

24 April 2018

Consumer Cyclical | Consumer Products

## Borneo Aqua Harvest

### The Golden Touch

**Bahvest's gold-mining operations would likely be officially commissioned by mid-2018. We believe this could spell a change of fortune for the group, with earnings inflection likely in sight after being in the red for the past four years. Management is currently wrapping up on-site preparations, with trial runs likely in May. Over the medium term, Bahvest is exploring the possibility of doubling its capacity to monetise its mineral assets, which could further boost earnings growth and visibility over the next 2-3 years. We do not have a rating on the stock.**

**Diversifying into mining and mineral resources.** Borneo Aqua Harvest (Bahvest) completed the acquisition of a 100% stake in Wullersdorf Resources SB (WRSB) in Jan 2017. The acquisition allows the group to diversify into mining and mineral resources exploration, as well as other related businesses.

This is as WRSB was granted a sub-lease of 33 years, starting from 1 Oct 2015, to carry out mining operations on a piece of land zpanning 317.7ha in Bukit Mantri in Tawau, Sabah. WRSB started exploration and drilling works in the initial mining area of approximately 28ha (out of the total 317.7ha), prior to the acquisition by Bahvest. Its mining production is currently in the final stages of preparation, with the official commissioning likely by mid-2018.

**Key takeaways from site visit.** Bahvest's existing mining site is located c.25km from the Tawau airport, and 50km from the town centre. We walked through several of its core facilities, including the laboratory, rock crusher with current capacity of 400 tonnes of ore/hour, carbon-in-leach plant with the current capacity of 1,200 tonnes/day, and other supporting amenities.

Management has allocated a capex of MYR40-45m for the current set-up, with over 90% of the allocation being utilised thus far. One of the biggest advantages the group possesses is the unique geography of its land, which comprises hills containing hydrothermal mineral deposits. The capital and operating costs for mining such areas are relatively lower vis-à-vis the conventional underground drilling and mining method, which requires the digging of a complex series of tunnels and vents.

**Capacity expansion in 6-12 months.** Management highlighted that upon the official commissioning of its facilities by mid-2018, the group may explore capacity expansion within 6-12 months. This may involve doubling up its carbon-in-leach capacity to around 2,400-3,000 tonnes/day at a total cost of MYR10-15m. We believe this, if it materialises, would most likely be funded internally, as the commencement of its gold-mining operations by mid-2018 would generate cash flow for the company.

**Potential multi-bagger.** Based on our estimation, Bahvest could be worth MYR2.30-3.10/share, assuming a 2019F P/E range of 15-20x and its existing outstanding share base. Our target multiple range implies 5-30% discounts over its peer average of 21.2x, which we deem justified, given Bahvest's relatively smaller presence within the global mining industry. We, however, note that our back-of-the-envelope earnings projections are relatively conservative, as reflected in our mining cash cost assumption of USD500/troy ounce (vs management's internal target of USD300-350).

Key Financial Data	Dec-14	Dec-15	Dec-16	Dec-17
Total turnover (MYRm)	23.0	17.2	18.3	31.1
Reported net profit (MYRm)	(4.3)	(2.3)	(3.3)	(3.8)
Recurring EPS (MYR)	(0.01)	(0.01)	(0.01)	(0.01)
DPS (MYR)	na	na	na	na
Recurring P/E (x)	na	na	na	na
P/B (x)	3.34	3.20	3.14	1.71
Dividend Yield (%)	na	na	na	na
Return on average equity (%)	(4.1)	(1.8)	(2.4)	(1.8)

Source: Company data, RHB

Price: MYR1.06  
Market Cap: USD185m  
Bloomberg Ticker: BORN MK

#### Share Data

Avg Daily Turnover (MYR/USD) 2.54m/0.65m  
52-wk Price low/high (MYR) 0.59 - 1.41  
Free Float (%) 59  
Shares outstanding (m) 604

