

20 February 2018

RECOMMENDATION

Speculative Buy

Valuation: \$0.37

Average daily volume (3M)	390k
12 month share low	\$0.10
12 month share high	\$0.27

Market Risk	High
Liquidity Risk	Med
Infrastructure Risk	Med
Country Risk	Med

CIQ & DJC Research

ISSUED CAPITAL

ASX	ATC
Share price	\$0.17
Mkt cap	\$70.4m
Ordinary shares on issue	426.5m
Unlisted options & Rights	20.7m

Source: CIQ

DIRECTORS

Luke Atkins	Chairman
Iggy Tan	Managing Director
Daniel Tenardi	Non-Exec Director
Peter Bailey	Non-Exec Director
Tunku Yaacob	Non-Exec Director

MAJOR SHAREHOLDERS

SMS group	9.14%
MAA Group Berhad	7.7%
Lake McCloud Gypsum	5.4%
Melewar International Inv.	4.0%

As at December 2017

12-MONTH PERFORMANCE



Source: CIQ

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Altech Chemicals Ltd (ATC)

US\$190m project debt secured. Final funding due Q2

ATC has secured a US\$190m debt funding package from KfW IPEX-Bank in Germany. It consists of US\$170m via the German Export Credit Agency (ECA) scheme and US\$20m through traditional debt on commercial terms. The successful conclusion of the debt financing for its high purity alumina plant is a major step for ATC, which now paves the way for final project funding to be secured. ATC aim to be the world's largest independent supplier of HPA, which is an important constituent for the production of LED's, Li-ion battery separators and mobile devices. We maintain our Buy recommendation on ATC and move our valuation up 15.6% to \$0.37 per share.

Key Points

- ATC achieve execution of US\$190m debt funding package:** In December 2017, ATC announced a credit approval for their application for project debt financing from the German-owned development bank, KfW IPEX-Bank. The US\$190m debt package consists of a combination of Export Credit Agency cover (ECA) and traditional bank debt. The Final Investment Decision (FID) Study, completed in 2017, estimated a total pre-production capex spend of US\$298m. The debt funding package therefore represents 64% of the total.
- Paves the way for equity raising:** ATC has now commenced the project equity funding process. ATC has stated that the final funding mix may include subordinated mezzanine finance, straight equity and/or project level equity participation or project level joint ventures. ATC state the final mix will take into account funding costs and equity dilution to current shareholders. We note that the EPC contractor, SMS group, for the project build in Malaysia has committed to a total of US\$15m in equity.
- Due diligence identifies twin product stream:** ATC's proposed processing plant in Johor, underwent an arduous (and expensive) near 18-month due diligence period by the German-based team. The DD identified an opportunity for the product finishing line to produce two HPA products – a beaded HPA product for use in the synthetic sapphire glass industry and a fine powder version of HPA for use by battery separator manufacturers. The production capacity was also adjusted upwards to 4,500tpa from the 4,000tpa envisaged in the BFS.
- Updated financial model:** Now that the pre-production capex has been settled and execution of agreements completed, we have updated our financial model for the HPA project. We increase our output in-line with ATC's twin production line, increased our capex estimates (in-line) and used updated price forecasts for HPA. We test two scenarios for additional funding requirements 1) a straight equity model and 2) a part sell-down of the project to a strategic investor. The part-equity sell-down on our base case indicates a +14% valuation change over straight equity (assuming A\$175m of additional capital required, raised at \$0.20 per share).
- Recommendation and Valuation:** We maintain our **Speculative Buy** recommendation noting that achieving the equity component of the project financing is the last major hurdle. We increase our valuation by 15.6% valuation to **\$0.37** from **\$0.32** per share. In our part equity sell-down scenario, our valuation moves to **\$0.42** per share.

Project debt funding secured

In December 2017, ATC announced a positive outcome (credit approval) for their application for project debt financing from the German-owned development bank, KfW IPEX-Bank. The US\$190m debt package consists of a combination of Export Credit Agency cover (ECA) and traditional bank debt.

Importantly, ATC has secured 89.5% (US\$170m) of the debt funding under the ECA scheme, which benefits from a very low interest rate and long repayment term, probably in the region of 10 years. The remaining (US\$20m) is being sourced via traditional bank debt at commercial rates.

The FID Study, completed in 2017, estimated a total pre-production capex spend of US\$298m, much higher than the US\$78m in the BFS. However, the additional capex is balanced by a much lower-risk project to ATC in terms of execution, financial and productivity risk. The debt funding package therefore represents 64% of the total. An outstanding achievement given the fact that the process plant has never been built before by any commercial manufacturer of HPA.

