# **Helium One Global**

## Seismic gathering commenced ahead of Q2 drilling

#### Commencement of seismic acquisition on the Rukwa licence

Following the mobilisation of the seismic crew in mid-February, Helium One has commenced seismic data acquisition with mobilisation of vibroseis trucks and geophones to its Rukwa Project (100%) in Tanzania. 150km of infill 2D seismic will be shot targeting multiple trapping styles and will define the optimal well locations to be drilled in Q2'21. This should provide greater clarity on the subsurface and help to reduce the exploration risk. It is targeting shallow trap structures identified from the interpretation of historic seismic and recent gravity gradient data. It is also positive to see that Helium One has further strengthened its management team by adding Lorna Blaisse as Principal Geologist, who has 15 years' experience, managing exploration campaigns across Africa, including working with similar rift basin geology to Tanzania.

## Rukwa project has the potential to be a material helium producer

Helium One's key asset is its Tanzanian licence, Rukwa, which is a globally unique large-scale, high-grade, primary helium project. Most helium is produced as a by-product in large gas developments but Rukwa is one of very few helium projects that could be produced from non-hydrocarbon sources. To put it in context each of the wells is targeting the equivalent of around a year's global helium demand. The total prospect inventory is 138bcf unrisked (P50), the largest primary helium resource in the world. HE1 has a first mover advantage in Tanzania, with attractive fiscal terms for helium extraction and low exploration drilling costs. It is also currently carrying out geochemical exploration at the Eyasi Project (Helium One 100%), evaluating historic seep locations as well as identifying potential new seep locations at the southern end of the project area.

## Exploration drilling in Q2 2020 targeting 18bcf worth £1.02/sh unrisked

HE1 intends to drill three exploration wells (on the Kasuku, Itumbula and Mbuni prospects) within the Rukwa licence in Q2'21. Each well should take a month to drill but helium shows in the mudlogs could be reportable prior to hole completion. We carry 34p/sh of unrisked and 3p/sh of risked value on average for each well. A substantial part of the overall risking relates to the "play" risk, which is the same for all prospects. Therefore, if one well is successful, it would derisk HE1's other targets. We estimate that it could double the overall chance of success for the other prospects.

## Helium market investment dynamics versus oil & gas

Helium has several unique properties that make it an essential element for many industries, which cannot be synthesised or manufactured, and with no substitutes. There has been a shortage of helium in recent years leading to a significant increase in prices. Helium is an extremely highly-valued commodity with a price around 100x that of natural gas, meaning even small amounts or low concentrations can be highly economic. Given the smaller footprint of a helium development, a standalone helium production facility can be developed quicker and much more cost effectively than a conventional greenfield oil and gas discovery that would normally take five-plus years and potentially cost billions of dollars to develop. A concentrated market also confers a competitive advantage to the current participants. HE1 expects to produce helium from resources that do not have associated hydrocarbon accumulations, allowing HE1 to produce carbon emission-free helium, unlike most of the global supply that is a by-product of natural gas operations. Listed helium companies have soared in value over the last year, in stark contrast to oil and gas companies.

## Valuation: almost 15x upside on an unrisked basis; peers +650% over last year

In our base case scenario, we use a helium price of US\$250/mcf long-term flat from 2021 and a 14% discount rate from 1/1/2021. Our risked NAV is 11p/sh, which implies >50% upside from the current share price. On an unrisked basis, we have a NAV of £1.04/sh or almost 15x upside. Further to this are the follow-on prospects that are not included in our NAV and its other exploration areas. Helium focused E&P companies, especially those akin to Helium One that focus on primary helium have seen their shares rise by >650% in 2020, demonstrating the market's interest in the helium sector.

