- Working capital facilities; and
- The potential for Traxys and/or its affiliates to invest in the project through debt and/or equity.

The MOU is a major step forward for the HPA First Project. Together with the February 2020 agreement with chemical counterparty Orica Ltd, A4N now has MOUs covering all key components of the HPA First Project from technical through to commercial and financing aspects.

Traxys: Major player in battery materials; esteemed backers

Traxys North America is part of Traxys Group, an international provider of market access, supply chain, distribution and financing solutions to the commodities sector. The Group is deeply involved in in the global lithium-ion battery supply chain from mine to market. It has existing strategic alliances with groups including AngloAmerican, Molycorp Minerals LLC, ENRC, and Fluor-BWXT Portsmouth LLC.

Traxys is a private company owned by its management team, the Carlyle Group, and affiliates of Louis M. Bacon, the founder of Moore Capital Management, LP and Moore Strategic Ventures, LLC., Mr Bacon's privately held investment company.

Pallinghurst-Traxys Battery Material joint venture

In November 2019, Traxys and UK-based natural resources investor, Pallinghurst Group, announced the launch of the Pallinghurst-Traxys Battery Material joint venture. The joint venture's strategy is to "invest in and establish controlling positions in projects to develop and supply responsibly and ethically sourced materials to the growing rechargeable battery and energy storage industry" (www.pallinghurst-traxys.com/).

Pallinghurst was co-founded and is chaired by former BHP Billiton chief executive, Brian Gilbertson.

Near term news flow & value catalysts

- Agreement and completion of a definitive and binding Supply and Offtake Agreement with Orica. We expect an agreement prior to the completion of the Orica MOU exclusivity period on 31 October 2020.
- Announcement of further details on the progress of definitive agreements with Traxys on various commercial and financing components of the HPA First Project.
- Continued efficiency and operational improvements in the pilot plant operating at higher throughput and assay results pre-cursor and final HPA product.
- Commencement of detailed post-DFS front-end engineering design (FEED) in preparation for engineering, procurement, construction management (EPCM) tendering.

- Environmental and other statutory permitting approvals for the construction of the HPA First Project facility and the required connecting pipeline infrastructure to the chemical counterparty.
- Ongoing discussions and potential signing of offtake agreements with end-users in the lithium-ion battery and LED light manufacturing sectors.

Quarterly cash flow summary

Table 1 - Quarterly cash flow summary A$000's

Quarter ending	**Mar-18**	**Jun-18**	**Sep-18**	**Dec-18**	**Mar-19**	**Jun-19**	**Sep-19**	**Dec-19**	**Mar-20**	**Jun-20**
Development	-568	-711	-681	-604	-263	-774	-1,216	-1,201	-1,908	-871
Staff, administration & corporate	-412	-323	-398	-267	-400	-551	-598	-479	-586	-372
R&D refunds	0	0	0	0	0	0	234	684	0	0
Other operating	-207	-59	14	11	8	5	106	106	6	3
Total operating cash flows	-1,187	-1,093	-1,065	-860	-655	-1,320	-1,474	-890	-2,488	-1,240
Total investing cash flows	0	0	50	100	0	0	0	0	0	0
Proceeds from shares net of costs	0	0	3,927	-17	0	0	4,424	2,076	0	7,000
Other financing cash flows	18	0	83	99	35	28	40	39	37	-231
Total financing cash flows	18	0	4,010	82	35	28	4,464	2,115	37	6,769
Beginning cash balance	2,615	1,446	353	3,282	2,604	1,984	692	3,682	4,907	2,456
Total change in cash	-1,169	-1,093	2,995	-678	-620	-1,292	2,990	1,225	-2,451	5,529
Ending cash balance	**1,446**	**353**	**3,282**	**2,604**	**1,984**	**692**	**3,682**	**4,907**	**2,456**	**7,984**

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Alpha HPA Ltd summary

Company description

A4N's HPA First Project is aiming to supply high-purity alumina (HPA) at a purity of greater than 99.99% (or 4N) to the lithium-ion battery and light emitting diode (LED) manufacturing sectors. The project's proprietary technology is expected to disrupt incumbent HPA production through significantly lower unit costs. Results of a definitive feasibility study (DFS) announced in March 2020 outlined a 10,000tpa 4N HPA project with a capital cost of $308m and pre-tax annual cash flow of $133-280m at 4N HPA prices ranging US$15,000-25,000/t (prices are currently around $24,000/t).

HPA First is a solvent extraction process using an aluminium chemical feedstock purchased on globally traded markets. Orica Ltd (ORI) and A4N are advancing a definitive agreement for ORI's supply of process reagents and for by-product offtake. This agreement has required significant third party due diligence of the HPA First process. A 20-year partnership between A4N and ORI is being considered.

Investment thesis: Speculative Buy, Valuation $0.35/sh

Our Buy, Speculative recommendation is supported by the potential for A4N's HPA First Project to generate significant free cash flow through supplying 4N (+99.99%) high purity alumina (HPA) to the high-growth lithium-ion battery manufacturing sector. The HPA First technology has passed rigorous due diligence by third party technical consultants and has attracted the attention of leading battery material supply chain participants. A4N provides value leverage to the electric vehicle and renewable energy sectors. Our A4N risked and diluted A4N valuation is $0.35/sh (unchanged).