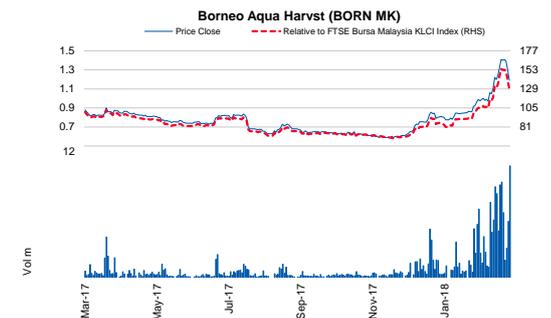
#### Shareholders (%)

Datuk Lo Fui Ming 16.1  
Lembaga Tabung Haji 8.6  
Mohd Amir Masry 6.6

#### Share Performance (%)

	YTD	1m	3m	6m	12m
Absolute	83.1	23.3	95.1	77.6	35.2
Relative	79.6	23.3	89.4	72.3	28.7

Source: Bloomberg



Source: Bloomberg

#### Analyst

Kong Heng Siong  
+603 9280 8866

[kong.heng.siong@rhbgroup.com](mailto:kong.heng.siong@rhbgroup.com)



## Investment Thesis

**Diversifying into mining and mineral resources.** Bahvest completed the acquisition of a 100% stake in WRSB in Jan 2017, for a total purchase consideration of MYR96m (via the issuance of 102.1m ordinary shares at an issue price of MYR0.94). The acquisition allows the group to diversify into mining and mineral resources exploration, as well as other mining related business.

To recap, in 2015, WRSB entered into a sub-lease agreement with Southsea Gold SB (SGSB) whereby SGSB agreed to grant a sub-lease of 33 years, starting from 1 Oct 2015 to 30 Sep 2048, to WRSB for the latter to carry out mining operations on a piece of land totalling 317.7ha in Bukit Mantri in Tawau, Sabah. The land is located within Mount Wullersdorf and Ulu Kalumpang in Tawau (within the Semporna Peninsula). In return, SGSB is entitled for a nominal annual rental rate of MYR60,000 to be satisfied by WRSB.

**Mining to start in mid-2018.** Of the total 317.7ha of land involved, Bahvest has identified and zoned out 28ha as its initial mining area. Mining production is currently in the final stages of preparation, with the official commissioning likely by mid-2018. A report issued by mining consultant, *Optiro*, in accordance with the Joint Ore Reserves Committee (JORC) Code reported that the indicated and inferred mineral resources comprising gold, silver and copper in the initial mining area are as listed in Figures 1 and 2.

**Figure 1: Gold resources estimates**

Category	Tonnes of ore (m)	Gold grade (g/tonne)	Estimated gold resources (tonnes)	Estimated gold resources (troy ounces)
Indicated mineral resource	1.69	2.72	4.6	148,000
Inferred mineral resource	1.01	1.84	1.9	60,000
<b>Total</b>	<b>2.70</b>	<b>2.39</b>	<b>6.5</b>	<b>207,000</b>

Source: Company data

**Figure 2: Silver and copper mineral resources estimate**

Category	Tonnes of ore (m)	Silver		Copper		
		Silver grade (g/tonne)	Estimated silver resources (tonnes)	Estimated silver resources (troy ounces)	Copper grade (%)	Estimated copper resources (tonnes)
Indicated mineral resource	1.69	8.28	14.0	450,000	0.24	4,000
Inferred mineral resource	1.01	6.39	6.5	208,000	0.27	2,800
<b>Total</b>	<b>2.70</b>	<b>7.57</b>	<b>20.4</b>	<b>657,000</b>	<b>0.25</b>	<b>6,800</b>

Source: Company data

**Key takeaways from site visit.** To gain further insight into its operations as well as the current construction progress, we paid a visit to Bahvest's existing site in Tawau. After a 2.5-hour flight from Kuala Lumpur, we were welcomed by the company's CEO and managing director, Datuk Lo Fui Ming. We estimate that Bahvest's production site is located about 25km from the Tawau airport, and 50km from the town centre. Based on the local infrastructure, its current site is approximately 15km away from the main road, as well as the nearest point of power grid.

We arrived at its core facilities approximately 45 minutes after departing the Tawau airport. We walked through several of its core facilities, including:

- Laboratory, which conducts testing on soil samples collected to determine the areas with high gold content, as well as samples from the production flow to ensure proper accounting of gold production;
- Rock crusher, with a current capacity of 400 tonnes of ore per hour;
- Carbon-in-leach plant, with a current capacity of 1,200 tonnes per day;
- Other supporting amenities.