GICS Sector	Energy
Ticker	LN:HE1
Market cap 16-Mar-21 (US\$m)	50
Share price 16-Mar-21 (GBp)	7.0

NAV summary (p/sh)							
Asset Unrisked Risked							
Kasuku	30	3.3					
Itumbula	32	2.4					
Mbuni	40	3.1					
Cash/other	2	2					
Total NAV	104	11					

Source: H&P estimates

# US\$762mm

Unrisked value of the 3 prospects planned to be drilling in H1'21

>650%

Share price performance of the 3 primary helium E&P companies in 2020

H&P Advisory Ltd is a Retained Advisor to Helium One. The cost of producing this material has been covered by Helium One as part of a contractual engagement with H&P; this report should therefore be considered an "acceptable minor non-monetary benefit" under the MiFID II Directive.

# Anish Kapadia

Research Analyst

T +44 (0) 207 907 8500 E anish@hannam.partners

## Jay Ashfield

Sales

T +44 (0) 207 907 2022 E ja@hannam.partners

### H&P Advisory Ltd

2 Park Street, Mayfair London W1K 2HX

## **Investment Case**

Company overview — Helium One Global Ltd ("Helium One"; ticker "HE1") is a UK AIM-listed pure-play helium exploration company, with a first-mover advantage in developing helium assets in Tanzania. Founded in September 2015, its goal is to become a significant primary supplier of high-grade helium to industry. It owns exploration licences in three locations in Tanzania, a country with helium occurrences that are globally unique. HE1 is the only listed company in the UK that enables investors to participate in the helium market. HE1, which had been private, raised an upsized GBP£6mm and amalgamated with Attis Oil and Gas in order to gain a London listing.

Risked and Unrisked NAV at different helium prices and discount rates

Risked		Helium Price (\$/mcf)						
		\$100.00	\$175.00	\$250.00	\$325.00	\$400.00		
	10%	4.5p	8.8p	13.1p	17.4p	21.7 p		
Discount	12%	4.0p	7.9p	11.7 p	15.6p	19.4p		
rate	14%	3.6p	7.1p	10.6p	14.1p	17.5p		
	16%	3.3p	6.5p	9.6p	12.7 p	15.8p		
	18%	3.0p	5.9p	8.7 p	11.6p	14.4p		

Unrisked	Helium Price (\$/mcf)								
	\$100.00	\$175.00	\$250.00	\$325.00	\$400.00				
10%	зор	83p	135p	187 p	239p				
12%	25p	72p	118p	165p	211p				
14%	20p	62p	104p	146p	188p				
16%	16p	54P	92p	130p	168p				
18%	12p	47 P	82p	116p	150p				

Source: H&P estimates

**Valuation:** >50% upside to our risked NAV – In our base case scenario, we use a helium price of US\$250/mcf long-term flat from 2021 and a 14% discount rate from 1/1/2021. Our risked NAV is 11p/sh, which implies >50% upside from the current share price. On an unrisked basis, we have a NAV of £1.04/sh or almost 15x upside.

Helium market investment dynamics vs Oil & Gas—Exploration opportunities provide investors with uncorrelated returns to the market and investing in helium brings further diversification to a portfolio as it is uncorrelated to oil and gas. Listed helium companies have soared in value over the last year in stark contrast to oil and gas companies. Helium is an extremely highly-valued commodity with a price that is around 100x that of natural gas, meaning that even small amounts or low concentrations can be highly economic. Given the smaller footprint of a helium development, a standalone helium production facility can be developed quicker than a conventional greenfield oil and gas discovery that would normally take five-plus years. A concentrated market also confers a competitive advantage to the current participants.

Helium fundamentals – We also recently produced a comprehensive report on the helium sector providing some unique perspectives and data points on this opaque, niche industry. We have created our own proprietary Helium supply and demand balance as well as sourcing proprietary pricing data. Helium has several unique properties that make it an essential element for many industries, without a substitute, which cannot be synthesised or manufactured. It has been an essential part of growing technology-focused businesses (e.g. semiconductors, university labs, fibre optics and space travel) and there are many more potential growth areas. It does not suffer from environmental criticism, pipeline constraints, regulatory burdens and excess taxes. It is a scarce commodity but when it is found it is relatively quick and easy to produce meaning generally stronger returns than from oil and gas projects. Current pricing is at least triple our estimated breakeven for a 6bcf helium development in Tanzania.

