BEACON Securities Limited

Avanti Energy Inc. (AVN-V)

Catching The Helium Rise

April 9, 2021

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We are initiating coverage of Avanti Energy with a SPEC BUY recommendation and a 12-month price target of $3.80. AVN offers an enticing investment opportunity based on:

World class team. Avanti has assembled several of the key people that identified, modeled and developed the Montney play in NE BC at Encana/Ovintiv where, over ~15 years, production reached nearly 300,000 boe/d.

That team, including Chris Bakker, Genga Nadaraju, Dr. Jim Wood and Ali Esmail, is in the process of building a proprietary G&G model to target significant helium accumulations in western North America.

Supportive He market fundamentals. Helium prices have risen in the past couple of years and demand is expected to climb over this decade as its critical use in MRI, semiconductors, space exploration and nuclear augment traditional applications. Supply will be challenged to keep pace. It has contracted ~20% in the past eight years and is set to lose the last of the U.S. BLM sales in September. Together, these forces are forecast by many to send helium prices much higher in the next several years.

Potential economics are very impressive. With a top line of US$300-US$500/mcf, low royalty rates and reasonable capex and operating costs, AVN may deliver well-level payouts of only a few months and IRRs of 122%-635%. Returns like these would rival (or beat) most O&G plays in Canada and the U.S.

Valuation & Recommendation: Although Avanti is pre-production, our model builds to an average of 330 mcf/d in 2023 on a 60% drilling success. At a 4.0x EV/EBITDA multiple of our 2023 forecasts, our target price is $3.80. We rate Avanti Energy a Spec Buy.

Initiating Coverage

SPEC BUY $3.80

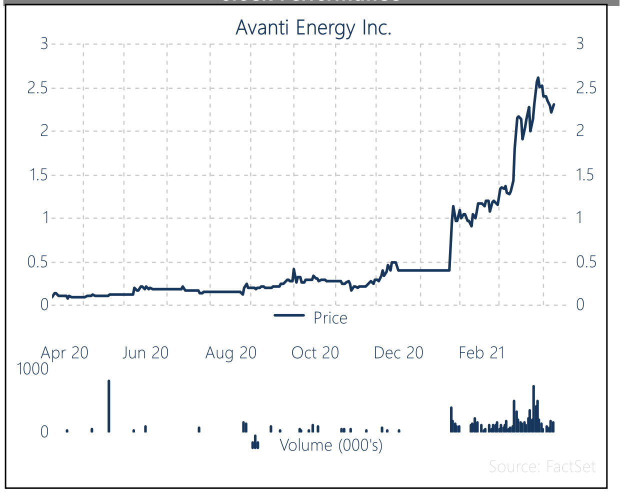
Recent price				$2.32
12-month Target Price				$3.80
Potential Return				64%
52 Week Price Range				$0.09 - $2.82
FYE				Dec 31
Assumptions	**2020A**	**2021E**	**2022E**	**2023E**
Helium price (US$/mcf)	-	-	$300	$325
US$/CDN$	$0.75	$0.78	$0.79	$0.78
Production				
Helium (mcf/d)	-	-	63	330
HE/MM Basic shares	-	-	1.4	6.4
Financial ($MM, except Per Share item)				
EBITDA	$0.0	($1.0)	$6.0	$40.4
FFO	$0.0	($1.0)	$6.0	$40.3
CAPEX	$0.0	$5.7	$15.0	$16.5
YE Net Debt (cash)	($3.6)	($2.7)	($7.2)	($31.0)
Net Debt/CF	n.a.	n.a.	n.a.	n.a.
FFOPS - Fully Diluted	$0.00	($0.02)	$0.11	$0.76
EPS - Fully Diluted	$0.00	($0.03)	$0.08	$0.55
Valuation				
P/CF		n.a.	20.2x	3.1x
EV/EBITDA		n.a.	18.7x	2.2x
EV/MCFPD		n.a.	$1,313,198	$178,485
Stock Data				
Shares Outstanding, Basic (MM)				38.8
Shares Outstanding, Diluted (MM)				49.7
Insider Holdings, Basic				18%
Market Capitalization (MM)				$89.9
Enterprise value (MM)				$82.0

About the Company

Avanti Energy is focused on the exploration, development and production of helium across western Canada and the western United States via the depolyment of its proprietary exploration model.

All prices in C$ unless otherwise stated

Stock Performance



Investment Thesis

The global helium market has been undergoing transformational change on both the supply and demand sides that have aligned to drive recent pricing up by 200%-300%.

- On the supply side, the closure of public access to the U.S. National Reserve, which is operated by the BLM (Bureau of Land Management), as of September 2021 will remove 5%-10% of global supply in an already tight market.
- Global helium demand is experiencing a groundswell of new and/or expanded drivers in the medical, semiconductor, space exploration, quantum computing and nuclear power sectors (to name a few), due to the finite and irreplaceable nature of the element, that drove the Canadian government to put He on its new critical minerals list in March 2021.