Management has allocated a capex of MYR40-45m for the current set-up, with over 90% of the allocation being utilised thus far.

**Huge cost advantage.** One of the biggest advantages the group possesses is the unique geography of its land, which comprises hills containing hydrothermal mineral deposits. The capital and operating costs for mining such areas are relatively lower vis-à-vis the conventional underground drilling and mining method, which requires the digging of complex tunnels and vents.

In essence, hydrothermal is a process in which water is heated underground when it is near to a geothermal site. This would dissolve the ores, which have been trapped in the surrounding rocks. Through cooling, the ore precipitates into a solid and purified metal. It will then rise to the surface through tectonic movement. This results in highly concentrated regions of gold in veins within mountainsides, and hence, is ideal for gold mining.

**Securing off-takers.** From the perspective of off-taking, management intends to offload its gold production within 2-3 days. This would likely involve direct on-site collection by its potential customers, or delivery via insured outsourced security firms, which offer such services. The group has started negotiations with potential customers comprising mainly refiners and smelters recognised by Conflict-Free Sourcing Initiative (CFSI) for off-taking arrangements. Based on our channel checks, while there are no CFSI-certified smelters in Malaysia, we note that there are several players within the ASEAN region with bases in countries such as Singapore, Indonesia and the Philippines.

**Capacity expansion in 6-12 months.** Management highlighted that upon the official commissioning of its facilities by mid-2018, the group may explore capacity expansion within 6-12 months. This may involve doubling up its carbon-in-leach capacity to around 2,400-3,000 tonnes per day at a total cost of MYR10-15m. We believe this, if it materialises, would most likely be funded internally, as the commencement of its gold-mining operations by mid-2018 would generate cash flow for the company.

**Guidance on the remaining 289.7ha.** Based on our estimates, Bahvest could exhaust the estimated resources at its existing 28ha of land within 3-4 years. However, management highlighted that the 1.69m tonnes of indicated resources on the 28ha initial mining area are only on the surface of the hill (<200m depth). The group may potentially start digging downwards or sideways, upon exhausting the resources on the surface.

As a side note, we expect exploration and mining works on the remaining 289.7ha land to take place within 1-2 years from now, as the group seeks to safeguard its interests as well as sustainability in the long run. At the current juncture, we are unable to ascertain the amount of ore or gold resources involved. We, however, caution that extrapolating the amount of gold reserves by comparing the land size (28ha vs 289.7ha) may not be a good gauge, as we understand that the gold content varies across areas.

To put things into perspective, management indicated that based on its in-house lab testing within the existing 28ha mining site, the gold content findings range from 0.1g to over 22g per tonne of ore.

**SGSB's remaining landbank to be idle for now.** Post injecting the 317.7ha of land into Bahvest, SGSB would still house a massive landbank of 628.4ha, on which it has secured a mining lease. Based on official disclosure from the Companies Commission of Malaysia, Bahvest's single largest shareholder, Datuk Lo holds a 70% stake in SGSB, with the remaining owned by Mr Mohd Amir Masry (25%) and Dr Tan Su Haw (5%).

**Potential earnings accretion.** To gauge the potential earnings accretion upon the commissioning of its gold mining operations, we compute a simple analysis, taking into account the following core assumptions, which include:

- i. Official commissioning of operations in early July;
- ii. Capacity expansion of 1,200 tonnes per day at its carbon-in-leach plant to be in place by mid-2019;
- iii. Average gold price of USD1,300 per troy ounce;
- iv. Average USD/MYR of 4.05 for 2H18, and 4.10 thereafter;
- v. Direct mining cash cost of USD500 per troy ounce (vs management's guidance of USD300-350 per troy ounce).

To reflect our conservative stance, we excluded the following items from our computations:

- i. Inferred gold resources, as stated in the JORC report;
- ii. Indicated and inferred silver and copper resources, as stated in the JORC report.