**Rukwa:** one of the highest concentration Helium deposits – Helium One's key asset is its Tanzanian licence, Rukwa, which is a globally unique large-scale, high-grade, primary helium project (measured surface seeps at 10.6% helium mixed with nitrogen, the principal component of the atmosphere). Most



helium is produced as a by-product in large gas developments at grades ranging from 0.35%He down to 0.05%He. Rukwa is one of very few helium projects that could be produced in significant volume from non-hydrocarbon sources. To put it in context each of the wells is targeting the equivalent of around a year's global helium demand. The total prospect inventory is 138bcf unrisked (P50).

**First mover advantage** — HE1 was the first company to pick up licences in Tanzania dedicated to helium exploration. As a result, it has been able to get its pick of the prospective areas to license. It is viewed as having the best undeveloped unexplored helium prospectivity in the world and HE1 had the serendipitous first-mover advantage as the founders recognised the potential.

More attractive fiscal terms than for hydrocarbon developments – The fiscal terms for helium extraction are attractive with a low 3% royalty, a 16% free carry available for the Government and the corporate tax rate of 30%. We estimate that HE1 will get around 50% of the FCF from the project over the life.

**Low-cost exploration and appraisal** – We estimate that the exploration drilling cost for a Rukwa well is just US\$1mm per well versus our base case unrisked NAV of US\$300mm for an average prospect of 6bcf (P50).

Reasonable risk but very low cost for frontier exploration – This is frontier exploration but Helium One has a number of independent shots at goal, there is plenty of encouragement from surface and geological data obtained to date, and the actual exploration cost is very low in comparison to targeting similar-sized value in oil and gas exploration. In aggregate the competent person reports see 10-14% chance of success for the 2021 target prospects, although each prospect has multiple targets. However, HE1 sees around a 20% geological chance of success. Source and migration have been derisked by surface seeps, the reservoir has been proved by previous wells and the trap is data limited by 2D seismic and gravity gradient data. High relief structures are imaged by both geophysical data sets. The biggest risk surrounds seal but sealing units are known in the geology.

**Successful well would have a significant derisking impact** – As with petroleum, a single discovery is often accompanied by additional accumulations within the same play fairway. A substantial part of the overall risking relates to the "play" risk, which is the same for all prospects. Therefore, if one well is successful, it would derisk all the other prospects. We estimate that it could double the overall chance of success for the other prospects.

**Rapid and low-cost development** – A development is expected to be straightforward (unlike a traditional oil and gas project), without the need for expensive gas pipeline infrastructure. The production wells are much cheaper than oil and gas wells to drill and complete (estimated cost of US\$3mm per well). The processing plant can be constructed abroad requiring only installation and commissioning – the size of the plant is small at <10,000m². The estimated cost for a plant is US\$50mm.

Tanzania: attractive investment and geological destination – Tanzania has become a more stable investment destination in recent years and has a history of foreign company participation in the extractive industries. Tanzania has shown strong economic growth over the last decade, which in 2020 propelled it into lower-middle income status, having seen the poverty rate decline. Tanzania is predominantly a mining country with both small and large-scale operations and many foreign companies large and small operating successfully. Recent regulatory reforms and settlements of disputes with foreign companies (e.g. Barrick Gold)



and delayed project approvals (Aminex) are positive signals. The President's address to parliament recently mentioned helium as a potential strategic supply source for the country.

From a geological perspective, Tanzania is attractive for helium prospectivity as in the East African Rift Valley, the break-up of the earth's crust from powerful plate tectonic forces creates the environment to release helium from the crust, which can migrate into viable reservoirs. HE1 has good relations at all levels of the mining commission and has paid all its dues on time.

Management: experienced and running a lean operation – We see HE1 as having an effective management team, balancing both the technical and commercial sides of the helium business. Directors have kept salaries to a minimum with a focus on options and share-based remuneration, meaning clear alignment with shareholders. Management owns 3% of the company and with options 8% of the diluted share count. Also, the company has minimal G&A as a result. The management team has experience of developing projects in a range of jurisdictions in Africa. It is technically focused and led, with experience of delivery on the continent. The members of the Company's Board, senior management team and technical team have extensive expertise in resource exploration including geology, geophysics, geochemistry, and drilling execution, development inclusive of engineering, procurement and construction and operations, inclusive of execution and delivery.