A4N is a development company with prospective operations and cash flows only. Our Speculative risk rating recognises this higher level of risk and volatility of returns

Valuation methodology

We have modelled the HPA First Project using assumptions consistent with the March 2020 DFS. We have employed a blended valuation of:

- EV/EBITDA multiple applied to steady state earnings, discounted to present value, less a capital cost assumption; and
- NPV of a 20 year project (consistent with expected ORI agreement).

Other adjustments to our valuation include:

- A 30% risk discount to account for project stage;
- An allowance for corporate and administration costs;
- The conversion of in-the-money options; and
- A $5m capital raise before the end of June 2021 at a 15% discount to the current share price for corporate working capital purposes.

Risks

Risk to an investment in A4N include, but are not limited to:

- **Commodity price and exchange rate fluctuations.** The future earnings and valuations of development and operating assets and companies are subject to fluctuations in underlying commodity prices and foreign currency exchange rates.
- **Technology:** Projects may be reliant on commercialisation of new production processes and methodologies which have yet been proven on a large scale. Technology may be replicated by competitors resulting in a loss of market share.
- **Infrastructure access.** Projects are reliant upon access to transport and pipeline infrastructure. Access to infrastructure is often subject to contractual agreements, permits and capacity allocations. Agreements are typically long-term in nature. Infrastructure can be subject to outages as a result of weather events or the actions of third party providers.
- **Operating and capital cost fluctuations.** Markets for raw material inputs and labour can fluctuate and cause significant differences between planned and actual operating and capital costs. Key operating costs are linked to commodity and labour markets. Companies are also exposed to costs associated with future land rehabilitation.
- **Sovereign risks.** Companies' assets are subject to the sovereign risk of the country of location and may also be exposed to the sovereign risks of major offtake customers.
- **Regulatory changes.** Changes to the regulation of infrastructure and taxation (among other things) can impact the earnings and valuations of companies.
- **Environmental risks.** Companies are exposed to risks associated with environmental degradation as a result of their production processes.
- **Operating and development risks.** Companies' assets are subject to risks associated with their operation and development. Development assets can be subject to approvals timelines or weather events, causing delays to commissioning and commercial production.
- **Occupational health and safety (OH&S) risks.** Companies are exposed to OH&S risks.
- **Funding and capital management risks.** Funding and capital management risks can include access to debt and equity finance, maintaining covenants on debt finance, managing dividend payments and managing debt repayments.
- **Merger/acquisition risks.** Risks associated with value transferred during merger and acquisition activity.
- **Impact of pandemic infection such as Coronavirus disease (COVID-19).** This may have an adverse impact on the macro economic factors, including the mobility of labour, which can impact asset valuations.

Alpha HPA
as at 20 August 2020

Recommendation	Buy, Speculative
Price	$0.21
Valuation	$0.35

Table 2 - Financial summary

Date		**20/08/20**
Price	**A$/sh**	**0.21**
Valuation	**A$/sh**	**0.35**

Bell Potter Securities

Stuart Howe (showe@bellpotter.com.au, +61 3 9235 1856)

PROFIT AND LOSS

Year ending 30 June	Unit	2020e	2021e	2022e	2023e	2024e
Revenue	$m	-	-	-	57	197
Expenses	$m	(6)	(2)	(2)	(30)	(74)
EBITDA	$m	**(6)**	**(2)**	**(2)**	**27**	**123**
Depreciation & amortisation	$m	-	-	(8)	(16)	(16)
EBIT	$m	(6)	(2)	(10)	11	107
Net interest expense	$m	-	-	(6)	(12)	(12)
Profit before tax	$m	(6)	(2)	(16)	(1)	95
Tax expense	$m	-	-	-	-	(29)
NPAT (reported)	$m	**(6)**	**(2)**	**(16)**	**(1)**	**67**
NPAT (adjusted)	$m	**(6)**	**(2)**	**(16)**	**(1)**	**67**

CASH FLOW STATEMENT

Year ending 30 June	Unit	2020e	2021e	2022e	2023e	2024e
OPERATING CASH FLOW						
Receipts from customers	$m	1	-	-	45	169
Payments to suppliers and employe	$m	(5)	(3)	(2)	(27)	(70)
Tax paid	$m	-	-	-	-	(29)
Net interest	$m	-	-	(6)	(12)	(12)
Other	$m	-	-	-	-	-
Operating cash flow	$m	**(4)**	**(3)**	**(8)**	**7**	**59**
INVESTING CASH FLOW						
Capex	$m	(1)	(104)	(222)	(16)	(16)
Acquisitions	$m	-	-	-	-	-
Other	$m	-	-	-	-	-
Investing cash flow	$m	**(1)**	**(104)**	**(222)**	**(16)**	**(16)**
FINANCING CASH FLOW						
Debt proceeds/(repayments)	$m	-	-	200	-	-
Dividends paid	$m	-	-	-	-	(35)
Proceeds from share issues (net)	$m	7	157	-	-	-
Other	$m	-	-	-	-	-
Financing cash flow	**$m**	7	157	200	-	(35)
Change in cash	**$m**	**1**	**50**	**(30)**	**(10)**	**7**
Free cash flow	$m	(5)	(107)	(230)	(10)	42

