



Hummingbird Resources

2nd July 2018

Mid-tier gold stock in the making - developing further gold mines in West Africa on the back of strong cash flow from Yanfolila

Hummingbird joined AIM in 2010 raising funds to develop its 4.2Moz Dugbe Gold Project in Liberia. In June 2014, during the worst of the downturn in the mining sector, the entrepreneurial board masterminded the opportunistic acquisition of Gold Field's Mali gold portfolio including Yanfolila, a smaller higher-grade project which Hummingbird's team of mine builders successfully put into production both on time and on budget.

Yanfolila open pit gold mine in Mali producing at 110,000 oz a year

Gold production set to rise to 120-130k oz pa this year at this high grade, low-cost mine boasting compelling economics. US\$8 million per year of planned infill drilling should boost reserves, increase mine life and ensure that Hummingbird benefits from its enviable cash flow for many years.

Liberia's largest gold project with a lot more exploration potential

The 4.2Moz Dugbe Gold Project has a PEA for a 125,000 oz per annum mine. But, there is obvious scope for a far larger project which is expected to be outlined in a forthcoming optimised DFS. Ongoing negotiations with well-financed joint-venture partners could fund the development through to production.

Developing multiple assets backed by large & fast-growing resources

The board is seeking to invest the cash generated at the first mine into additional gold projects, utilising their impressive skills to bring further development projects into production & add substantial value.

NPV and peer group analysis suggests an upside of 52%

Our conservative valuation illustrates the clear upside potential. We initiate coverage of Hummingbird with a target price of 46.43p and **Conviction buy** stance.

Table: Financial overview						
Year to end Dec	2016A	2017A	2018E	2019E		
Revenue (U\$'000)	-	-	143,000	169,000		
PTP (U\$'000)	(8,442)	(5,336)	5,770	13,850		
EPS (USD cents)	(3.60)	(1.55)	1.66	3.95		
Source: Company accounts & Alian Pesearch						

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This investment may not be suitable for your personal circumstances. If you are in any doubt as to its suitability you should seek professional advice. This note does not constitute advice and your capital is at risk. This is a marketing communication and cannot be considered independent research.

CONVICTION BUY – Price target 46.43p



Key data	
PIC	HUM
Share price	30.5p
52 week	39.50p – 25.63p
high/low	
Listing	AIM
Shares in issue	350.94m
Market Cap	£107m
Sector	Mining

12 month share price chart



Analyst details Dr Michael Green michael.green@alignresearch.co.uk

IMPORTANT: Hummingbird Resources is a research client of Align Research. For full disclaimer information please refer to the last page of this document.

Business overview

Hummingbird Resources Operations

Hummingbird Resources (Hummingbird) is an Africa focused gold company with a producing mine in Mali and a large development asset in Liberia. In addition, there is further exploration potential in both Mali and Liberia where the company has a substantial acreage position which totals a combined 4,000km².

Hummingbird has the following main interests:

• Yanfolila Gold Project, Mali (80%) – Producing gold mine in SW Mali with a mineral resource of 2.2Moz and a mine life of 7 years. This is a high grade, low-cost open pit gold operation where first gold was poured in December 2017 and commercial production began at the start of Q2 2018. Guidance on production for the current year is 105,000 – 115,000 oz. There is significant scope to increase the mine life and the rate of gold production by moving resources into reserves with a well-funded ongoing exploration programme.

• Dugbe Gold Project, Liberia (100%) – Development project with a 4.2Moz resource & which represents the largest gold project in Liberia. A Preliminary Economic Assessment (PEA) outlined a 125,000 oz per annum project with a 20-year mine life. However, there looks to be the potential for a 6-8Moz resource which would allow the development of a significantly larger project. The Detailed Feasibility Study from 2016 is currently being optimised and is expected to pave the way for a joint-venture partner to fund the development of the project.

• **Cora Gold (34%)** – An AIM-listed exploration company which is focused on two world class gold regions in Mali and Senegal. Exploration work by Cora has resulted in extremely encouraging high-grade gold intercepts being announced. Hummingbird vended in some of their exploration licences in Mali for equity in this company and sees Cora acting as a project developer.



Construction of the Yanfolila Gold Project. Source: Company



Background

Hummingbird Resources was established in November 2005 and went on to become actively involved in mineral exploration in Liberia, West Africa. The company joined AIM in December 2010 following a placing that raised £30.1 million at 167p per share which gave Hummingbird an initial market capitalisation of £89.1 million.

At the time of the IPO, the company had a NI 43-101 resource of 812,000 oz gold defined at its flagship Dugbe F Project in Liberia. The company was also then the holder of the largest area of mineral exploration ground (7,000km²) in a highly prospective geological region in eastern Liberia. Subsequent exploration over the next year or so led to the discovery of the Tuzon anomaly, where a 2Moz maiden gold resource was announced in February 2012 taking Hummingbirds' attributable gold resource to 3.7Moz.

December 2012 saw Anglo Pacific agree to advance US\$15 million in three equal tranches in return for a 2% net smelter royalty on any products mined within a 20-kilometre radius of the Dugbe F resource. In addition, there was a US\$5 million placement from the International Finance Corporation (IFC). During 2013, a Preliminary Economic Assessment (PEA) on the Dugbe 1 Project was announced, which demonstrated robust economics. The US\$20 million raised from these two partners provided the funding for the Definitive Feasibility Study (DFS). Infill drilling improved the confidence and the categorisation of the Tuzon 2.5Moz N1 43-101 Inferred Resource.

In 2014, there was a sell-off in the junior gold mining sector following the decline in the gold price. Management were able to take advantage of the uncertain market for mining stocks to acquire high quality assets. In June 2014, Hummingbird announced the acquisition of Gold Fields' gold assets in Mali, which included the Yanfolila Project, for US\$20 million payable in shares at 56p each. At that time, Yanfolila had an inventory of 1.8Moz of gold at 2.8g/t, and with this acquisition Hummingbird became a multi-project, near-term producer.

In August 2014, the board was able to announce that an agreement had been reached with Taurus Mining Finance Fund to fund Yanfolila with a US\$75 million debt facility. At that time, mine construction at Yanfolila was targeted for Q1 2015 with the first gold production planned by the end of 2015 while work continued advancing the Dugbe Gold Project. July 2015 saw the company signing, with the President, a 25 year Mineral Development Agreement (MDA) for the 2,000km² Dugbe Shear Zone which contained the 4.2Moz Dugbe Gold Project, that has been going through parliament and is expected to be ratified soon.

Hummingbird raised US\$8.9 million at 30p per unit (1 share and a half warrant) in March 2015. This was followed in June 2015 with £3.5 million raised at 33p per share, all of which was to primarily fund Yanfolila where, by September 2015, the plant earthworks had been completed.