Corporate Social Responsibility plan – Environmental, social and corporate governance (ESG) is an increasingly important issue for all investors, especially in the oil and gas industry. HE1 expects to find helium, mixed with nitrogen, that does not have associated hydrocarbon production, allowing HE1 to produce greenhouse gas emission-free helium, unlike most of the global supply that is associated with natural gas production. There will be some carbon footprint involved in the facilities required for development and production of helium. This is something that HE1 could address through the use of renewable energy sources or carbon offsets. Helium One has adopted a proactive land management strategy and strong relationships with local communities, traditional owners and government bodies.

Investment risks – We see the main risks as exploration and appraisal of the existing helium deposit, weaker helium prices, Government approvals and development and financing risk. There are several mitigants to these risks. On pricing, our scoping economics show that a successful development is profitable down to US\$100/mcf, which is 60% lower than our base case scenario. Appraisal risk is real; however, it is not as risky as pure exploration given there is already well data and seismic available. Government approvals have been problematic in Tanzania; however, this is a relatively small project that is not a strategic energy resource for Tanzania and also recently approvals have been forthcoming for other companies in the oil and gas and mining spaces (e.g. Aminex). In terms of the financing risk, Helium One will potentially need to either raise equity finance, forward sell helium production or look to farm out its assets to fund the development; however, based on our scoping economics there should be a large NPV relative to the size of the investment required.



# Catalysts

There are various catalysts that we see potentially positively impacting the equity story over the coming year.

- Q1 2D seismic acquisition H1 intends to acquire 125 line kms of 2D seismic over the priority prospects to infill the existing late 1980s era seismic grid. The seismic will improve the subsurface data density with modern acquisition and presumably increase the chance of success in the subsequent exploration and appraisal drilling.
- Q2'21 exploration and appraisal drilling HE1 intends to drill three exploration wells (on the Kasuku, Itumbula and Mbuni prospects) within the Rukwa licence early Q2'21. We expect the first well to be spudded in May, and in terms of results each well should take a month to drill but helium shows in the mudlogs could be available earlier. We carry 34p/sh of unrisked and 3p/sh of risked value on average for each well.
- Follow-up to a potential discovery On success, we would expect an
  appraisal well to be drilled to establish pressure communication and to
  obtain further subsurface data. Also, there will likely be a 3D seismic survey
  carried out to better understand the reservoir geometry. HE1 has seen
  interest from helium off-takers and these discussions will also become more
  serious.
- Further exploration drilling Given HE1's strategy to pursue an aggressive exploration and development plan, we would expect further drilling to take place on Rukwa after the initial round of drilling, especially if there are positive indications from the initial three wells.
- Engineering and environmental studies We expect HE1 to start the preliminary engineering studies including a bankable feasibility study, ahead of development planning in 2021, as well as the requisite environmental studies, which should enable development to start in 2022 and first production potentially in early 2023.
- Eyasi and Balangida prospect maturation HE1 currently has not revealed any prospects on these two licences that are at an earlier stage of investigation than Rukwa. We expect HE1 to release further details of the leads it sees on these blocks in 2021 and potentially some of these could be matured to the prospect stage. We see drilling on these prospects occurring in H1'22 at the earliest. Both have exceptional helium gas concentrations at the surface, and ideal geology for source, reservoir, trap and seal. It is currently carrying out geochemical exploration work at the Eyasi project valuating historic seep locations as well as identifying potential new seep locations at the southern end of the project area.
- Future funding Now that Helium One is listed on the AIM market it has more ready access to capital. In the event of a successful exploration well we see several avenues for Helium One to raise the funds to develop the helium. Helium One currently owns 100% of the asset, so there is plenty of room to farm-down any discovery and gain a carry-on development. It could also raise debt against a potential development. In addition, there may be the possibility of leasing the equipment prior to first cash flows, reducing the funding requirement. Raising further equity is also an option in a success case scenario to fund both the development and expand the exploration programme.