ATC announced the executed commitment and final terms for the US\$190m debt package on 2 February 2018. Finance close comes when the facility agreement documentation and satisfaction of various conditions precedent is completed. One of those conditions is the successful completion of the equity portion of the project finance.

Terms of the debt funding package

Exact terms remain confidential, however, a feature of ECA covered loans are its long tenure and low rates. Normally the rates are set at a fixed percentage above the LIBOR (London Interbank Offered Rate). We envisage the rate would be in the region of between 2 and 3% above LIBOR. The current 1-year LIBOR is 2.31%.

The term of the loan is also likely to be fairly long-dated. We believe that a term of ~10 years would be a good outcome for ATC's project. This would provide a significant time buffer to payback and would allow plenty of time for ATC to achieve nameplate production capacity and the generation of strong cashflows prior to term.

The additional US\$20m traditional bank debt is on a 7-year term, including a 2-year construction period, resulting in a 5-year repayment schedule.

Equity funding from EPC contractor

ATC has also received a commitment from its chosen EPC (engineering, procurement and construction) contractor, German-based SMS group, for a total equity injection of US\$15m. SMS had already provided a cornerstone investment of US\$4m in the A\$17m capital raise in October 2017. The additional US\$11m is subject to final close of the debt facility from KfW IPEX-Bank.

Fixed price EPC contract

As a result of the extensive DD process, ATC has been able secure a fixed price contract for the construction of the HPA plant in Malaysia. The contract also includes warranty, performance and completion guarantees, plus liquidated damages for late completion (with bonus for early delivery). We believe this is a positive for shareholders and would reduce financing risk to debt providers thereby facilitating lower interest rates

Who is SMS group?

SMS group (SMS) is a large privately owned German engineering company with an annual turnover of approximately 3.3 billion Euros. SMS builds turnkey solutions based on innovative plant technology, complete with buildings, infrastructure and auxiliary equipment for processing plants such as ATC's proposed HPA plant. SMS was founded in 1871 and is based in Düsseldorf, Germany with office locations worldwide.

Equity funding activity

ATC has now commenced the project equity funding process. Our modelling tells us that the equity valuation from this point forward is largely determined by the strategy employed by ATC on the equity piece.

ATC has stated that the final funding mix may include subordinated mezzanine finance, straight equity and/or project level equity participation or project level joint ventures. ATC state the final mix will take into account funding costs and equity dilution to current shareholders.

Our modelling suggests that the project can withstand additional debt, given the high level of EBITDA margin, however, additional debt from alternate sources may carry shorter repayment terms and this will have to be balanced by the anticipated ramp up to full production and solid cashflows.

Equally, we believe an equity JV, with an industrial group(s), that would result in a significant reduction in required additional capital, would be an attractive funding solution for shareholders.

Arduous due diligence period results in increased product flexibility

The HPA project, from mining of the pure kaolin deposit in Meckering, WA through the transport and logistics route to Malaysia and the subsequent production of HPA at ATC's proposed processing plant in Johor, underwent an arduous near 18-month period of due diligence by the German-based team. Every aspect of the project was interrogated, and several adjustments were made on the original BFS design, including the use of higher quality stainless steels and changes to the back end of the plant to achieve desired discharge composition.

In addition, the DD identified an opportunity for the product finishing line to produce two HPA products – a beaded HPA product for use in the synthetic sapphire glass industry and a fine powder version of HPA for use by battery separator manufacturers. The production capacity was also adjusted upwards to 4,500tpa from the 4,000tpa envisaged in the BFS, to cater for the twin-product stream.

- **Sapphire Grade HPA (beads):** ATC's sapphire grade HPA product will be 4N (99.99%) high purity alumina (Al_2O_3) in the form of a high density HPA bead of around 3-4mm in size. The higher bulk density of HPA beads is preferred by synthetic sapphire manufacturers as it maximises the amount of alumina that can be placed into the furnaces and kilns used in the production of synthetic sapphire. The target loose bulk density of ATC's high-density HPA beads will be around $2.2t/m^3$.
- **Battery separator HPA (ultra-fine powder):** HPA consumption in the lithium-ion battery sector alone is forecast by Altech to rise from around 1,000tpa in 2016 to 15,000tpa by 2025. Over the last twelve months ATC has been developing a HPA product to meet the requirements of the lithium-ion battery industry. The finishing line is now designed to include the production of the ultra-fine (1 micron) HPA used in the lithium-ion battery sector; this product may also be sold in slurry form (drums).

