nra capital

Agritrade Resources Limited

Company note
11 July 2018

Overweight

Current Price	**HK$1.40**
Fair Value	HK$1.93
Up / (downside)	37.9%

Stock Statistics

Market cap	HK$8.92b
52-low	HK$0.455
52-high	HK$1.67
Avg daily vol	8,847,196
No of share	6,369.5m
Free float	46%

Key Indicators

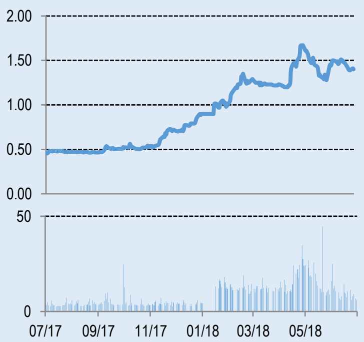
ROE 19F	14.2%
ROA 19F	9.9%
P/BV	2.74x
Net gearing	6.7%

Major Shareholders

Agritrade International Pte Ltd	54%

Source: Bloomberg

Historical Chart



Source: Bloomberg

Liu Jinshu

(+65) 6236-6887
jinshu.liu@nracapital.com
www.nracapital.com

Preparing for Next Stage of Growth

- **Background**. Agritrade Resources Limited (stock code: 1131) is a Singapore headquartered coal mining, shipping and energy conglomerate listed on the Hong Kong Stock Exchange. We were introduced to this company following the announcement of its annual results for FY18 ended 31 March 2018. The group reported PATMI growth of 81.4% to HK$424.4m (US$54.1m) in FY18 on the back of revenue growth of 55% to HK$$2.24 billion (US$285m). The high growth delivered by the group in FY18 makes it an interesting prospect to consider.
- **Higher selling prices and volume growth to sustain growth into FY19.** The group expects to achieve coal output of 6m tonnes in FY19, to be driven by the installation of new capacity of 2.5m tonnes. We expect output to grow by 0.5m tonnes to 6.2m tonnes in FY19, assuming some gestation period for the new capacity to ramp up to full utilisation. Coupled with higher selling prices in FY19, we expect coal revenue to grow by 23% in FY19 to HK$2.39 billion. We expect higher selling prices in FY19 due to higher contribution from the 6,426 kcal/kg MERGE mine and higher prices achieved in 2H FY18. Moreover, contracts secured in CY18 suggest a 30% increase in selling prices over that achieved in FY18.
- **MERGE Mine still has room to grow.** The group operates three mines in Indonesia, of which the MERGE is being scaled up for higher production in FY19. In FY18, MERGE contributed HK$52.4m in operating profit from only 0.5m tonnes of production. MERGE's production schedule, as per the 2015 technical report, was to ramp up production to 6m tonnes per year. Therefore, we can infer that there are parts of MERGE that can be developed to raise production even after hitting the FY19 planned capacity of 3.5m tonnes per year.
- **Key risks**. While coal prices have remained steady or risen in 2018, any correction in coal prices will impair our outlook. As at 31 March 2017, the group had >50% ownership of 102.4m tonnes of proved and 94.7m tonnes of probable coal reserves. Our forecasts assume extraction of 170.7m tonnes of these reserves from FY18 to FY33F (15 years). While we assume that the group will optimise production to achieve best value, actual production will depend on factors such as site conditions and mine design.
- **Strong balance sheet provides support**. Given the performance of the group and the prospect of higher production, we rate the group Overweight. One key investment merit is that the group is lowly geared with estimated net borrowings of 6.7% of common equity at end of FY18. However, we qualify our rating with a high-average risk rating, pending more detailed review such as the group's mine plans etc. Based on our forecasts, we value the group at HK$1.93 per share, translating to upside of 37.9%.

