# **Helium One Global**

### Updating our NAV on higher risked resource

#### Increasing our risked NAV to 25p/sh on lower risking and extra prospect

We have updated our NAV to incorporate an additional prospect, Tai, which Helium One now intends to drill as its first prospect in early July. We have also doubled the exploration chance of success on the prospects to 21% on average and we have lowered our discount rate to 12% from 14% to factor in a lower cost of capital for helium companies relative to oil and gas companies given the investor appetite for the sector and the higher percentage of debt funding at the development stage. We have also updated our USD/GBP exchange rate to \$1.40 from \$1.35, which has an offsetting negative impact. In aggregate this leads to an increase in our risked NAV to 25p/sh from 11p/sh previously.

#### Encouraging results from Helium One's 2D seismic campaign

HE1 completed an extended 200km 2D seismic shoot in early May, which focussed on areas of known prospectivity to provide greater clarity over subsurface structures, which HE1 believed to have the highest chances of successfully discovering helium. This modern seismic data is of a higher quality than earlier work, resulting in a better understanding of the subsurface and reassessment of geological risk across its portfolio. The company has not updated the chance of success on the prospects; however, we believe that the chance of success will have increased and as a result we have doubled the chance of success used by the reserves consultants. Initial data interpretation has upgraded and expanded the Tai prospect, which was poorly defined on legacy seismic data, but now clearly demonstrates a faulted 3-way dip closure concurrent with a gravity high. We assume a 6bcf prospect (in line with the average of the other planned prospects), which we see as worth 39p/sh unrisked.

### Updates to global helium supply and demand data: bullish data points

We have updated our global supply outlook to factor in recent data and news flow. The USGS reported that US helium production (the world's largest supplier) was down 10% last year and helium supply out of the BLM storage was down 38% - in total US helium supply was 2.7bcf/d (-17% y/y). US helium exports fell 5%. Supply out of La Barge in the US fell by 8.5% versus 2018 to 1.3bcf/d. Algerian supplies into Europe were down 30% y/y in 2020, on the back of lower gas production. In terms of new capacity Russia's Amur plant seems unlikely to have any impact in 2021 given delays and Qatar's new capacity is likely to only ramp up slowly. The US BLM volumes are likely to be down sharply again this year with potential reservoir issues being flagged up also at the Cliffside field used for storage. Import data from early 2021 shows demand is picking up in Europe and Asia.

#### Market developments: strong stock performance and robust helium pricing

Listed helium companies soared in value over 2020. This trend has continued in 2021 with strong performance from companies such as Desert Mountain Energy (+194% ytd), Avanti Energy (+490%), Renergen (+74%) and Royal Helium (+41%) – Helium One is up 198% year to date. There have been several capital raises by helium focused companies also and three more companies coming to market in Canada: Global Helium, Imperial Helium and Royal Helium. This demonstrates the strong market appetite for helium investment, with Helium One the only listed helium company in the UK. Looking at updated pricing and volume data suggests that helium prices have remaining robust into 2021. Data from Asia implies helium import pricing of >US\$300/mcf from Qatar.

### Valuation: ~6x upside on an unrisked basis

In our base case scenario, we use a helium price of US\$250/mcf long-term flat from 2021 and a 12% discount rate from 1/1/2021. Our risked NAV is 25p/sh, which implies 25% upside from the current share price. On an unrisked basis, we have a NAV of £1.33/sh or ~6x upside. Further to this are the follow-on prospects that are not included in our NAV and its other exploration areas. A US\$50/mcf increase in the helium price would increase our risked NAV by 6p/sh and unrisked by 33p/sh.

GICS Sector	Energy
Ticker	LN:HE1
Market cap 21-May-21 (US\$m)	180
Share price 21-May-21 (GBp)	20.8

NAV summary (p/sh)								
Asset	Unrisked	Risked						
Kasuku	28	7						
Itumbula	29	5						
Mbuni	37	6						
Tai	31	4						
Cash/other	3	3						
Total NAV	128	25						