In January 2016, the company announced a DFS for Yanfolila which showed a big improvement in the economics, with the NPV almost doubling to US\$142 million at a US\$1,250 per ounce gold price. Hummingbird then raised £49.5 million (US\$71 million) at 22p per share. In October 2016, civil works for the full-scale mine commenced at Yanfolila, with the first gold pour achieved at the end of 2017 as planned.

Operations

Hummingbird has operations in Mali and Liberia in West Africa. There is currently production at the Yanfolila Gold Project in Mali which is a high grade, low-cost open pit gold mining operation. In Liberia the company is developing the Dugbe Gold Project, a large-scale project that offers significant further exploration potential. In both Mali and Liberia, Hummingbird has substantial exploration acreage which totals 4,000km². In addition, the company has a 34% stake in AIM-listed Cora Gold which has exploration prospects in Mali and Senegal.

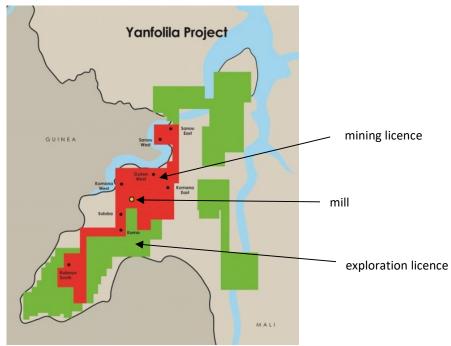
Mali

Mali is Africa's third largest gold producer, with a good mining code and reasonable infrastructure. Mali has been compliant with the Extractive Industries Transparency Imitative (EITI) since 2011, which is the global standard for good governance and improved transparency in the oil, gas and mining sectors.

Mining is treated as a priority industry sector for further economic development in Mali, with gold representing approximately 90% of the country's mineral production. There are no restrictions on foreign investment or capital flows in and out of Mali. Active in the country are well-known gold mining companies such as Randgold Resources, Endeavour Mining and B2Gold Corp.

Yanfolila Gold Project (80%)

The Yanfolila Gold Project is a high grade, low-cost open pit mining operation which lies in the south of Mali. In June 2014, the company acquired all the mining and exploration interests in Mail that belonged to Gold Fields for US\$20 million which was paid in equity by issuing shares at 56p each. These interests included the Yanfolila Project with its then current mineral inventory of 1.8Moz of gold at 2.8g/t. The government of Mali has a 10% free carried interest and is buying an additional 10% stake in the project for US\$11 million.



The Yanfolila Gold Project. Source: Company



Geology

The project is located in the Yanfolila greenstone belt along the eastern margin of the Siguiri Basin, which forms part of the Birimian volcano-sedimentary series of the West African craton. Birimian greenstone belts cover a vast area of West Africa and host numerous high-grade, world class gold deposits.

Gold mineralisation occurs in a deformed stratigraphic sequence of basalt, polymictic conglomerate, feldspathic sandstone, siltstone and greywacke; with mineralisation styles dominated by vein, breccia and intrusive types. Lodes are characterised by intense albite-carbonate veining (coarse grained and well crystallised veins with no set orientation) and extensive sulphide alteration. The sulphide component has been weathered with oxidation extending to depth of 50 metres or more, which has created a well-developed saprolite (chemically weathered rock) zone.

	Tonnes		Grade (g/t)
	Probable	reserves	
Komana East	4,606,000	470,600	3.18
Komana West	2,433,000	239,200	3.06
Total	7,039,000	709,800	3.14
Indic	ated and Inferred Reso	urces (Inclusive of Reserves)
JORC 2012 18,654,000 1,587,600 2.64			
SAMREC 2009	3,250,000	224,400	1.98
Total	22,165,000	1,812,000	2.54
Net attributable to Hummingbird (80%)	18,840,250	1,540,200	2.54
Gold	Fields 2013 Non-Code (Compliant Mineral Inventor	v
De-Risking Study	6,324,200	390,700	1.92

Probable reserves, resources and non-code compliant mineral inventory. Source: Company

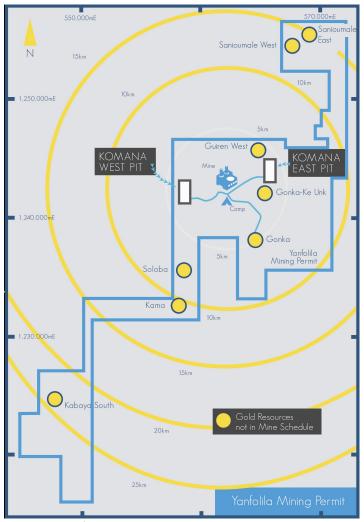
Mine plan

A Definitive Feasibility Study was published in January 2016. This was rapidly followed by an Optimised Mine Schedule which provided significant improvements in the economic returns and reserves at Yanfolila. This report put the company into a much better position to negotiate the final funding package for the project.

Gold Price	US\$1,100	US\$1,250	US\$1,400
Production Year 1	132,000oz	132,000oz	132,000oz
LoM Production/year	107,000oz	107,000oz	107,000oz
LoM grade	2.95g/t	2.95g/t	2.95g/t
Annual throughput	1.24Mtpa	1.24Mtpa	1.24Mtpa
Project CAPEX	US\$79m	US\$79m	US\$79m
Recovery	92.8%	92.8%	92.8%
All in Sustaining Costs (US\$/oz)	US\$686	US\$695	US\$701
LoM NPV (8%)	US\$109m	US\$162m	US\$216m
After Tax IRR	42%	60%	77%

Key parameters and results of the DFS (January 2016) plus the Optimised New Mine Schedule Optimised Mine Schedule (February 2016). Source: Company

Hummingbird brought Yanfolila into production for a total capital expenditure of US\$88 million, which is very impressive as it is estimated that many mid-tier gold companies could have spent US\$100 million+ on a similar project. In retrospect, the team believe that they could have probably saved a further US\$5 million, & which bodes well for future developments.



Yanfolila mining permit. Source: Company

The project came in both on budget and as scheduled. Construction began in October 2016 and mining started in August 2017. Power was connected in October 2017, with first gold poured on schedule in December 2018. The mining fleet consists of 4 Liebherr 9150 excavators, one Liebherr 9250 and 18 CAT 777Fs 100 tonne off-highway trucks.



Production at Yanfolila. Source: Company



Initial operations focused on the Komana East pit, but preparations are underway for mining to begin at the Komana West pit following grade control drilling which is planned to commence in August 2018. In both these pits there is something like 60 metres of oxide to be mined before starting to mine the fresh ore. Phase 2 sees Guirin West beginning to be mined in year 5, with production commencing at both Sanioumale West & East in year 6. The project was designed with an initial 7.5 year mine life.

The processing route is a simple gravity and carbon-in leach (CIL) processing route with a planned high recovery rate. Gold recoveries from the CIL circuit have been excellent right from the initial start-up with recoveries of over 95%, exceeding the design criteria of 92.8%. The mill has a capacity of 1.24Mtpa and total processing costs have been estimated to be US\$15/t.