Key Financial Data (HK$ m, FYE Mar)	**2015**	**2016**	**2017**	**2018**	**2019F**
Sales	1,234.5	1,152.5	1,441.5	2,237.3	2,662.1
Gross profit	370.5	355.8	518.3	876.4	1,157.8
PATMI	146.9	470.8	233.9	424.5	530.8
EPS (cents)*	2.31	7.39	3.67	6.66	8.33
EPS growth (%)	27.5	220.6	-50.3	81.5	25.0
PER (x)	60.72	18.94	38.12	21.01	16.80
NAV/share (cents)*	25.12	42.32	46.09	54.54	62.34
DPS (HK cents)*	0.44	0.24	0.24	0.50	0.63
Div Yield (%)*	0.3	0.2	0.2	0.4	0.5

*Adjusted for share subdivision on 12 January 2018. *Source: Company, NRA Capital*

Background

Agritrade Resources operates three lines of businesses:

Coal mining. Coal mining is undertaken at three mines – "SEM", "MERGE" and "Bunda Kandung". The group owns 65% of SEM and 51% of MERGE. SEM was injected into the listed company in June 2010. MERGE was acquired in late December 2015. The group started operating the Bunda Kandung mine in 1Q of CY2016, under a contract mining arrangement whereby the group makes royalty payments to the mine owner in return for the production and extraction of coal from the mine without ownership. The group uses its own mining equipment and labor at Bunda Kandung.

Figure 1: Overview of Coal Mines

	SEM		MERGE	
	31-Jul-12	31-Mar-17	30-Jun-15	31-Mar-17
Reserves (million tonnes)				
Proved	83.38	65.48	0	36.9
Probable	34.47	34.47	92	60.2
Resources, inclusive of reserves (million tonnes)				
Measured	86.61	68.71	55.3	66.3
Indicated	51.26	51.26	88.4	99.5
Inferred	14.83	14.83	120.8	98.4
Coal Output (million tonnes)	**FY16**	**FY17**	**FY18**	
SEM	4.0	4.2	4.7	
MERGE		0.361	0.558	
Bunda Kandung	0.125	0.448	0.461	
Total	**4.1**	**5.0**	**5.7**	

	SEM	MERGE	Bunda Kandung
IUP Issue (Mining permit)	8-Dec-09	19-Jun-13	NA
IUP Term	20 years	20 years from 12 Feb 2010	NA
Total Moisture (ARB)	40%	10%	35%
Inherent Moisture (ADB)	13%	5%	13%
Ash (ADB)	7%	15%	8%
Volatile Matter (ADB)	41% - 43%	39% - 41%	40% - 43%
Fixed Carbon (ADB)	By difference	By difference	By difference
Total Sulphur (ADB)	0.4%	0.3%	0.2%
Gross Calorific Value (ARB	3,800 kcal/kg	6,452 kcal/kg	4,200 kcal/kg
Size (0–90mm)	85% min.	85% min.	85% min.
Hardgrove Grindability Index (HGI)	45 min.	33 min.	40 min.

- The group has access to a variety of coal, by calorific value. This allows them to cater to the needs of a variety of customers customers, e.g. for blending or as the main stock for power generation.
- For instance, SEM coal is sold to domestic traders and power generation plants in Indonesia, as well as for export to international markets such as China and India. MERGE coal, with its higher calorific value, is targeted at traders and power generation plants including Japan, Taiwan and India.
- The sulphur content of these coal can be considered low-to-medium. SEM and Bunda Kandung coal have low ash content. MERGE coal's ash content can be considered low-to-moderate. These attributes make them ideal for use as thermal coal.

- The group does not disclose IUP and reserve/resources information about Bunda Kandung as it does not own this mine. Our forecasts assume 16.1m tonnes of coal will be produced from Bunda Kandung from FY19F to FY33F.
- The proved reserves of SEM and MERGE are sufficient for our production forecasts for the first 11 years (i.e. FY19F to FY29F). Thereafter, we assume the extraction of probable reserves to support production of 170.7m tonnes of coal from FY19F to FY33F.

Source: Company

Shipping. The group's shipping business comprise of two VLCC-grade oil tankers, one panama dry bulk vessel and six sets of tugboats and barges. The oil tankers are generally as floating storage with heating and blending facilities installed on board. The dry bulk vessel and the tugboats and barges, on the other hand, are chartered out for income.

The group had three oil tankers as at the end of FY18. One tanker Sea Equatorial was sold after the end of the financial year for US$18.5m (HK$145m). Against an unaudited book value of HK$154m as at 31 March 2018, the sale of this vessel is expected to result in a one-off loss of about HK$9m.