- **Helium near-term supply additions** There are two major Helium supply projects due online over the next year or so. Gazprom is due to bring its Amur plant in Russia online, which will add 700mmcf/y of capacity initially (~10% of the current supply) and Qatar is also expected to bring on line its 3<sup>rd</sup> helium plant at Barzan adding 425mmcf/d of supply. Also, there are planned additions in Russia (Yaraktin; 230mmcf/y capacity) and an expansion in Algeria (350mmcf/y capacity).
- Commentary from industrial gases companies There are a few major buyers and distributors of helium, which are the major industrial gases companies: Air Liquide, Air Products, Linde and Messer. Given that the helium market is fairly opaque, commentary from these companies can be useful in getting a sense of the market. Also, commentary from end users (e.g. universities) and large commercial buyers (e.g. Party City) can give a sense of any shortages or pricing trends.
- **Peer group performance** Although there are no helium focused companies listed in Europe, there are a few other listed helium companies globally. Performance and commentary from these companies are likely to impact sentiment on HE1. Also, we see the potential for several private helium companies to pursue IPOs over the coming year.



## Valuation

Our favoured valuation methodology is a bottom-up risked NAV, in which we have built a DCF valuation of the main exploration prospects and then risked them for geological and commercialisation risk. There is further upside to our valuation from several exploration prospects that have not been firmed up to drill as yet and the additional licences on which prospects have not been matured. We also look at the valuation relative to some other Helium focused exploration and development companies.

In our base-case scenario, we use a helium price of US\$250/mcf long-term flat from 2021 (the helium price is discussed in detail in our macro note) and a 14% discount rate from 1/1/2021. Our discount rate is in line with our oil and gas coverage in Africa, factoring in emerging market risk. Our risked NAV is 11p/sh, which implies >50% upside from the current share price. On an unrisked basis we have a NAV of £1.04/sh or almost 15x upside. Exploration success will significantly derisk our unrisked NAV.

#### NAV

	Gross		Net	NPV	Unrisked	Unrisked	Geo./techn.	Comm.	Well cost	Risked	Risked
Asset	bcf	Interest	bcf	US\$/mcf	US\$m	£/sh	CoS	CoS	US\$m	US\$m	£/sh
Kasuku (Rukwa)	5	84.0%	4	\$51	\$226	£0.30	14%	75%	\$1	\$25	£0.03
Itumbula (Rukwa)	5	84.0%	5	\$51	\$235	£0.32	10%	75%	\$1	\$18	£0.02
Mbuni (Rukwa)	7	84.0%	6	\$51	\$301	£0.40	10%	75%	\$1	\$23	£0.03
YE'20 net cash					\$8	£0.01				\$8	£0.01
Working capital and other					\$o	£0.00				\$o	£0.00
Options proceeds					\$2	£0.00				\$2	£0.00
G&A	@	2.0x			\$4	£0.01				\$4	£0.01
Total NAV					\$775	£1.04				\$79	£0.11

Source: H&P estimates

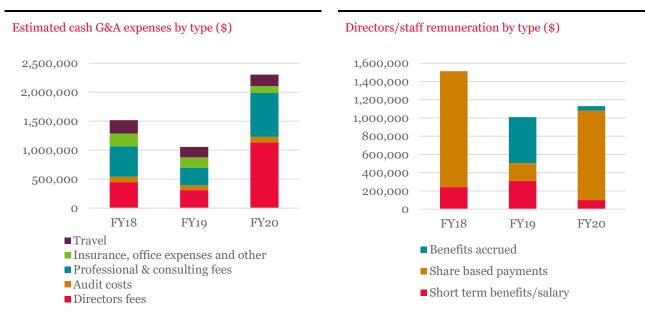
**Rukwa** – We have built a bottom-up risked valuation of the prospects that HE1 intends to drill on the Rukwa licence. This is described in detail on page 27 of our initiation report. Each of the prospects are between 5-7bcf and based on our conceptual development model we have an NPV of US\$51/mcf, which implies an unrisked value of on average \$250mm for each of the prospects, around 5x the current share price. We use the geological risking contained in the recent prospectus of between 10-17% for the prospects; however, we see this as conservative given the company believes that a 20% chance of success is more realistic. We also factor in a further 75% chance of commercialisation to take into account potential development risk, delays and the funding requirement for development. In total on a risked basis, we see 9p/sh of value or \$66mm for the three Rukwa prospects.