Mill during construction. Source: Company

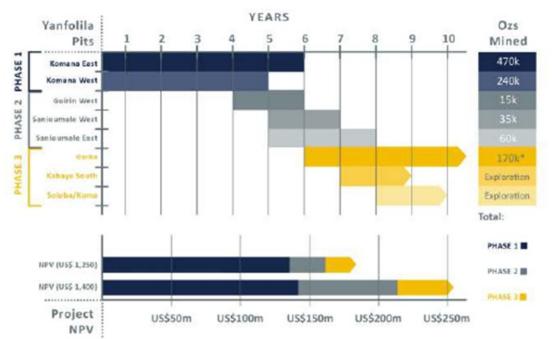
Results for the 2018 showed that 18,750 oz gold was produced and there was a 96.1% plant recovery. The average gold grade during this period was 2.96g/t and 3.39g/t in March 2018. Total ore processed was 238,628 tonnes, with the plant working at more than 95% of capacity in March 2018. In Q1 2018, costs per ounce were in the region of US\$750 – 800/oz.

Full production was achieved on 1^{st} April 2018 with the preceding three months representing the ramp up period. The production target for 2018 is 105,000 - 115,000 oz with 120,000 - 135,000 oz forecast in the first full year of commercial production, which is the year to the end of March 2019.

Throughout 2018, the plan at Yanfolila is to extend mine life and further develop the project. In addition, the team will be focusing on value growth opportunities. There is undoubted production and organic growth potential at this project, with phased exploration expected to deliver an increase in reserves and life of mine.

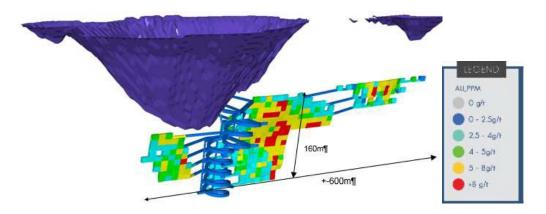
The project was built quickly and inexpensively with not much exploration carried out ahead of going into production. Advanced stage exploration is expensive, with mineral reserves often purely being a function of the spend on drilling. Now that the project is in production, management is seeking to establish a longer mine life so that shareholders can enjoy the benefit of strong cash generation for many years.

The company intends to spend up to 15% of free cashflow each year on exploration. This is brownfield exploration but in reality it is infill drilling and the plan this year is to convert a significant amount of the 1.5Moz of Indicated and Inferred resources into reserves. The new reserve statement will form the basis on which to devise a new mine plan, which is expected to be published before the end of 2018.



Planned production at Yanfolila for the current life of mine and further growth potential. Source: Company

The change in the mine plan may bring forward the mining of the higher-grade material. The Gonka deposit provides the potential to bring higher grade ounces into the mine plan, starting in 2020, with the deposit being open on strike and at depth. **Gonka has 385,198 oz at 3.1g/t Inferred resource which could provide an additional 166,086 oz to be mined over a six-year period.**



The Gonka deposit provides high grade upside for Yanfolila. Source: Company

Underground at Gonka there is 77,424 oz at 4.47g/t gold which sits beneath 91,662 oz in an open pit at 2.33g/t, which would pay for the decline. Gonka does not form part of the current DFS mine plan but could significantly increase production to 138,000 oz pa in 2020 and has been estimated to have the potential to add US\$24 million to the NPV at a US\$1,250 gold price.



Liberia

The mining industry in Liberia has witnessed a revival since the end of the country's civil war in 2003. Gold, diamonds and iron ore represent the core minerals in the country's mining sector where a new Mineral Development Policy and Mining Code was put in place in 2013 as a means of attracting foreign investments. Avesoro Resources' (AIM:ASO) New Liberty Gold Mine is Liberia's first commercial gold mine, commencing gold sales in 2015 and selling 77,000 ounces last year.

Dugbe Gold Project (100%)

The Dugbe Gold Project was the company's flagship asset when Hummingbird listed on AIM in 2010. The project is located in the south east of the country and is 40 miles by road from the deepwater port of Greenville. The Dugbe Shear Zone that lies in the south east of Liberia crosses the company's Dugbe and Joe Villages licences. The Dugbe Gold Project has a total defined resource of 4.2Moz of gold which is spread across three discoveries: Dugbe F, Tuzon and Sackor.



Location of licences and the Dugbe Shear Zone. Source: Company

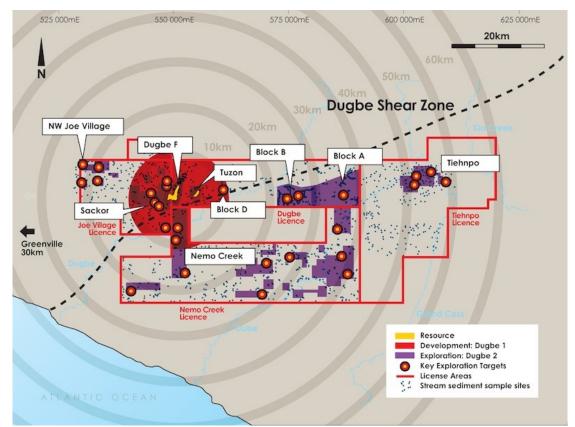
Geology

Birimian rocks are a major source of gold and diamonds that extends through Ghana, Cote d'Ivorie, Guinea, Mali and Burkina Faso. The Birimian is recognised as the second largest gold producing area in the world. It hosts many mines with multi-million ounce gold reserves including AngloGold Ashanti's Obuasi Gold Mine in southern Ghana, which has reserves of more than 40Moz. There are many more smaller mines spread across this region with multi-million ounce reserves.

The company's extensive licence area in eastern Liberia is seen as being one of the last remaining unexplored regions of the Birimian, & which has remained largely untouched due to the civil war. The team has focused its exploration activities on the greenstone contacts in the Birimian and made a series of highly significant gold discoveries. The Birimian is well known for being elephant country and it was completely unproven in Liberia before Hummingbird's arrival. Here, there does seem to be the real potential for the company to open up a completely new gold district.

Resources

At the Dugbe Gold Project, Hummingbird has a total of 4.2Moz of gold resources split between two deposits, Dugbe F (1.76Moz) and Tuzon (2.47Moz) which lay 2.6 kilometres to the east. No resource has yet been defined at Sackor, which is just 2.1 kilometres to the west of Dugbe F, although economic mineralisation has been discovered at this deposit following a 3,727 metre drilling programme in 2012.