In addition, the vessel contributed profit after tax of HK$17m in FY18. Hence, we expect the shipping segment's profit to drop from HK$135.1m in FY18 to HK$109.1m in FY19F. That said, we still expect group PATMI to grow by 25% from HK$424.4m in FY18 to HK$530.8m in FY19F, on the back of strong growth in the coal mining segment.

The group will probably continue to make judicious investments to expand the shipping business. The Sea Equatorial was sold as a) it is more than 20 years old and was less attractive to charterers, and b) its maintenance cost is expected to exceed future chartering return and c) the offer price by the buyer was considered attractive for vessels of similar age and size. Previous vessel acquisitions include the purchase of the Sea Latitude in January 2017 and a dry bulk vessel in December 2015. According to the group, the dry bulk vessel enjoys a higher charter rate than other vessels as it is Indonesian flagged.

Figure 2: Shipping Portfolio

	Ownership	Built	DWT	Remarks
Sea Horizon (VLCC, acquired Mar 2016)	100%	2001	298,412	Long term lease from March 2016
Sea Equatorial (VLCC, acquired Feb 2015, sold after Apr 2018)	100% (sold)	1997	300,000	Long term lease from February 2015
Sea Latitude (VLCC, acquired Jan 2017)	55%	2001	309,300	Long term lease from March 2017
Andhika Kanishka (dry bulk, acquired in Dec 2015)	49% (equity interest with >50% voting rights	NA	73,000	Five-year contract to transport coal upon acquisition in Dec 2015.
Six tugs and barges (acquired in 2014)	100%	NA	0.13 - 0.15m metric tonnes per month	Contract of Affreightment charter for three years from Jan 2016

Source: Company

Energy. The energy segment refers to the group's 51% owned biodiesel plant in Arkansas, United States. The 51% stake was first acquired in December 2016 for US$2.97m, with Solfuels Holdings Pte Ltd, a Singapore-based independent third party, owning the remaining 49%. The joint venture leverages on the operational expertise of Solfuels and started trial production on 27 June 2017 after it has been retrofitted to accommodate multi-feedstock, including yellow grease, rendered animal fats, inedible corn oil and refined vegetable oil, to reduce cost of production.

Being in its first year of operation, the plant produced 1.9m gallons of biodiesel in FY18 against a maximum capacity of 40m gallons annually (9.5% utilization in FY18). For FY19F, we are assuming production of 5m gallons and an approximate 30% reduction in unit operating costs to result in a narrower loss of HK$15.3m as opposed to the reported loss of HK$21.7m.

Key Growth Drivers

2018 contracts suggest higher selling prices for FY19. In February, the group announced two contracts for up to 1.7m tonnes of coal to be delivered from FY19 to 1Q FY21. About 1m to 1.5m tonnes of coal of calorific value of around 6,000 kcal/kg for FY19. The group values these contracts at about US$80/tonne of coal. Based on a USDHKD rate of 7.85, this works out to a pricing of about HK$628 per tonne.

These contracts imply two points

a) We have assumed MERGE production of only 1m tonnes for FY19F. These contracts support our forecast.

b) The pricing suggested by these contracts are about 30% higher than the average selling price of HK$481.5/tonne achieved for MERGE mine in FY18.

   If we assume 30% higher selling prices, projected group PATMI for FY19F would have been 7% higher at HK$570.4m. As a base case, we assume 10% higher selling prices, or HK$529.7 per tonne for MERGE in FY19F.

Figure 3: Recently Announced Coal Contracts

Ann. Date	Customer	Terms
23-Feb-18	Japanese commodity trader	Up to 1m tonnes with gross calorific value of 5,800-6,000 kcal/kg (on as-received basis) during the delivery period from 1 June 2018 to 1 June 2020. The selling price will be determined by making reference to the benchmark FOB prices from either the Newcastle Index or the Indonesian Coal Index depending on the specification of the coal delivered. The value of the Contract is estimated at approximately US$80 million.
8-Feb-18	Independent global commodity trader	0.7m tonnes, from 1Q CY18 to 1Q CY19. The selling price will be determined by making reference to the benchmark FOB price from the Newcastle Index for coal with net calorific value of 6,000 kcal/kg on as-received basis. The value of the Contract is estimated at approximately US$56 million.