**Rukwa follow-on** – There are several follow-on prospects that would be derisked in the event of positive drilling results (even possibly in the case of a non-commercial well) – we do not currently include any value for these but to give a sense of the scale, there is in total 138bcf of unrisked resource on a P50 basis; on a risked basis this equates to ~14bcf, which at US\$50/mcf NPV would be worth US\$700mm.

**Cash and debt** – Based on the proforma accounts, at end H1'20, HE1 had US\$0.2mm of cash, Attis had US\$0.5mm and US\$7mm of cash was raised after transaction costs. Therefore, in our NAV, we assume a net cash position of US\$7.7mm (around 15% of the market capitalisation). This is worth 1p/sh on the NAV.



**Working capital and other assets and liabilities** – Based on the proforma accounts there was US\$0.2mm of receivables and US\$0.7mm of payables. This has a negligible impact on our NAV.



Source: Company data, H&P estimates

**G&A** – HE1 has historically operated with a low level of G&A and even though being listed and starting a drilling campaign will increase costs somewhat, we expect G&A to stay low. We expect 2021 cash G&A of US\$2mm, which we capitalise at 2x and leads to a negative value of 1p/sh.

Warrants and options – Our NAV is calculated on a fully diluted basis. Helium One has 64mm options and warrants outstanding at an average exercise price of 16c/sh (70% premium to the current share price) in a range of o-4oc/sh. We exclude the options and warrants that are significantly out of the money; this leaves 54mm at an average exercise price of 3.6c/sh. If all these options and warrants are exercised it would raise US\$2mm and increase the share count by 11%.

**Other** – We do not include any value for Helium One's Eyasi and Balangida licences with totalling >1,000km2. However, success on Rukwa and further exploration work on these licences will derisk the value.

## NAV sensitivity to helium price and discount rate

Risked		Helium Price (\$/mcf)							
		\$100.00 \$175.00 \$250.00 \$325.00 \$400							
	10%	4.5p	8.8p	13.1p	17.4p	21.7p			
Discount	12%	4.0p	7.9p	11.7 p	15.6p	19.4p			
rate	14%	3.6p	7.1p	10.6p	14.1p	17.5p			
	16%	3.3p	6.5p	9.6p	12.7 p	15.8p			
	18%	3.0p	5.9p	8.7 p	11.6p	14.4p			

Unrisked	Helium Price (\$/mcf)								
	\$100.00	\$175.00	\$250.00	\$325.00	\$400.00				
10%	зор	83p	135p	187 p	239p				
12%	25p	72p	118p	165p	211p				
14%	20p	62p	104p	146p	188p				
16%	16p	54p	92p	130p	168p				
18%	12p	47 P	82p	116p	150p				

Source: H&P estimates



#### **Disclaimer**

This Document has been prepared by H&P Advisory Limited ("H&P"). It is protected by international copyright laws and is for the recipient's use in connection with considering a potential business relationship with H&P only. This Document and any related materials are confidential and may not be distributed or reproduced (in whole or in part) in any form without H&P's prior written permission.

By accepting or accessing this Document or any related materials you agree to be bound by the limitations and conditions set out herein and, in particular, will be taken to have represented, warranted and undertaken that you have read and agree to comply with the contents of this disclaimer including, without limitation, the obligation to keep information contained in this Document and any related materials confidential.

This Document does not represent investment research for the purposes of the rules of the Financial Conduct Authority ("FCA Rules"). To the extent it constitutes a research recommendation, it takes the form of NON-INDEPENDENT research for the purposes of the FCA Rules. As such it constitutes a MARKETING COMMUNICATION, has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of dissemination of investment research.