Location of resources at the Dugbe Gold Project. Source: Company

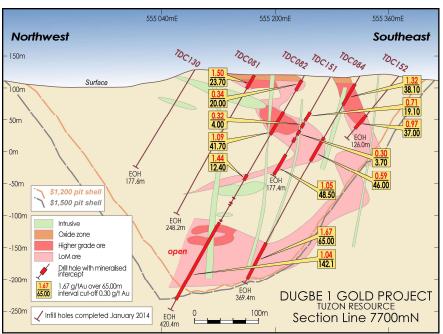
	Tonnage (Kt)	Gold (g/t)	Gold (Koz)					
Tuzon – US\$1,500 – March 2014								
Indicated 41,800 1.51 2,031								
Inferred	10,201	1.32	435					
Total	52,001	1.47	2,466					
Tuzon – US\$1,200 – March 2014								
Indicated	37,400	1.56	1,879					
Inferred	4,965	1.52	244					
Total	42,365	1.56	2,123					

Resources at Tuzon. Source: Company

	Tonnage (Kt)	Gold (g/t)	Gold (Koz)				
Dugbe F (WAI) March 2013							
Indicated	-	-	-				
Inferred	43,000	1.28	1,760				
Total	43,000	1.28	1,760				

Resources at Dugbe F. Source: Company





Tuzon resource - cross section line 7700mN. Source: Company

Preliminary Economic Assessment (PEA)

The results of a Preliminary Economic Assessment on the Dugbe Gold Project were announced in April 2013 and showed attractive economics at the then current gold price. The PEA was based on a 125,000 oz per annum project with a 20-year mine life and involved mining the Dugbe F and Tuzon deposits. The report clearly outlined a project that was both technically and economically robust.

Gold price US\$/oz	NPV(10) post-tax US\$ million	IRR %
1,300	186	29.4
1,500	337	43.4



Net present values and returns at Dugbe estimated in the PEA. Source: Company

Dugbe Gold Project and drilling. Source: Company

Detailed Feasibility Study (DFS)

Following the impressive results seen in the PEA, the company embarked on the far more comprehensive Detailed Feasibility Study, where work is still continuing today. The DFS is being managed by MDM Engineering Group which has appointed a number of well-known international consultants to cover certain key elements including: SRK Consulting (resource), Colley Mining (geotechnical studies) and AMEC (EISA - Environmental and Social Impact Assessment).

At present, the DFS is undergoing optimisation which involves a detailed analysis of the economic benefits of converting Measured and Indicated Resources beyond Tuzon into actual reserves. In addition, the improved cash flows that will result from scheduling low strip, shallow ore from other deposits not currently in Measured & Indicated Resources categories are being modelled. This includes bringing ore from Dugbe F into the first ten years of mine life. The project is focused on mining fresh rock, which needs a lot of power So a Hydro-Electric Prefeasibility Study (PFS) has been completed which really outlines the potential to reduce the all-important power costs.

Mineral Development Agreement

In June 2018, the members of Liberia's House of Representatives unanimously approved a Mineral Development Agreement (MDA) for Dugbe which will now be passed into law. This marks a big step forward as the agreement has a 25-year life with an option for an extension by mutual consent. Crucially, the MDA locks in all the fiscal agreements and so provides the necessary long-term framework and stabilisation of taxes and duties. These include an agreed royalty rate on gold production of 3% and an income tax rate of 25%, with credit for historic exploration expenditures.

The MDA also provides for a 50% reduction in fuel duty with a 75% reduction for the first five years of production, if the gold price is below US\$1,500 per ounce. The agreement grants the Government of Liberia a free carried interest of 10% in the Dugbe Gold Project as well as the establishment of a Community Development Fund by the company. The MDA, together with the optimised DFS, provides the tools to successfully conclude negotiations with potential joint-venture partners.

Cora Gold

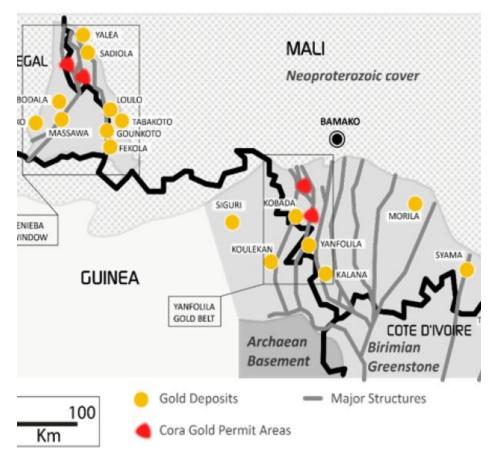
Cora Gold (AIM:CORA) is a reasonably new exploration company which is focused on two world class gold regions in Mali and Senegal. Cora's attention is currently on the highly prospective Sanankoro Gold Discovery, which lies in the Yanfolila Gold Belt in Southern Mali and where there have been extremely encouraging high-grade gold intercepts.

Exploration work has been going well with encouraging assay results being reported which have led to the identification of a high grade, shallow and broad gold zone. High grade gold has been discovered at Sanankoro and Tekeledougou, which both lie within trucking distance of Hummingbird's plant.

Impressive grades and widths of gold mineralisation include: 17 metres @ 5.43g/t and 11 metres @ 5.24g/t from Sanankoro with 56 metres @ 2.2g/t, 17 metres @ 6.8g/t and 60 metres @ 0.7g/t from Tekeledougou. In addition, drilling north of Zone B has served to further extend the mineralised strike at Sanankoro to over 5 kilometres in length.



Cora has a good management team that is headed by Dr Jonathan Foster, a world-class geologist. The team has a proven track record in making multi-million ounce gold discoveries which have been developed into profitable mines. Dr Foster has described the overall scale and quality of Sanankoro as being remarkable.



Cora Gold permits and deposits. Source: Company

It seems to be fast appearing obvious that there is a large discovery to be drilled out which has a potential scale of covering an 8-10 kilometre strike length at an economically mineable grade. This material could in the end become feed material for Hummingbird's mill that lies just 8 miles away.

Hummingbird vended certain of its Malian licences into Cora for a 50% interest which following the IPO of Cora in October 2017 has seen its interest diluted down to 34%. Sanankoro was seen by the company as being a non-core licence for the next four years and of a potential size that really warranted having its own exploration budget and dedicated project team. To all intents and purposes, Cora is acting as a highly-cost effective project generator for Hummingbird.

Strategy for growth

Hummingbird is being positioned to become a substantial mid-tier gold producer. For many years, mid-tier gold miners have been seen to outperform the industry giants by pursuing smaller projects with lower costs and high margins, which seems to neatly encapsulate the company's ethos.

Hummingbird has now established a strategic framework to deliver value and growth. Yanfolila, with its strong cash flow generation, just US\$60 million of debt and with the scope to become debt free within 12 months, provides a high-quality platform on which to build such a mid-tier entity. The company has the necessary skill set within its project team of world class engineers and geologists, which was clearly demonstrated at Yanfolila where the project was brought into production on time and on budget for just US\$88 million.

Guidance for Yanfolila in 2018 is for 105,000 – 115,000 oz of high margin production, with low costs of between US\$750 – 800 per ounce (AISC). After a Q1 2018 ramp up, commercial production began at the start of Q2. The company is seeking to invest 15% of free cash flow into exploration, which equates to around US\$8 million this year and will largely be spent in infill drilling to convert resources into reserves. More than 50,000 metres of drilling is planned at six deposits to convert an additional 400,000 oz of resources into reserves, with the goal of extending the mine life from the current 6.5 years to 10 years. This new reserve statement will form the basis of the new mining plan, which is expected to be published by the year-end.