BALANCE SHEET

Year ending 30 June	Unit	2020e	2021e	2022e	2023e	2024e
ASSETS						
Cash	$m	2	52	22	12	20
Receivables	$m	-	-	-	11	39
Inventories	$m	1	0	0	3	7
Capital assets	$m	4	107	321	322	322
Other assets	$m	0	0	0	0	0
Total assets	**$m**	**6**	**160**	**344**	**349**	**389**
LIABILITIES						
Creditors	$m	2	0	0	6	15
Borrowings	$m	-	-	200	200	200
Provisions	$m	-	-	-	-	-
Other liabilities	$m	-	-	-	-	-
Total liabilities	**$m**	**2**	**0**	**200**	**206**	**215**
NET ASSETS	**$m**					
Share capital	$m	41	197	197	197	197
Reserves	$m	2	2	2	2	2
Accumulated losses	$m	(38)	(40)	(55)	(56)	(25)
Non-controlling interest	$m	(0)	(0)	(0)	(0)	(0)
SHAREHOLDER EQUITY	**$m**	**5**	**159**	**144**	**143**	**174**
Weighted average shares	m	610	902	1,172	1,172	1,172

FINANCIAL RATIOS

Year ending 30 June	Unit	2020e	2021e	2022e	2023e	2024e
VALUATION						
EPS	Ac/sh	(1)	(0)	(1)	(0)	6
EPS growth (Acps)	%	na	na	na	na	na
PER	x	-21.4x	-94.7x	-15.6x	-373.3x	3.7x
DPS	Ac/sh	-	-	-	-	3.0
Franking	%	0%	0%	0%	0%	0%
Yield	%	0%	0%	0%	0%	14%
FCF/share	Ac/sh	(0.9)	(11.8)	(19.6)	(0.8)	3.6
FCF yield	%	-4%	-56%	-93%	-4%	17%
EV/EBITDA	x	-22.5x	-67.5x	-67.5x	5.0x	1.1x
LIQUIDITY & LEVERAGE						
Net debt / (cash)	$m	(2)	(52)	178	188	180
Net debt / Equity	%	-42%	-33%	124%	131%	103%
Net debt / Net debt + Equity	%	-71%	-48%	55%	57%	51%
Net debt / EBITDA	x	0.3x	26.0x	-88.8x	6.9x	1.5x
EBITDA /net int expense	x	0.0x	0.0x	-0.3x	2.3x	10.2x
PROFITABILITY RATIOS						
EBITDA margin	%	na	na	na	48%	62%
EBIT margin	%	na	na	na	20%	54%
Return on assets	%	-107%	-2%	-6%	0%	18%
Return on equity	%	-136%	-2%	-10%	0%	42%

ASSUMPTIONS - Prices (nominal)

Year ending 30 June	Unit	2020e	2021e	2022e	2023e	2024e
4N HPA price	US$/t	20,000	20,000	20,000	20,000	20,000
4N HPA price	A$/t	29,100	28,571	27,586	27,211	27,027
FX	US$/A$	0.69	0.70	0.73	0.74	0.74

ASSUMPTIONS - Sales (equity)

Year ending 30 June	Unit	2018a	2019a	2020e	2021e	2022e
4N HPA sales	kt	-	-	-	2.10	7.30

VALUATION - BASE CASE

HPA First Project (unrisked)		
Multiple valuation (EV/EBITDA) x / $m	6.5x	367
NPV $m		346
Blended project value (50% NPV, 50% EV/EBITDA) $m		**357**
Risk discount to account for project stage % / $m	30%	(107)
PV future corporate / admin expenses $m		(17)
A4N risked EV		**233**
Assumed capital raise $m	$5.0m	
Assumed raise price $/sh (15% discount)	$0.18/sh	
Current shares on issue m	680	
In the money options m	27	
Assumed capital raising dilution m	28	
Diluted shares on issue m	**735**	
Net debt / (cash) (including options & raising) A$m		(18)
Equity value (risked, diluted) $m		**251**
Equity value (risked, diluted) $/sh		**0.35**

SOURCE: BELL POTTER SECURITIES ESTIMATES

Recommendation structure

Buy: Expect >15% total return on a 12 month view. For stocks regarded as 'Speculative' a return of >30% is expected.

Hold: Expect total return between -5% and 15% on a 12 month view

Sell: Expect <-5% total return on a 12 month view

Speculative Investments are either start-up enterprises with nil or only prospective operations or recently commenced operations with only forecast cash flows, or companies that have commenced operations or have been in operation for some time but have only forecast cash flows and/or a stressed balance sheet.

Such investments may carry an exceptionally high level of capital risk and volatility of returns.

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