Valuation and Recommendation

We have conducted a valuation scenario analysis using the following updated metrics, to reflect the updated BFS following the DD period.

HPA (4N) throughput	: 4,500 tpa
HPA price (long-term)	: US\$26.90/kg
USD:AUD	: \$0.75
Capex (A\$m)	: \$398m
Construction period	: 2 years
WACC	: 7.5%
DCF	: 12 years
Terminal value (EBITDA)	: Year 12

We derive a valuation of A\$479.1m which includes current cash of circa \$9m. The implied EV/EBITDA multiple is 4x.

Figure 1. ATC forecast revenue, cash flow, EBITDA, EBIT and tax



Project financing scenarios and effect on valuation per share

We chose two scenarios to test the sensitivity of project funding structure on valuation.

- Scenario 1: Straight equity** - KfW IPEX-Bank debt of US\$190m and a further equity raise of A\$175m. This includes the additional US\$108m required for pre-construction project funding, plus an additional A\$31m for corporate working capital through the 2-year construction period and to cater for additional bank charges and/or guarantees etc.
- Scenario 2 – Part equity sell down** - KfW IPEX-Bank debt of US\$190m and a part equity sell-down to a strategic investor. We assume a 30% equity sell-down for A\$100m to ATC. ATC would therefore have to provide additional equity of circa A\$75m to complete the project financing requirement and the additional working capital and bank charges etc.

The scenario analysis below shows the effect of an equity sell-down on the valuation of ATC. Even though a percentage of the cashflows are foregone, if structured correctly, an equity sell-down can have a significant effect on the valuation per share as a result lower dilution through raising less additional equity. On our base case assumption, the increase in value per share over the straight equity scenario is +14%.

SCENARIO 1 - Straight Equity		Capital structure	High case	Base case	Low case
Capex (US\$m)	298.0	Existing shares on issue (m)	426.5		
Debt provision (US\$m)	190.0	Equity raise share price in A\$	\$ 0.25	\$ 0.20	\$ 0.15
Equity requirement (US\$m)	108.0	No. of New shares (m)	700	875	1,167
		Total Shares on Issue (m)	1,126.54	1,301.54	1,593.21
In AUD equity (A\$m)	144.0	Implied share price (A\$)	\$ 0.42	\$ 0.37	\$ 0.30
DJC assumed raise (A\$m)	175.0				
SCENARIO 2 - part equity sell down		Capital structure	High case	Base case	Low case
Capex (US\$m)	298.0	Existing shares on issue (m)	426.5		
Debt provision (US\$m)	190.0	Equity raise share price in A\$	\$ 0.25	\$ 0.20	\$ 0.15
Equity requirement (US\$m)	108.0	No. of New shares (m)	300	375	500
		Total Shares on Issue (m)	726.54	801.54	926.54
Equity Required (A\$m)	144.0	Implied share price (A\$)	\$ 0.47	\$ 0.42	\$ 0.36
Assume 30% sell down (A\$m)	100.0	% Change	12%	14%	20%
DJC assumed raise (A\$m)	75.0				

Figure 2. Valuation scenario analysis for ATC

Source: DJC estimates

We are not suggesting that A\$100m for 30% of the project is likely. We are using this scenario merely to demonstrate the benefits of obtaining the right project financing structure for shareholders. We believe that ATC still has a number of options available with respect to financing structure which could also involve subordinated mezzanine financing, part equity sell-down and straight equity, or combinations thereof.

We use the Base Case scenario from Figure 2 to derive a valuation of \$0.37 per share, assuming straight equity is raised to fill the project financing gap between the US\$190m in debt and the total project capex, plus additional equity raised for working capital and bank charges. Our base case model therefore assumes a 64/36 debt:equity split for the capex. Our base case also therefore requires that an additional 875 million shares are issued at a price of 20c for a total number of shares on issue of 1.3 billion.

Recommendation

We maintain our Speculative Buy recommendation on ATC, moving our valuation up by 15.6% from \$0.32 per share to \$0.37 per share (unrisked) based on the confirmed debt amount from KfW IPEX-Bank of US\$190m.

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Recommendation Definitions

SPECULATIVE BUY – Potential 10% or more outperformance, high risk

BUY – Potential 10% or more outperformance

HOLD – Potential 10% underperformance to 10% over performance

SELL – Potential 10% or more underperformance

Period: During the forthcoming 12 months, at any time during that period and not necessarily just at the end of those 12 months.

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