Currently, 120,000 - 135,000 oz are forecast in the first full year of commercial production, which runs from 1st April 2018 to 31st March 2019 with a production target for 135,000 oz being outlined in briefings for calendar year 2019. There are good opportunities for expansion at Yanfolila given the number of satellite deposits that have been discovered including Gonka, Guiren West, Sanioumale East & West.

In all there is at present some 1.5Moz of Indicated and Inferred Resources which lay outside the current mine plan. These could provide additional reserves, thereby increasing the rate of production in future years, coupled with providing additional significant extensions of the mine's life. Such moves would allow the NPV to rise substantially. **That's not to mention the** wider Yanfolila assessment and development as along with Liberia, the company has some 4,000km² of acreage which offers significant further exploration potential.

The Dugbe Gold Project is Liberia's largest gold deposit, with a resource of 4.2Moz. The map on page 11 really shows the scale of the future potential. Over the years, Hummingbird has spent a total of US\$70 million on exploration and evaluation which has demonstrated the obvious potential for a total of 6-8Moz at something like 1.5g/t gold. As yet, drilling has not provided any high-grade core. So, due to the larger tonnage that needs to be mined and processed, the capital intensity could be significantly higher than at Yanfolila.



Back in 2016 the gold price was US\$1,050/oz, which made returns at the Dugbe Gold Project appear to not be sufficiently attractive at that time. However, with gold now consistently trading around the US\$1,300 mark, robust economics have already been demonstrated. Dugbe is a lower grade project than Yanfolila with a lower return. Shareholders naturally would not necessarily want management to commit funds from a project with an IRR of 60% (Yanfolila) to Dugbe, which has an IRR of 30%. Interested parties are being sought as farm in partners, as a potential alternative to developing it solo and who have the necessary financial strength to develop a project with the large potential scale that is being unveiled.

In 2018 the company is seeking to unlock the value at Dugbe. The MDA being signed into law is an important milestone and along with the optimised DFS represents an updated comprehensive study on which to successfully negotiate a joint-venture deal with a partner. The original 2Moz Dugbe Gold Project had a PEA for a 125,000 oz per annum mine. But, there is obvious scope for a far larger project which is expected to be outlined in the forthcoming optimised DFS. Current negotiations with well-financed joint-venture partners could fund this potentially large-scale project and, in the process, create further value for Hummingbird. There are plenty of development options and the scale of this project looks certain to be able to drive portfolio growth.

Management is looking to fast track growth towards its goal of becoming a mid-tier gold producer by taking advantage of M&A opportunities, in a move that could emulate the success that has been enjoyed at Yanfolila. The focus is on development stage projects or projects that are already in production. Development projects would not only represent more affordable options, but also have the scope to create far greater value for shareholders. In addition, development projects would provide an investment opportunity and fully utilise the proven skill set of the team in project design, delivery and being able to develop projects on time and on budget.

Hummingbird has its eyes firmly set on continuing to be a higher margin gold producer and so smaller and higher-grade projects are likely to be of most interest. This is because the same gold production can be achieved with substantially lower capex, as has been wellillustrated at Yanfolila. The board is looking at investing in both brownfield and greenfield targets where there is a good opportunity of converting resources to reserves. Such targets provide opportunities where the board can grow value through cash flow generation backed up by a highly discipline approach to capital allocation alongside balance sheet strength.

At the same time, Cora Gold looks well placed to generate projects for Hummingbird in a cost-effective manner. Cora has a highly prospective gold portfolio consisting of 1,700km² in well-established gold areas like the Yanfolila Gold Belt in Mali and the Kenieba Window in Mali/Senegal. Already, the three main project areas have been de-risked with multiple gold targets intercepted by drilling. It is fast becoming obvious that the Sanakoro Gold Discovery has the potential for be a standalone mine development and provide feedstock for the company's Yanfolila plant, which lies just 8 kilometres away.

The company is led by a young entrepreneurial management team which was quick to grasp the opportunity that Yanfolila provided as a foundation on which to build a strong growth business. This is a management team which we believe looks like it can be relied upon to make the most of M&A growth opportunities moving ahead. The company is led by Dan Betts who is not a mining engineer nor a geologist, but a businessman and entrepreneur. It might be that he does not quite fit the City's traditional image of a typical mining company boss. However, the management team and the advisory panel is made up of world-class mining professionals and perhaps the company needs to have a capital market day to properly demonstrate its depth of gold mining experience and expertise. Institutional shareholders like Capital, Odey, Fidelity and Majedie already seem to have been convinced.

Today, Hummingbird looks to be well-placed to become a mid-tier gold producer. This is based on Yanfolila's strong free cash flow and backed by a strong institutional shareholder base. Together, the two projects have a combined project NPV(8) of greater than US\$600 million at a US\$1,350 gold price.

Currently, Hummingbird looks to be undervalued when compared against its peer group. Normally, a re-rating of the stock would have been expected following Yanfolila being successfully put into production, but this has not happened yet. Perhaps the catalyst will come with the Q2 2018 production figures which are expected to be released in mid-July 2018. These should demonstrate that commercial production has been consistently achieved for a full three months.



Financials & current trading

Losses that have been recorded over the last five years are largely due to expenditure incurred in exploration and evaluation on the company's gold exploration properties in Liberia and Mali, along with administration expenses and share based payments that have led to Yanfolila coming into production, and the development of Dugbe.

Y/E 31 December US\$'000s	2014'	2014A ²	2015A	2016A	2017A
Revenue	-	-	-	-	-
Pre-tax profit/loss	-4,466	-3,382	-4,563	- 5,336	-8,442
Net profit/loss	-4,466	-3,382	-4,563	-5,336	-8,442
' – 12 months to 31 May 2014					
² - 7 months to 31 December 2014					

- 7 months to 51 December 2014

Hummingbird Resources five-year trading history. Source: Company accounts

2017 results

Financial results for the twelve months ended 31st December 2017 covered the period when the Yanfolila Gold Project was brought into production within both the planned 18-month schedule and the US\$88.5 million budgeted capital costs. The first gold pour was on schedule before the end of the year. In this period, the company replaced its bridging loan finance with a senior debt facility of US\$60 million with Coris Bank International, to be repaid on a straight-line basis over three years from June 2018. After US\$6.775 million of administrative expenses, US\$6.514 million of finance income and US\$6.877 million of finance expenses, the company made a loss of US\$5.336 million after tax and a USD 1.55 cent loss per share.

Recent developments

In March 2018, the company announced an update on the ramp up in gold production at Yanfolila. News was that in the first half of the month the plant operated at an average of 95% of the design throughput as well as consistently achieving a gold recovery of 96%. By mid-March 2018, 16,804 ounces of gold had been recovered with a head grade of more than 3g/t.