The information contained herein does not constitute an offer or solicitation to sell or acquire any security or fund the acquisition of any security by anyone in any jurisdiction, nor should it be regarded as a contractual document. Under no circumstances should the information provided in this Document or any other written or oral information made available in connection with it be considered as investment advice, or as a sufficient basis on which to make investment decisions. This Document is being provided to you for information purposes only.

The distribution of this Document or any information contained in it and any related materials may be restricted by law in certain jurisdictions, and any person into whose possession this Document or any part of it comes should inform themselves about, and observe, any such restrictions.

The information in this Document does not purport to be comprehensive and has been provided by H&P (and, in certain cases, third party sources) and has not been independently verified. No reliance may be placed for any purposes whatsoever on the information contained in this Document or related materials or in the completeness of such information.

The information set out herein and in any related materials reflects prevailing conditions and our views as at this date and is subject to updating, completion, revision, verification and amendment, and such information may change materially. H&P is under no obligation to provide the recipient with access to any additional information or to update this Document or any related materials or to correct any inaccuracies in it which may become apparent.

Whilst this Document has been prepared in good faith, neither H&P nor any of its group undertakings, nor any of its or their respective directors, members, advisers, representatives, officers, agents, consultants or employees makes, or is authorised to make any representation, warranty or undertaking, express or implied, with respect to the information or opinions contained in it and no responsibility or liability is accepted by any of them as to the accuracy, completeness or reasonableness of such information or opinions or any other written or oral information made available to any party or its advisers. Without prejudice to the foregoing, neither H&P nor any of its group undertakings, nor any of its or their respective directors, members, advisers, representatives, officers, agents, consultants or employees accepts any liability whatsoever for any loss howsoever arising, directly or indirectly, from use of this Document and/or related materials or their contents or otherwise arising in connection therewith. This Document shall not exclude any liability for, or remedy in respect of, fraudulent misrepresentation.

All statements of opinion and/or belief contained in this Document and all views expressed and all projections, forecasts or statements regarding future events or possible future performance represent H&P's own assessment and interpretation of information available to it as at the date of this Document. This Document and any related materials may include certain forward-looking statements, beliefs or opinions. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There can be no assurance that any of the results and events contemplated by the forward-looking statements contained in the information can be achieved or will, in fact, occur. No representation is made or any assurance, undertaking or indemnity given to you that such forward looking statements are correct or that they can be achieved. Past performance cannot be relied on as a guide to future performance.

This Document is directed at persons having professional experience in matters relating to investments to whom Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 ("FPO") applies, or high net worth organisations to whom Article 49 of the FPO applies. The investment or investment activity to which this communication relates is available only to such persons and other persons to whom this communication may lawfully be made ("relevant persons") and will be engaged in only with such persons. This Document must not be acted upon or relied upon by persons who are not relevant persons.

This Document is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. In particular, the information contained in this Document is not for publication, release or distribution, and may not be taken or transmitted into: (i) the United States or its territories or possessions, or distributed, directly or indirectly, in the United States, its territories or possessions or to any U.S. person as such term is defined in Regulation S of the Securities Act; or (ii) Australia, Canada, Japan, New Zealand or the Republic of South Africa. Any failure to comply with this restriction may constitute a violation of United States, Canadian, Japanese, New Zealand or South African securities law. Further, the distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this Document comes are required to inform themselves about, and observe, any such restrictions.

H&P may from time to time have a broking, corporate finance advisory or other relationship with a company which is the subject of or referred to in the Document.

This Document may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omission (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees or losses (including lost income or profits and opportunity costs or losses caused by negligence) in connection with any use of their content including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

In H&P's view this material is considered as "acceptable minor non-monetary benefit" under MiFID II as it is either: (i) "non-substantive short-term market commentary"; and/or (ii) making a brief reference to existing H&P research and, as such, is in-and-of-itself non-substantive; and/or (iii) paid for by a corporate issuer or potential corporate issuer as part of a contractual engagement with H&P.

H&P Advisory Ltd is registered in England No.11120795. Registered Office: 2 Park Street, London W1K 2HX. H&P Advisory Ltd is authorised and regulated by the Financial Conduct Authority (Firm Reference Number 805667).