**Figure 3: Estimated potential earnings accretion over the next three years**

FYE Dec (MYRm)	2018F	2019F	2020F
Months in production (months)	6	12	12
Daily capacity (ore in tonnes)	1,200	1,800	2,400
Gold content (gram per tonne)	2.72	2.72	2.72
Recovery rate	90%	90%	90%
Plant utilisation	90%	90%	90%
Total gold production (in troy ounce)	15,514	46,543	62,058
Average gold price (USD per troy ounce)	1,300	1,300	1,300
Revenue (USD m)	20.2	60.5	80.7
Revenue (MYR m)	79.7	242.0	322.7
USD/MYR	3.95	4.00	4.00
Direct mining cash costs (USD per troy ounce)	(500.0)	(500.0)	(500.0)
Direct mining cash costs (MYR per troy ounce)	(1,975.0)	(2,000.0)	(2,000.0)
Direct mining cash costs (MYR m)	(30.6)	(93.1)	(124.1)
Interest charges	(1.4)	(0.7)	-
Admin charges	(5.0)	(7.5)	(8.3)
Depreciation charges	(5.0)	(5.5)	(6.1)
Royalty charges	(4.0)	(12.1)	(16.1)
PBT	33.6	123.1	168.2
Taxation	(8.1)	(29.6)	(40.4)
PAT	25.6	93.6	127.8

Source: RHB

**Peer comparison.** Based on our compilation, Bahvest's comparable peers are trading at average P/Es of 32.3x and 21.2x for FY18F-19F respectively. We, however, note that a direct apple-to-apple comparison is lacking, due to Bahvest's operations being relatively smaller in scale, and with geographical differences in mining sites, which could result in cost distortions as well as differences in mining technology involved – all these would affect profitability.

**Potential multi-bagger.** Based on our estimates, Bahvest could worth MYR2.30-3.10 per share, assuming a 2019F P/E range of 15-20x and its existing outstanding share base. Our target multiple range implies 5-30% discount over the peer average of 21.2x, which we deem justified, given Bahvest's relatively smaller presence within the global mining industry.

We however note that our back-of-the-envelope earnings projections are relatively conservative, as reflected in our mining cash cost assumption of USD500 per troy ounce (vs management's internal target of USD300-350).

**Figure 4: Peer comparison (as at 19 Apr 2018)**

Company	Currency	Mkt Cap (USDm)	P/E (x)		EV/EBITDA (x)		P/BV (x)		DY (%)		ROE (%)	
			FY18F	FY19F	FY18F	FY19F	FY18F	FY19F	FY18F	FY19F	FY18F	FY19F
Newmont Mining	USD	22,384.3	29.0	24.5	9.3	8.5	2.0	1.9	1.3	1.2	7.0	8.5
Goldcorp	USD	12,506.4	31.3	19.2	9.1	6.5	0.9	0.8	0.6	0.6	2.7	4.7
Newcrest Mining	AUD	11,926.0	40.3	17.5	10.5	7.3	1.5	1.4	1.0	1.6	4.3	8.3
Agnico Eagle Mines	USD	10,349.7	74.7	44.1	13.0	10.6	2.0	1.9	1.0	1.0	3.4	4.0
Kinross Gold	USD	4,813.7	22.1	23.3	4.6	4.3	1.0	0.9	-	3.2	4.3	3.9
AngloGold Ashanti	ZAR	3,817.2	12.3	10.8	4.1	3.9	1.3	1.1	1.0	1.3	11.1	9.7
CNMC Goldmine	SGD	85.0	16.1	9.1	6.8	3.7	1.9	1.9	1.9	2.9	11.6	19.4
Average			32.3	21.2	8.2	6.4	1.5	1.4	1.0	1.7	6.3	8.4

Source: Bloomberg

## Key Risks

Key risks include:

- i. Potential delays in the official commissioning of production;
- ii. Exposure to fluctuations in gold prices;
- iii. Actual gold resources may differ substantially from the JORC report findings;
- iv. Potential prolonged losses at its aquaculture division, which we believe may be eventually terminated or disposed, as management intends to focus on the more profitable gold mining operations.