First quarter 2018 production results from Yanfolila were announced at the end of April 2018 which showed that the mine and plant had been operating at name plate capacity since 1st April 2018, which meant that commercial production had been achieved. In the first quarter, 18,785 ounces of gold were poured at an average grade of 2.96g/t. Gold sales totalled 11,941 ounces at an average price of US\$1,332 per ounce and at the end of the quarter the company had US\$28 million of cash in the bank.

Q1 production results also included production guidance for 2018 of 105,000 – 115,000 ounces of gold, which includes the Q1 ramp up period. At the time, Dan Betts, CEO, pointed out that one of the team's priorities was the exploration program of around US\$8 million targeting near mine opportunities to convert resources into reserves and thereby increase the mine life.

Risks

Geological risks

There are a series of technical risk factors concerning the amount of understanding of the geology of the project areas, the mineralisation style being targeted and the distribution and magnitude of the indicators that have been identified in exploration work.

Political risk

There are political risks involved in companies operating in Mail and Liberia. The mining industry is arguably the most susceptible sector of the market to political risk largely due to its importance to the host countries' economies.

Metal price risks

Metal prices are highly cyclical and changes in the prices of gold could have a negative or positive impact on the valuation of the company's projects and revenue from the sales of metals. Over the past ten years, the price of gold has been highly volatile, trading in the range of US\$1,899 - \$712 per ounce, and currently trades around the US\$1,270 level.

Exchange rate risks

Movements in the value of currencies will have an effect on the company's accounts on translation from West African CFA franc into US dollars. Fluctuations in the value of the US dollar and West African CFA franc against sterling may well have an effect on the valuation that Hummingbird is awarded by the UK stock market.



Board of Directors

Russell King – Non-Executive Chairman

Russell is Senior Independent Director of Spectris plc and Interserve plc and an Independent Non-Executive Director of BDO LLP. Between 2010 and 2013 he was a Senior Advisor to RBC Capital Markets on Metals and Mining. Prior to this Russell served as Chief Strategy Officer at Anglo American plc where he had global responsibility for strategy, business development, government relations, safety and sustainable development. He was also a member of Anglo American's executive committee for eight years. Additionally, Russell was Senior Independent Non-Executive Director of Aggreko plc, the FTSE 100 temporary power company, from February 2007 to April 2017.

Daniel Betts – Managing Director

Daniel founded Hummingbird in November 2005. After graduating from Nottingham University, he worked for Accenture Management Consultants until he joined the Betts family business in 2000. Founded in 1760, the family business is the oldest privately-owned gold bullion smelters and refiners in the country. The company has a long history of trading across the world and in dealing in all areas of the precious metal industry. While working for the Betts family business, Daniel established a number of natural resource-based businesses in Uganda, Namibia, Sierra Leone, Mauritania and Peru, before founding Hummingbird Resources in 2005.

Thomas Hill – Finance Director & Company Secretary

Thomas joined the Company as Chief Financial Officer in September 2010 and was appointed as Finance Director in July 2012. Prior to this Thomas was a Senior Manager within BDO LLP's natural resources department, where he worked extensively with quoted mining and exploration companies and was involved with numerous flotations and other corporate transactions. He has a metallurgy, economics and management degree from Trinity College, Oxford and qualified as a Chartered Accountant with BDO LLP in 2001.

Stephen Betts – Non-Executive Director

Stephen founded Hummingbird Resources in November 2005. He has over 40 years' experience in trading with gold and related businesses in developing countries, having established several businesses in West Africa during his career. He is the Chairman of the Stephen Betts group of companies. The family business has over 250 years' history in smelting, refining and bullion dealing.

David Straker-Smith- Non-Executive Director

David Straker-Smith is a Director of CrossBorder Capital Ltd, which he joined in April 1999. CrossBorder Capital is a London-based investment research and advisory firm regulated by the FCA. Previously, he worked at ING Barings Securities Ltd from 1996 to 1999, where he was Head of Equity Sales for Eastern Europe, and at Gerrard & National Holdings plc from 1980 until 1995, a firm which operated as a discount house, futures broker, money broker, stockbroker and fund manager. During his time at Gerrard & National Holdings plc, he became a main Board Director and active Fund Manager. He is a Director of New Vision Management Limited, a Dublin regulated management company, and a Director of Nomad Energy UK Limited.

Attie Roux – Non-Executive Director

Adriaan (Attie) Roux is a Metallurgical Engineer with over 42 years operational, technical and executive management experience in the mining industry. He was until recently the COO of Endeavour Mining and was instrumental in the development and growth of that group. He has been internal director of a number of companies within both Anglogold Ashanti and Endeavour. Attie is a Registered Professional with the SA Council for Natural Scientific Professions. He will also serve as Chairman of the Technical Advisory Committee.

Ernie Nutter – Non-Executive Director

Ernest (Ernie) is a highly regarded mining analyst, formerly with one of the world's largest money managers, Capital Group, from 2004 until his retirement in 2017. Prior to this, he spent over 13 years with the Royal Bank of Canada where he was Managing Director of RBC Capital Markets, Director of RBC's Global Mining Research team and former Chairman of RBC Dominion Securities' (now RBC Capital Markets) Strategic Planning Committee. Ernie holds a Bachelor of Science degree in Geology from Dalhousie University.

Senior Management

Robert Monro – Head of Business Development

Bert joined Hummingbird in 2009 as Operations Manager, in charge with overseeing the development of the Dugbe Gold Project as it progressed from greenfield exploration to maiden resources. Following 18 months in the field, Bert spent six months in Monrovia as the acting Country Manager, overseeing all in-country activity, before returning to London in April 2011 as Hummingbird's Head of Business Development. He is a Non-Executive Director of Cora Gold Ltd, which is listed on AIM with Hummingbird as a major shareholder.

Shaun Bunn – Senior VP Project Delivery

Shaun is a mining executive with over 30 years' experience in exploration, mining, processing and project development. Shaun has a BSc and GDip (Metallurgy) from WA School of Mines, and an MBA from Deakin University. Shaun has managed mining projects through all stages of development, from grass roots exploration, feasibility studies, financing, construction, commissioning and operations.



Wayne Galea – VP EPCM

Wayne is a mining professional with 31 years' experience in the mining industry, specialising in gold. A process engineer by background, he has worked for a number of the world's leading engineering companies, including AMEC, Bateman and Signet, where he has extensive experience of managing EPCM contracts. Wayne has also worked directly for gold mining companies such KBK Gold, where he was instrumental in their project execution. His career has led him to have experienced working in Africa, Asia and Australasia, with a focus on process engineering. Wayne therefore brings significant technical and project execution skills to the Hummingbird team.