Source: Company

Capacity addition to drive volume growth. We expect production at MERGE to grow significantly or by about 0.5m tonnes in FY19F, followed by 1m tonnes per annum from FY20F to FY23F, before slowing to 0.5m tonnes of growth in FY24F. The MERGE mine was mainly operated with one set of “longwall” system and the group has further acquired another longwall system for RMB139.4m in May 2018. This second system is expected to raise MERGE’s capacity from 1m tonnes to 3.5m tonnes, by concurrently mining two coal seams using the two systems at the same time. The “longwall” system is an underground coal mining technique.

In addition, we believe that parts of MERGE remain unexploited and can be developed to further raise production. According to forecasts contained in an earlier shareholders’ circular, the mining of MERGE is supposed to be carried out over four areas to yield annual production of up to 6m tonnes, thus justifying our high growth expectations for MERGE.

That said, we also assume total capex, net of replacement costs for depreciation, of HK$2.5 billion from FY19F to FY23F to drive group production from 5.7m tonnes in FY18 to 11.8m tonnes in FY24F. This is equivalent to a cost of HK$413.5 per tonne of additional output. This rate of capex spending is similar to that of FY17 and FY18 where the group invested net capex of HK$685.5m (HK$430 per tonne of additional production) and raised production by 1.6m tonnes.

The group also intends to expand its fleet of mining equipment for use at the Bunda Kandung mine through the acquisition of additional dump trucks and excavators. Both SEM and Bunda Kandung are open cut surface mines. Hence, they rely on more conventional equipment for mining. The group has indicated that SEM production is expected to remain stable. Hence, we forecast flat production in FY19F, followed by 3% annual growth, at SEM. For Bunda Kandung, we expect production to grow by 10% per annum, given its relatively low base of just 0.46m tonnes of production in FY18.

Market diversification and value chain integration for longer term growth. Although the biodiesel plant lost money in FY19F, the US biofuels market has potential. Under the Renewable Fuel Standard programme created under the Energy Policy Act of 2005, and expanded under the Energy Independence and Security Act of 2007, petroleum-based transportation fuel, heating oil or jet fuel sold in the US must contain a certain volume of renewable fuel, with the amount of renewable fuel to be used stipulated by the government annually. The objective is to raise the consumption of biofuels in US to 36 billion gallons by 2022.

The group has also announced in February that it is in advanced negotiations to acquire a company that owns 1x thermal power plant currently under commercial operation in India and 1x 600MW thermal power plant currently under construction at the same location. According to the group, the new power plant is worth about US$400m, while it estimates and investment amount of US$525m to US$550 for the target company.

Without further information, we exclude this “power plant” transaction from our forecasts and valuation. However, we note that vertical integration will help the group to mitigate against coal price risk.

Lowly geared balance sheet. One investment merit, rather than a growth driver, is that the group is lowly geared with borrowings equivalent to 6.7% of its common equity as at 31 March 2018. Hence, there is scope for the group to utilize its borrowing capacity to fund future growth.

Figure 4: Gearing

As at 31 March 2018	HK$ million
Current liabilities	
Secured bank borrowings	322.35
Amounts due to related parties	0.72
Obligation under finance leases	2.67
Non-current liabilities	
Amounts due to related parties	59.95
Obligation under finance leases	0.15
Secured bank borrowings	313.10
Total borrowings	698.94
Less	
Pledged bank deposit	-7.74
Bank balances and cash	**-457.13**
Net borrowings	**234.1**
Common equity	**3,480.6**
Net gearing	**6.7%**

Source: Company

Valuation and Forecasts

To value the group, we focus mainly on its coal mining business which generates the bulk of revenue and profit. In lieu of a conglomerate discount, we have excluded the shipping and renewable energy businesses from our valuation. The shipping and renewable energy businesses have net segment assets of HK$485m and HK$63.4m respectively. Together, they are worth about HK$0.0806 per share on a fully diluted basis.