While we present a more comprehensive review of the helium market in Appendix I, suffice it to say the macro backdrop presents a compelling opportunity for He exploration in North America, where new sources of supply will be highly sought after to counter the geopolitical risk of imports from Qatar and Russia. This opens an opportunity for companies exploring in western Canada as this country has the 5th-largest helium resources in the world, which could set Canada up as a strategic supplier to our southern neighbors.

So, how does a company set itself apart from its peers in the nascent Canadian helium E&P industry? Well, Avanti chose to get one of the most accomplished exploration and development teams of the past couple of decades that is building a proprietary G&G model, which we believe will put Avanti at the top of the heap in a year or two in terms of asset quality.

Over the next few quarters Avanti has many potential catalysts, including land acquisition, drilling of wells and, ultimately, initial production and cash flow. Although our analysis is preliminary due to lack of historical data, we model the potential returns for Avanti to be very high as long as raw gas and helium content are within our range of expectations.

We are initiating coverage of Avanti Energy Inc. (AVN or the company) with a SPEC BUY rating and a 12-month target price of $3.80 per share.

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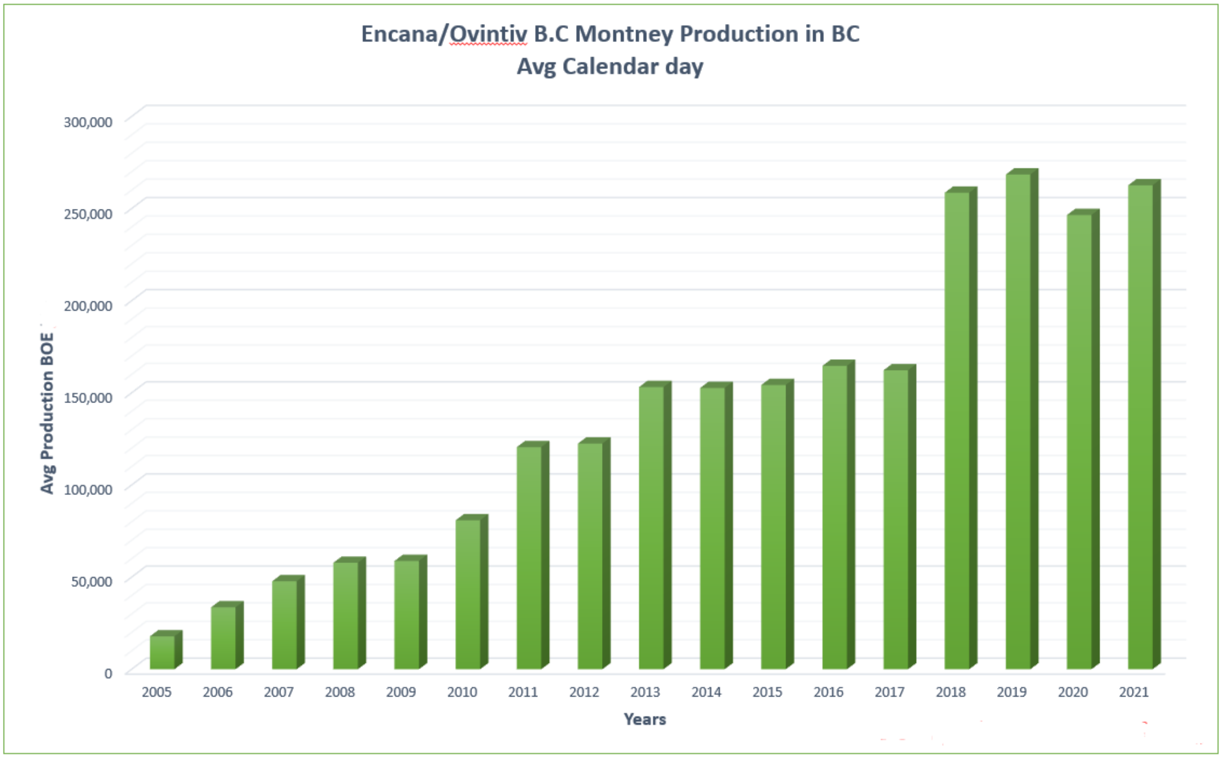
There is O&G Experience…
And Then There is OIL & GAS EXPERIENCE

Although the helium industry in western Canada is relatively new as it pertains to direct helium exploration and development, the skillsets for helium E&D and the natural gas industry are fungible, which gives the Canadian helium industry a huge head start to becoming a meaningful helium producer.