William Cook – VP Operations

William is a former officer of the British Army having served in the Light Infantry. Following his army service, he worked in the security sector for companies such as Control Risks, Rubicon and Salamanca Risk Management before joining Hummingbird Resources as Country Manager. William is experienced in the operational and logistical management of projects in challenging environments. In his capacity as VP Operations, he has been responsible for the establishment and ongoing running and development of all Hummingbird's operational capability in Liberia and Mali.

David Hebditch – VP SHEC

David is a social scientist by training and has worked for Hummingbird since 2012. He has successfully project managed the Dugbe Gold Project Environmental and Social Impact Assessment (ESIA) to IFC Performance Standards, and a number of specialist baseline studies and impact assessments at Yanfolila Gold Project since 2014. David holds an MSc from London School of Economics (LSE) and a BSc from University College London (UCL). Prior to joining Hummingbird, David worked in sustainability research, with a focus on market governance and smallholder supply chains, consulting primarily to the International Institute for Environment and Development (IIED). He has recently undertaken NEBOSH training and overseen the development of a comprehensive Environmental and Social Management System (ESMS) at Yanfolila.

Murray Paterson– VP Geology

Murray has over 20 years' experience as a mine (open pit and underground), mineral resource and exploration geologist, specialising in international assignments at new or startup operations in multi commodities (Cu-Ur, Pb-Zn-Ag, Au, & W). He has worked as a highlevel manager, a geological and mining systems consultant, and an exploration (gold porphyry systems and IRGS) and mine geologist. For all geological data integration and presentation, Murray uses Global Mapper and Surfer.

Timothy Huskinson– VP Finance

Tim joined the Hummingbird team in April 2011 and has been responsible for implementing the accounting and reporting structures within the group. In July 2014, he oversaw the integration of the Yanfolila Gold Project companies. Tim qualified as a Chartered Accountant with BDO LLP in 2009 and has 10 years' accountancy experience, covering a range of sectors, including natural resource and engineering. He has extensive experience of IFRS and complex international groups, and has taken Hummingbird through exploration, development, and now construction phases. Tim has an MEng degree with distinction from Nottingham University in Electrical & Electronic Engineering with management studies.

Technical Advisory Committee

Ian Cockerill

Ian is the former Non-Executive Chairman of Hummingbird Resources. He was also formerly CEO of Gold Fields Ltd and Anglo Coal Ltd. Ian is currently Non-Executive Director of Endeavour Mining, Chairman of Petmin Ltd and Chairman of the Leadership for Conservation in Africa.

David Lunt

David specialises in the design of process facilities for the recovery of gold, base metals, uranium and other minerals. He has held positions as Technical Director of GRD Minproc (now Amec Foster Wheeler) and Cominco Resources. David's experience in gold extraction covers both oxide and sulphide processes as well as refining.

Attie Roux – Non-Executive Director

Biography is shown on page 21

Ernie Nutter – Non-Executive Director

Biography is shown on page 21



Forecasts

We initiate coverage of Hummingbird with forecasts for the financial years ending 31^{st} December 2018 and 2019. In 2018 we expect to see the ramp up of gold production at Yanfolila commenced in Q1 followed by commercial production for the remaining 9 months of the year. The company has targeted between 105,000 and 115,000 oz of gold production for 2018 (with 120,000 – 135,000 oz in the first full year of commercial production) at an assumed average gold price of US\$1,300 per oz. Cost of sales includes guidance on All in Sustaining Costs (AISC) of US\$750 – 800/oz, plus there are depreciation and amortisation charges. This period includes the first US\$20 million instalment of three annual repayments of the US\$60 million loan in May 2018 plus interest at 9% pa. After administration charges and minorities we expect a pre-tax profit of US\$5.770 million and earnings per share of USD 1.66 cents.

For 2019 it is assumed that gold production is maintained at the expected level of commercial production, which is roughly 10,000 oz per month, in line with management's comments. AISC has been maintained at US\$750 – 800/oz. After depreciation and amortisation charges the gross profit comes out at US\$23.970 million. The pre-tax profit comes out at US\$13.850 million and earnings per share at USD 3.95 cents.

Year End 31 December (000s 'US\$)	FY2016a	FY 2017a	FY 2018e	FY 2019e
Continuing operations				
Revenue	-	-	143,000	169,000
Cost of sales	-	-	(114,940)	(129,420)
Depreciation and amortisation charges	-	-	(11,680)	(13,810)
Gross Profit			16,380	25,770
Share based payments	(505)	(424)	-	-
Other administrative expenses	(7,114)	(6,351)	(6,000)	(6,000)
Administrative expenses	(7,619)	(6,775)	(6,000)	(6,000)
Finance income	668	6,541	1,000	2,000
Finance income	(1,491)	(6,877)	-	-
Profit on disposal of subsidiaries	-	1,919	-	-
Share of associate loss	-	(117)	-	-
Net income attributable to minorities	-	-	(5,610)	(7,920)
Profit/(loss) before tax	(8,442)	(5,336)	5,770	13,850
Тах	-	-	-	-
Profit/(loss) for the year attributable to equity holders of the parent	(8,442)	(5,336)	5,770	13,850
Profit/(loss) per ordinary share				
Basic (\$ cents)	(3.60)	(1.55)	1.66	3.95
Weighted average number of shares	234,603,288	343,566,800	348,374,767	350,938,603
Total shares plus warrants and options	364,497,238	363,540,153	371,350,409	364,563,807

Source: Company/Align Research

Valuation

In seeking to place a value per share on Hummingbird we have used a sum-of-the-parts valuation for the company's interests in Yanfolila, Dugbe and Cora Gold.

Yanfolila

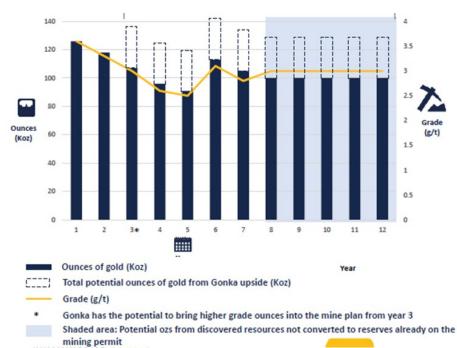
Our financial model is based on the current DFS mine plan plus a discussion with management. The target for the current year is 105,000 - 115,000 oz of gold, with AISC at US\$750 - 800 per ounce, which includes capex. The current DFS mine plan is for 107,000 oz/year, with a 7.5 year life and AISC of US\$750 - 800/oz. The CEO's statement in the 2017 Annual Report carries a target of 120,000 - 130,000 oz in the first full year of commercial production (1st April 2018 - 31st March 2019), which has also been reflected in our model.

The senior debt facility of US\$60 million with Coris Bank International is assumed to be repaid on a straight-line basis over three years from June 2018. The loan is in West African CFA franc which is the local currency and pegged to the Euro. There are three payments of US\$20 million, plus 9% interest per annum, that are due to be paid annually in May and the debt will be fully paid off in three years. Mali has a 3% royalty on gold sales and 30% basic tax rate which was used in the analysis.