To value the coal mining business, we chose a forecast horizon of 15 years from FY19F to FY33F, during which we expect the group to produce a total of 181.6m tonnes of coal, which is equivalent to about 95% of the group's proved and probable coal reserves for SEM and MERGE. Hence, the group has sufficient reserves vis-à-vis our forecasts even though reserve estimates for Bunda Kandung are unavailable.

Figure 5: Key Forecasting Assumptions

	FY16	FY17	FY18	FY19F	FY20F	FY21F	FY22F	FY23F	Remarks
Coal Output									**(million tonnes)**
SEM	4.0	4.2	4.7	4.7	4.8	5.0	5.1	5.3	+3% p.a. to FY33F
MERGE		0.361	0.558	1.0	2.0	3.0	4.0	5.0	5.5m for FY24F and +3% p.a. to FY33F
Bunda Kandung	0.125	0.448	0.461	0.507	0.56	0.61	0.67	0.74	+10% p.a. to FY33F, lower base
Total	**4.1**	**5.0**	**5.7**	**6.2**	**7.4**	**8.6**	**9.8**	**11.0**	
ASP (HK$/tonne)	**FY16**	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	
SEM	240.1	246.9	331.0	364.1	382.3	393.7	405.5	417.7	+10% in FY19, +5% in FY20, +3% p.a. thereafter
MERGE		302.5	481.5	529.7	556.2	572.9	590.1	607.8	
Bunda Kandung	206.4	77.5	238.8	286.6	300.9	310.0	319.3	328.8	+20% in FY19, +5% in FY20, +3% p.a. thereafter
Total	**239.1**	**235.7**	**338.2**	**384.4**	**423.1**	**450.2**	**474.8**	**497.9**	Bunda Kandung has higher CV than SEM and should have higher pricing.
Cost per tonne	**FY16**	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	**(HK$/tonne)**
SEM	-196.7	-184.0	-202.8	-202.8	-202.8	-202.8	-202.8	-202.8	Constant
MERGE		-212.5	-387.6	-271.3	-244.2	-244.2	-244.2	-244.2	Assume 30% reduction in FY19 on higher volume and 10% in FY20.
Bunda Kandung	-240.0	-66.1	-192.2	-192.2	-192.2	-192.2	-192.2	-192.2	
Total	-198.0	-175.5	-220.0	-213.0	-213.2	-216.5	-219.0	-220.9	
Revenue (HK$m)	**FY16**	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	(ASP x Output)
SEM	960.4	1,036.9	1,556	1,711.1	1,850.5	1,963.2	2,083	2,209.6	
MERGE		109.2	268.7	529.7	1,112.4	1,718.6	2,360	3,038.8	
Bunda Kandung	25.8	34.7	110.1	145.3	167.9	190.2	215.5	244.1	
Total	**986.2**	**1,180.8**	**1,934**	**2,386.1**	**3,130.7**	**3,872.0**	**4,658**	**5,492.5**	
Operating cost	**FY16**	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	**(HK$m),** Cost per tonne x Output
SEM	-786.7	-772.9	-953.3	-953.3	-981.9	-1,011	-1,042	-1,073	
MERGE		-76.7	-216.3	-271.3	-488.4	-732.6	-976.8	-1,221	
Bunda Kandung	-30.0	-29.6	-88.6	-97.5	-107.2	-117.9	-129.7	-142.7	
Operating profit	**FY16**	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	**(HK$m)** Revenue, less operating cost
SEM	173.7	264.0	602.2	757.8	868.6	951.8	1,041	1,136.6	
MERGE		32.5	52.4	258.4	623.9	986.0	1,383	1,817.7	
Bunda Kandung	-4.2	5.1	21.5	47.9	60.7	72.3	85.8	101.4	
Total	**169.5**	**301.6**	**676.1**	**1,064.0**	**1,553.2**	**2,010.1**	**2,510**	**3,055.8**	