## Business Overview

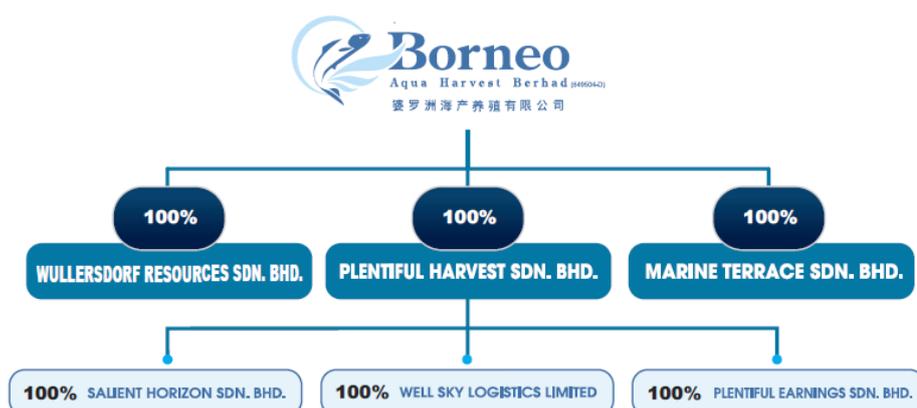
### Company background

Bahvest was incorporated on 16 Apr 2004 and listed on Bursa Malaysia's ACE market on 5 Sep 2005. Prior to the injection of WRSB, the company was principally involved in the entire process of sustainable aquaculture, ie broodstock management, research and development, breeding, hatching, rearing, production of live feed, marketing, transportation of live fishes, and distribution of fish products. The group has since diversified into quarry operations, and is engaged in mineral exploration and mining activities through the completion of the WRSB acquisition in Jan 2017.

The senior management team is led by Datuk Lo, who holds a 16.1% stake in the company, and is currently the managing director and CEO of the group. He is responsible for managing Bahvest's overall business operations and formulating the group's corporate strategies. He has over 35 years of experience in numerous areas such as timber, oil palm plantation and integrated aquaculture.

Bahvest's outstanding share base stands at 605.7m. The group also has outstanding warrants of approximately 300m, with a maturity date of 20 Aug 2024 and at an exercise price of MYR0.87 on a 1-to-1 basis.

Figure 5: Bahvest's corporate structure



Source: Company

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**Buy:** Share price may exceed 10% over the next 12 months

**Trading Buy:** Share price may exceed 15% over the next 3 months, however longer-term outlook remains uncertain

**Neutral:** Share price may fall within the range of +/- 10% over the next 12 months

**Take Profit:** Target price has been attained. Look to accumulate at lower levels

**Sell:** Share price may fall by more than 10% over the next 12 months

**Not Rated:** Stock is not within regular research coverage

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Kuala Lumpur	Hong Kong	Singapore
<b>RHB Research Institute Sdn Bhd</b> Level 3A, Tower One, RHB Centre Jalan Tun Razak Kuala Lumpur 50400 Malaysia Tel : +(60) 3 9280 8888 Fax : +(60) 3 9200 2216	<b>RHB Securities Hong Kong Ltd.</b> 12 <sup>th</sup> Floor World-Wide House 19 Des Voeux Road Central, Hong Kong Tel : +(852) 2525 1118 Fax : +(852) 2810 0908	<b>RHB Research Institute Singapore Pte Ltd.</b> 10 Collyer Quay #09-08 Ocean Financial Centre Singapore 049315 Tel : +(65) 6533 1818 Fax : +(65) 6532 6211
Jakarta	Shanghai	Bangkok
<b>PT RHB Sekuritas Indonesia</b> Wisma Mulia, 20th Floor Jl. Jenderal Gatot Subroto No. 42 Jakarta 12710, Indonesia Tel : +(6221) 2783 0888 Fax : +(6221) 2783 0777	<b>RHB (China) Investment Advisory Co. Ltd.</b> Suite 4005, CITIC Square 1168 Nanjing West Road Shanghai 20041 China Tel : +(8621) 6288 9611 Fax : +(8621) 6288 9633	<b>RHB Securities (Thailand) PCL</b> 10th Floor, Sathorn Square Office Tower 98, North Sathorn Road, Silom Bangrak, Bangkok 10500 Thailand Tel: +(66) 2 088 9999 Fax : +(66) 2 088 9799