Discount rate	NPV	NPV
	US\$ million	£ million
10%	177.01	133.09
12%	149.84	112.66

Net Present Value of the Yanfolila Gold Project. Source: Align Research

We determined a Net Present Value at a discount rate of both 10% and 12%. As Hummingbird is already in production the lower discount rate is used with a NPV(10) figure of US\$177.01 million in our analysis.



Forecast production and the increases in life of mine and reserves that the additional planned exploration is expected to provide. Source: Company



The valuation of Hummingbird's 80% stake in the project was determined to be US\$141.61 million or £107.28 million at current FX rates. Our valuation for Yanfolila is conservative as it is based on the DFS mine plan.

The current DFS mine plan looks as though it will soon be superseded. The US\$8 million planned annual expenditure on exploration is expected to lead to a significant amount of the current Indicated and Inferred resources being converted into reserves over the coming years. If the company converts just 50% of these resources, this would extend the mine life by 6-8 years and it does look likely that within the fullness of time the mine life could be a more generally acceptable 12-15 years.

Also, there is the opportunity to increase the level of gold production by bringing Gonka into production in year 3 and being able to access the higher-grade area by underground mining. All these measures could serve to substantially improve the free cash flow and the NPV.

Dugbe

We choose to value the Dugbe Gold Project by peer comparisons.

Company	Share	EV	Resource	EV/oz	Comments
	price	US\$m	000's oz	US\$	
Orezone Gold Corp (TSX:ORE)	C\$0.80	117.22	4,770	24.57	Burkina Faso Bombore Project – Fully permitted having received all environmental approvals. Company is updating the 2015 feasibility study following changes in the resource statement to 4.77Moz.
Cardinal Resources (ASX:CDV)	A\$0.415	104.02	7,000	14.85	Ghana Namdini Project 7Moz (Indicated 6.6Moz + Inferred 0.5Moz). Exploration activity also underway at Bolgatanga and Subranum Projects
Loncor Resources (TSX-V:LN)	C\$0.075	8.58	1,000	8.58	DRC Ngayu Project (Ngayu Archaean greenstone belt) where the Mineral Resource estimate at Makapela is 1,000,100 oz Inferred.
Amani Gold (ASX:ANL)	A\$0.009	9.06	1,180	7.67	DRC Giro Gold Project (Moto greenstone belt) (55.25%) maiden resource announced in 2017 2.14Moz. Net attributable 1.18Moz.
Kefi Minerals (AIM:KEFI)	2.24p	11.62	1,890	6.15	Ethiopia Tulu Kapa Project (95%) – Development ready project, currently seeking finance for production to start in 2020. 1.7Moz resource (1.6Moz Indicated + 1.4Moz Inferred). Net attributable 1.61Moz. Qutman (40%) – Saudi Arabia – Completing PFS 0.7Moz resource. Net attributable 0.28Moz.
Azumah Resources (ASX:AZM)	A\$0.026	12.06	2,063	5.85	Ghana Wa Gold Project – Largely derisked for rapid development, with next 2 years work funded by Ibaera Capital that can earn up to a 47.5% interest. Across 7 deposits totals 2,063Moz (637,000 Measured, 744,000 Indicated + 681,000 Inferred).
Sarama Resources (TSX-V:SWA)	C\$0.095	10.15	1.699	5.97	Burkina Faso ThreeBee Project – Bondi Deposit historical mineral resource of 282,000oz gold Measured & Indicated and 150,000 gold Inferred. (100%) South Houde Project – 2.1Moz Inferred Resources (50%). Koumandara Project – 0.7Moz Inferred Resource (31%)
Average				10.52	

Selected African exploration/development gold mining companies. Source: Align Research

This project has 4.2Moz of resources and so we have analysed a selection of African gold exploration and development companies to determine an average in-situ valuation of US\$10.52 per ounce.



Cora Gold

We have used the current share price to value the company's stake in Cora. It must be pointed out that there are some substantially higher valuations being placed on similar companies that are at the pre-resource stage but have reported gold grade and widths of gold mineralisation in some of the well-known gold plays in West Africa. Cora Gold is currently trading at a market capitalisation of £8.26 million, which looks pretty low when compared to Oklo Resources (ASX:OKU) which is also actively exploring in Mali and at its current share price of A\$0.30 is capitalised at £48.8 million.

Sum-of-the-parts valuation

Assets	Valua	tion
	US\$ million	£ million
Yanfolila Gold Project (80% of US\$177.01 million)	141.61	107.28
Dugbe Gold Project 4.2Moz at US\$10.52/oz	44.18	32.84
Cora Gold 34% at £8.12 million (current market		2.76
capitalisation)		
Cash (US\$28 million as at 31 March 2018)	28.00	21.21
US\$11 million owed by the government of Mali for	11.00	8.33
purchase of a 10% stake in Yanfolila		
Debt - company	-	-
Total		172.42
Per share (350,938,603)		49.13
On a fully diluted basis (371,350,409)		46.43

Source: Align Research

These figures were transferred into our SOTP table which showed a combined valuation of £172.43 million. Based on the number of current shares in issue (350,938,603) equates to 49.13p per share. On a fully diluted basis (371,350,409) this equates to 46.43p per share, which we have chosen to use as our target price to again be ultra conservative.

A glimpse of the sort of price target that may be achievable in the future, once there is improved confidence from consistent gold production, profitability and free cash flow can be provided by looking at the forward price to free cash flow multiple (a popular metric for analysing mid-tier gold producers).

On a price to free cash flow basis, at a current production rate of 10,000 oz per month, the company will produce 120,000 ounces over the next 12 months. At an AISC of US\$750-800/oz and gold price of US\$1,300/oz this would create free cash flow in excess of US\$50 million attributable to the company. At present, mid-tier gold producers are rated at 4-5 times free cash flow, which would suggest a valuation of US\$200 – 250 million or £152 - 189 million.

Conclusion

Hummingbird shares seem to be cheap in our view and are now attracting the attention of serious investors. We believe the shares deserve a re-rating on the back of the recent move into commercial production, but this has yet to happen. The stock might continue to be undervalued purely because the company is only just a few months into commercial production, but a very healthy flow of news is developing, with plenty of catalysts which should help and which we believe provides opportunity to investors with the foresight to look medium term and in particular if they believe that the gold price is due a material leg higher (which we do).

However, West African gold stocks have sprung a few disappointments on investors over recent years. In the deserts of doubt, the publication of consistent production data showing the mining of high grade gold from Yanfolila will represent highly compelling data to really demonstrate that this project is technically and economic very robust, as well as providing highly attractive returns.

There are a series of important milestones over the next 18 months which could all allow significant value to be added. We hope to be given the opportunity to update our target price as progress gets made on these developments. **Our coverage of Hummingbird Resources is initiated with a target price of 46.43p and a Conviction Buy stance.**



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