Source: NRA Capital

Figure 6: Valuation Workings

	FY16	FY17	FY18	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F
Mining operating profit	169.5	301.6	676.1	1,064.0	1,553.2	2,010.1	2,510.2	3,055.8	3,458.4
as per Figure 4									
Add back finance costs	12.9	10.1	22.9	22.9	22.9	22.9	22.9	22.9	22.9
Reported operating profit includes finance costs based on current level of borrowings. We have to adjust projected mining profit to reflect higher finance costs based on our assumed capital structure.									
EBIT, Mining operating profit less finance costs	**182.4**	**311.7**	**699.0**	**1,086.9**	**1,576.1**	**2,033.0**	**2,533.1**	**3,078.7**	**3,481.4**
Less revised finance costs	-12.9	-10.1	-22.9	-21.6	-36.7	-48.7	-61.7	-65.0	-68.3
Based on 1.1% x segment liabilities. The 1.1% rate is based on allocated FY18 finance costs divided by segment liabilities as at end FY17.									
PBT, or adjusted mining profit	**169.5**	**301.6**	**676.1**	**1,065.3**	**1,539.4**	**1,984.3**	**2,471.4**	**3,013.7**	**3,413.1**
Less NCI share of profit				-391.8	-609.7	-816.3	-1,042.2	-1,288.5	-1,462.5
Based on 35% of SEM profit from FY19F to FY33F and 49% of MERGE profit.									
Op. profit to shareholders				673.5	929.6	1,168.1	1,429.2	1,725.2	1,950.5
Tax @ group eff. rate of 20.2%				-135.9	-187.6	-235.7	-288.4	-348.1	-393.6
PATMI				**537.6**	**742.1**	**932.4**	**1,140.8**	**1,377.1**	**1,556.9**
Capital charge				-287.8	-280.8	-222.3	-153.8	-173.8	-193.8
Based on assumed cost of equity of 10% over estimated invested equity									
Residual income				**249.8**	**461.2**	**710.0**	**987.0**	**1203.3**	**1363.1**
Discount factor @ 10% p.a.				1.10	1.21	1.33	1.46	1.61	1.77
PV of residual income				**227.09**	**381.17**	**533.45**	**674.12**	**747.14**	**769.44**
	FY25F	**FY26F**	**FY27F**	**FY28F**	**FY29F**	**FY30F**	**FY31F**	**FY32F**	**FY33F**
Mining operating profit	3,758.5	4,081.2	4,428.2	4,801.3	5,202.8	5,634.7	6,099.5	6,599.8	7,138.6
Add back finance costs	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
EBIT	3,781.5	4,104.1	4,451.1	4,824.3	5,225.7	5,657.6	6,122.4	6,622.7	7,161.5
Less revised finance costs	-68.3	-68.3	-68.3	-68.3	-68.3	-68.3	-68.3	-68.3	-68.3
PBT	**3,713.1**	**4,035.8**	**4,382.8**	**4,756.0**	**5,157.4**	**5,589.3**	**6,054.1**	**6,554.4**	**7,093.2**
Less NCI share of profit	-1,583.9	-1,713.6	-1,852.2	-2,000.3	-2,158.5	-2,327.4	-2,507.7	-2,700.1	-2,905.4
Op. profit to shareholders	2,129.2	2,322.2	2,530.5	2,755.6	2,998.9	3,261.9	3,546.4	3,854.3	4,187.8
Tax @ 20.2%	-429.7	-468.6	-510.6	-556.1	-605.1	-658.2	-715.6	-777.8	-845.0
PATMI	**1,699.6**	**1,853.6**	**2,019.9**	**2,199.6**	**2,393.8**	**2,603.7**	**2,830.8**	**3,076.6**	**3,342.7**
Capital charge	-193.8	-193.8	-193.8	-193.8	-193.8	-193.8	-193.8	-193.8	-193.8
Residual income	1505.8	1659.8	1826.1	2005.8	2199.9	2409.9	2637.0	2882.8	3148.9
Discount factor	1.95	2.14	2.36	2.59	2.85	3.14	3.45	3.80	4.18
PV of residual income	772.69	774.29	774.44	773.31	771.06	767.86	763.84	759.12	753.82
	FY16	**FY17**	**FY18**	**FY19F**	**FY20F**	**FY21F**	**FY22F**	**FY23F**	**FY24F**
Segment assets, at beginning	3,620.4	6,353.2	6,584.1	7,041.6	8,351.4	8,851.4	9,351.4	9,851.4	10,351.4
Forecast segment assets = Prior year balance + addition to non-current assets + PBT x (1 – tax of 20.2%), less dividend									
Net addition to non-current assets	2,581.4	297.7	387.8	500.0	500.0	500.0	500.0	500.0	
Net addition = Addition, less depreciation and amortisation. We assume zero net addition to current assets from FY24F to FY33F.									
Dividend	-15.2	-15.2	-31.8	-40.3	-1,228.4	-1,583.5	-1,972.2	-2,405.0	-2,723.6
For FY16 to FY18, payout ratio = actual dividend / reported PATMI. For FY19F, dividend = FY18 pay-out ratio x mining PATMI. For FY20F to FY33F, dividend = assumed pay-out ratio x PBT x (1 – tax of 20.2%).									
Pay-out ratio as % of PATMI*	-3.2%	-6.5%	-7.5%	-7.5%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
For valuation purpose, we assume an aggressive pay-out so that invested equity reflects required capital, rather than excess capital.									
Segment liabilities, beginning	1,314.0	2,005.8	2,055.8	1,960.9	3,340.5	4,425.7	5,610.8	5,910.8	6,210.8
We assume higher gearing from the current 30%, to reflect the borrowing capacity of the group.									
Liabilities, % of segment assets*	36.3%	31.6%	31.2%	27.8%	40%	50%	60%	60%	60%
Invested net assets				5,080.6	5,010.8	4,425.7	3,740.5	3,940.5	4,140.5
Segment assets, less segment liabilities									
Less NCI				-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4
NCI remains flat as we have assumed 100% dividend pay-out to both shareholders and NCI. Implicitly, we assume that capex will be financed via debt. We assume that the group NCI of HK$2.2 pertains to the mining business.									
Invested equity				2,878.2	2,808.4	2,223.3	1,538.1	1,738.1	1,938.1