# >US\$1bn

Unrisked value of the 4 prospects planned to be drilled in 2021

>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

## NAV update

#### **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
w 1 (D 1 )		0 0/		<b>.</b> 0		0 0	00/	0.04		<b>.</b>	0
Kasuku (Rukwa)	5.2	84.0%	4.4	\$58	\$257	£0.28	28%	85%	\$1	\$62	£0.07
Itumbula (Rukwa)	5.4	84.0%	4.6	\$58	\$267	£0.29	19%	85%	\$1	\$45	£0.05
Mbuni (Rukwa)	7.0	84.0%	5.9	\$58	\$342	£0.37	20%	85%	\$1	\$58	£0.06
Tai (Rukwa)	5.9	84.0%	5.0	\$58	\$290	£0.31	15%	85%	\$1	\$38	£0.04
YE'20 net cash					\$7	£0.01				\$7	£0.01
2021 capital raise					\$14	£0.01				\$14	£0.01
Working capital and other					\$o	£0.00				\$o	£0.00
Options proceeds					\$7	£0.01				\$7	£0.01
G&A	@	2.0X			\$4	£0.00				\$4	£0.00
Total NAV					\$1,187	£1.28				\$233	£0.25

Source: H&P estimates

We have updated our NAV to incorporate an additional prospect, Tai (worth 4p/sh risked or 31p/sh unrisked), which Helium One now intends to drill as its first prospect in early July. We have also doubled the exploration chance of success on the prospects to 21% on average and we have lowered our discount rate to 12% from 14% to factor in a lower cost of capital for helium companies relative to oil and gas companies given the investor appetite for the sector and the higher percentage of debt funding at the development stage. We have also updated our USD/GBP exchange rate to \$1.40 from \$1.35, which has an offsetting negative impact. In aggregate this leads to an increase in our risked NAV to 25p/sh from 11p/sh previously.

In our base case scenario, we use a helium price of US\$250/mcf long-term flat from 2021 and a 12% discount rate from 1/1/2021. Our risked NAV is 25p/sh, which implies 25% upside from the current share price. On an unrisked basis, we have a NAV of £1.33/sh or ~6x upside. Further to this are the follow-on prospects that are not included in our NAV and its other exploration areas. A US\$50/mcf increase in the helium price would increase our risked NAV by 6p/sh and unrisked by 33p/sh.

#### NAV sensitivity to helium price and discount rate

Risked		Helium Price (\$/mcf)							
		\$100.00	\$175.00	\$250.00	\$325.00	\$400.00			
	8%	10.1p	20.9p	31.6p	42.4p	53.2p			
Discount	10%	8.9p	18.5p	28.1p	37.7p	47.3p			
rate	12%	7.9p	16.5p	25.1p	33.7 p	42.3p			
	14%	7. <b>o</b> p	14.8p	22.5p	30.3p	38.op			
	16%	6.2p	13.3p	20.3p	27.3p	34.3p			

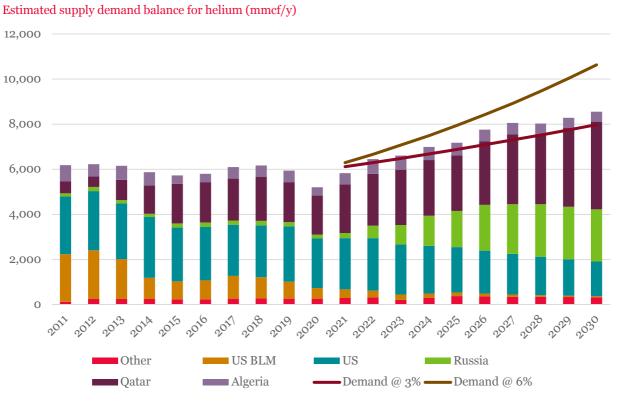
Unrisked	Helium Price (\$/mcf)								
	\$100.00	\$175.00	\$250.00	\$325.00	\$400.00				
8%	41p	103p	166p	228p	291p				
10%	34p	90p	145p	201p	257 p				
12%	28p	78p	128p	178p	228p				
14%	23p	68p	113p	158p	203p				
16%	18p	59p	100p	141p	181p				

Source: H&P estimates



# Helium market update

Helium demand was impacted by COVID in 2021, however pricing appears to have held up after significant rises in late 2019/early 2020. Supply was weaker on lower volumes coming out of storage from the US BLM and weaker natural gas production from Algeria due to weak global gas demand, reducing associated helium production.



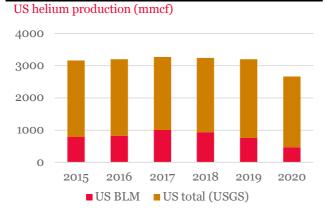
Source: Akap Energy estimates

The updated supply and demand balance in the chart above, sees lower supply expectations over the coming years because of production issues at some existing facilities and expected slower ramp-up of new capacity. We expect that helium supply will grow at a CAGR of around 6% over the next five years based on all the current projects planned but this would be a 3% CAGR based off the more normal 2019 levels. Also, we see risk skewed to the downside given the history of delays/ramp-up issues for new projects and also the risk of operational/geopolitical disruptions from existing projects.