Source: NRA Capital

Figure 6: Valuation Workings - Continued

	FY25F	FY26F	FY27F	FY28F	FY29F	FY30F	FY31F	FY32F	FY33F
Segment assets, at beginning	10,351.4	10,351.4	10,351.4	10,351.4	10,351.4	10,351.4	10,351.4	10,351.4	10,351.4
Addition to non-current assets									
Dividend	-2,963.1	-3,220.6	-3,497.5	-3,795.2	-4,115.6	-4,460.2	-4,831.2	-5,230.4	-5,660.4
Payout ratio as % of PATMI	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
Segment liabilities, beginning	6,210.8	6,210.8	6,210.8	6,210.8	6,210.8	6,210.8	6,210.8	6,210.8	6,210.8
Liabilities as % of segment assets	60%	60%	60%	60%	60%	60%	60%	60%	60%
Invested net assets	4,140.5	4,140.5	4,140.5	4,140.5	4,140.5	4,140.5	4,140.5	4,140.5	4,140.5
Less NCI	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4	-2,202.4
Invested equity	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1
Invested equity as at 31 March 2018	2,878.2	HK$m							
Sum of PV of residual income	10,242.8	HK$m							
Total	**13,121.0**	**HK$m**							
Enlarged number of shares	6,801.5	Million							
Value per share	**HK$1.93**								
Current number of shares	**6,369**								
Shares to be issued from									
Conv. of Class A pref. shares	253.06								
Exercise of share options	179.00								
Enlarged number of shares	**6,801.54**	**million**							

Source: NRA Capital

Figure 7: FY19F Forecasts

	FY16	FY17	FY18	FY19F
Mining				
Revenue	986.2	1,180.8	1,934.3	2,386.1
Operating profit	169.5	301.6	676.1	1,064.0
Shipping				
VLCC million DWT – months (DWT x months)	7.20	8.13	10.91	7.61
Storage fee per DWT per month (HK$)	14.36	23.86	22.93	22.93
Vessel storage service income (HK$m)	103.4	193.9	250.2	174.5
Vessel charter income (HK$m)	62.89	66.85	25.91	25.91
Segment profit (HK$m)	87.11	117.49	135.14	109.14
Energy	FY16	FY17	FY18	FY19F
Number of gallons (millions)			1.9	5.07
ASP per gallon (HK$/gallon)			14.21	14.92
Cost per gallon (HK$/gallon)			-25.63	-17.94
Revenue (HK$m)			27.0	75.6
Segment costs (HK$m)			-48.69	-90.89
Segment profit (HK$m)			-21.69	-15.29
Administrative expenses	-228.48	-114.07	-139.93	
Adjusted administrative costs	-146.04	-114.07	-139.93	
Allocated costs	-181.28	-103.41	-58.87	
Unallocated corporate costs	-47.20	-10.66	-81.06	-85.12
Unallocated finance costs	-11.14	-20.58	-20.42	-20.42
Unallocated corporate and finance costs	**-58.34**	**-31.24**	**-101.48**	**-105.53**
Consolidated PBT	**509.2**	**387.9**	**765.5**	**1,052.3**
Income tax	-43.6	-75.4	-154.5	-212.3
Effective tax rate	-8.6%	-19.4%	-20.2%	-20.2%
PAT	465.6	312.5	611.0	839.9

Source: NRA Capital

Figure 7: FY19F Forecasts - Continued

	FY16	FY17	FY18	FY19F
PAT	465.6	312.5	611.0	839.9
NCI share of operating profit				
SEM (35% x projections)	60.80	92.40	210.77	265.21
MERGE (49% x projects)		15.93	25.68	126.59
Total	**60.80**	**108.33**	**236.45**	**391.80**
NCI as % of share of operating profit	-8.5%	72.6%	78.9%	78.9%
PATMI	**470.78**	**233.92**	**424.45**	**530.76**
Non-controlling interests	-5.17	78.60	186.59	309.19

Source: NRA Capital

Key Risks

Key risks that we have highlighted include coal price risk and

a) **Execution and forecasting risks** i.e. the ability of the group to meet output and cost forecasts based on site conditions and mine design. We have not been able to review the group's mine plans for all three mines. In addition, the group does not disclose the JORC compliant reserves for Bunda Kandung. Hence, there is, to some extent, forecasting uncertainty in the case of Agritrade Resources.

Other material risks include

b) **Geological risk.** Underground mining at MERGE is undertaken using the "longwall" system where shears cut coal from a wall face and a conveyor belt carries the coal to collection equipment. This method is highly mechanised and has high recovery. However, the gap left from mining has the potential of causing subsidence at the surface, leading to higher restoration costs.

c) **Has coal demand peaked?** We see coal miners, outside of US, as beneficiaries if China decides to impose tariffs on coal imports from US. That said, there are some reports that suggest that global consumption has peaked.[1] If true, prices may decline over time, rather than appreciate.

To some extent, the group mitigates against this risk with its businesses in renewable energy and shipping. Moves to, for instance, invest in thermal power plants will help provide demand and pricing certainty.

d) **Legal proceedings against 49% minority shareholder of MERGE.** The group is currently in the midst of legal proceedings in Hong Kong and Jakarta, Indonesia with the 49% shareholder of MERGE. The shareholder alleges that the group has violated provisions of Indonesian law and regulations relating to the appointment of its nominees to the boards of directors and commissioners of MERGE.

It is worth noting that Indonesian media reports suggest that the 49% shareholder was being investigated by the Indonesian police and that the group remains in full control of MERGE.[2] Hence, the balance of evidence suggests that Agritrade has the advantage in this lawsuit. Hence, we see these proceedings as notable, rather than major risks.

[1] https://www.ft.com/content/966cb972-9d22-11e7-8cd4-932067fbf946
[2] http://www.agritraderesources.com/attachment/2017112918170200002984261_en.pdf

Recommendation

Given our preceding analysis, we rate Agritrade Resources Overweight with a high-average risk qualification. Positives include

a) Strong financial performance in FY18

b) Positive growth prospects driven by higher selling prices and volume growth

c) Lowly geared balance sheet and

d) Diversification into renewable energy and potential thermal power plant investment

Negatives include

a) The group is reliant on coal prices for its profitability.

b) Execution and forecasting risk.