On the demand side, we believe that there is latent, unfulfilled demand for helium as there has been limited supply for several years. A wave of new supply could bring back some of the demand that has been lost over the period of shortages and stimulate new demand from growth technology industries that previously were not able to source helium. We expect that helium demand will grow in a range of 3-6% p.a., which suggests that some of the current tightness may be eased; however, if there is downward pressure on price from incremental supply, we see the potential for higher demand as companies look to secure supplies at lower prices and possibly also look to top up storage levels.



#### Supply





2016 2017

2018 2019

1,100

1,000

Source: USGS, Wyoming Oil and Gas Conservation Commission

The USGS reported that US helium production was down 10% last year and helium supply out of the BLM storage was down 38% - in total US helium supply was 2.7bcf/d (-17% y/y). US helium exports fell 5% y/y.

Supply out of La Barge in the US was up slightly y/y but more importantly fell by 8.5% versus 2018 to 1.3bcf/d (2019 production was lower due to extended maintenance). Exxon also cancelled a CO2 sequestration project associated with La Barge, which means that production is at risk given declining demand for the huge quantities of CO2 being produced and the environmental push back on venting.

Production from the BLM storage was likely somewhat impacted by lower demand but a study out last year on the storage facility suggested that the reservoir was having issues and there is the risk that production rates out of storage could decline rapidly. Overall, it is painting a bearish picture for US supply.

The second largest producing field in the US, the Hugoton, continues to decline at  $\sim$ 5-6% per annum and we estimate is currently producing around 400mmcf/y. There are a few US fields that seem to be underperforming expectations such as the Doe Canyon field in Colorado, where total gas production has dropped by 50% since 2015 implying helium volumes have declined by an equivalent amount. Also, there is lower than expected production coming out of the Lisbon processing facility.

Algerian volumes in 2020 appeared weak as European imports of helium from Algeria fell by >30% y/y. However Qatari exports to the Europe increased by 4% y/y, although were 13% lower than 2018 levels. Russian production was down 6% y/y to 170mmcf.

In terms of future supply, we see Russian capacity ramping up slower than previously expected due to some delays at Amur train 1 (~700mmcf/y capacity) and subsequent trains being delayed also. Furthermore, we believe that comments from Gazprom suggest a substantial amount of this gas will go towards strategic storage. The other large project, Qatar Train 3 has also been delayed but is thought to be ramping up currently but will likely take a couple of years to get to 400mmcf/y nameplate capacity.

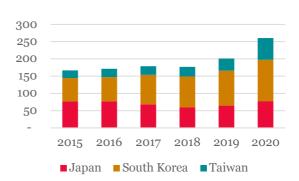


#### **Demand**





Far East helium imports from US (\$mm)



Source: Akap Energy estimates

In the key helium consuming markets, import data suggests that helium demand was unsurprisingly weaker in 2020 than 2019. For example, looking at imports from the US, European helium imports fell 3.5% y/y and Far East imports fell by 7%. However, there are some positive data points: South Korea and Taiwan in aggregate increased imports from Qatar by 22% in 2020 y/y. Also, 2021 data is showing improving volumes after the mid-2020 lows.

#### **Pricing**





Far East 3 month moving average helium import pricing from Qatar (\$/mcf)



Source: Akap Energy estimates

Market pricing for helium is difficult to ascertain as it is not a traded commodity and pricing is normally based on long-term, confidential contracts, resulting in opaque pricing given there are only a few key suppliers and industrial gas buyers.

We believe our price forecast of US\$250/mcf balances the risk of oversupply dampening the market with the upside risk to prices from the potential supply and bullish demand factors mentioned above. Our forecast appears to be substantially lower than current market pricing and in-line with some longer-term contract pricing.

Wholesale helium pricing appeared to strengthen into 2020 and hold up well in the face of COVID. For example, we estimate that EU import pricing was  $\sim$ US\$290/mcf (+16% y/y). Looking at imports from Qatar, we see an even bigger rise in pricing in Asia in 2020 of  $\sim$ 25% to  $\sim$ US\$340/mcf, which is likely due to price increases following the strong demand growth that had been seen up to 2019.



#### **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, 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).