As it is in the oil and gas industry, the success of individual companies will ultimately rest on the skill of the management and technical teams.

Perhaps the most salient rationale for investors to be excited about Avanti is the acumen and previous success of the technical team. Several of the AVN team were key members of the group that discovered and developed the Montney play at Encana/Ovintiv (OVV-T, NR), which was one of the industry leaders of that world-class resource. As shown in Exhibit 1, Encana/Ovintiv's Montney production in B.C. went from concept to nearly 300,000 boe/d over a 15-year period or so that included billions of dollars in capital investment.

Exhibit 1. Encana/Ovintiv B.C. Montney Historical Production



Source; Avanti Energy; GeoScout

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Management Transition Underway

When the joint venture between Avanti and Terrelium was announced last year, there was an expectation that the Terrelium team would migrate to key roles for Avanti. That progression started last week when Genga Nadarajau was appointed VP, Subsurface Geology.

This is a notable move for Avanti as Ms. Nadaraju has had a distinguished career that includes 25 years of diverse O&G experience, including:

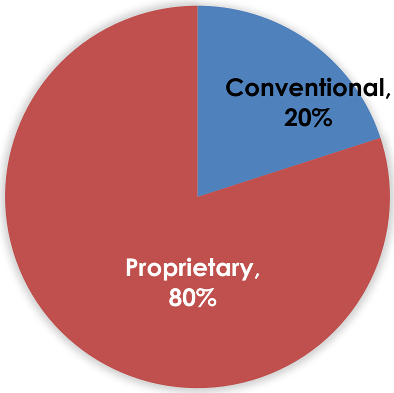
- business development, asset exploitation/development, strategic planning, investor relations, and technical innovation spanning both the conventional and unconventional oil and gas plays in the WCSB.
- she held senior management roles at Encana/Ovintiv, including leading a team of geologists, geophysicists, and engineers to exploit and fully develop the Montney Resource Play.

Over the coming weeks/months, we expect Rob Gamley, CEO, will announce several more of the technical team into key roles for AVN.

Pursuing an 80%-20% Model

Borrowing from the natural gas industry, most of the exploration undertaken to date by AVN's peers has been what the company considers "conventional" exploration, which entails the use of data from previous gas wells and seismic to identify structural Cambrian-aged traps where the "high point" will be drilled. This is a tried-and-true method and should result in reasonable success. Avanti plans to use similar techniques on approximately 20% of its asset base.

Exhibit 2. Expected Exploration Deployment



Source: Beacon Securities Limited

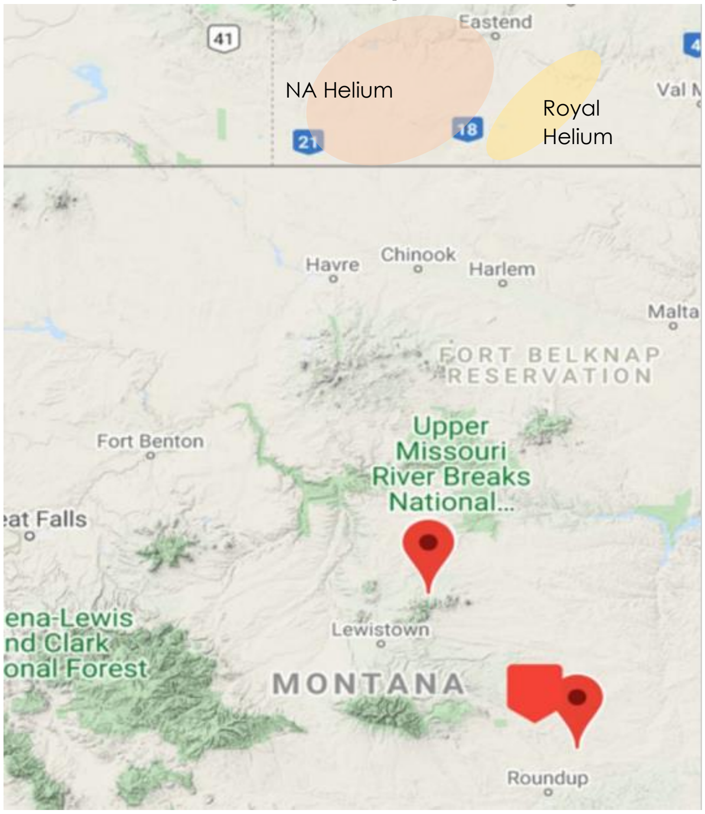
What sets Avanti apart from its peers is the proprietary G&G model that the company is building to fully understand how the source (generally radioactive decay of uranium and thorium), formation and migration will lead to large subsurface accumulations of He. This will employ a similar approach that the Avanti scientists used to understand, locate and develop the Montney play at Encana/Ovintiv.

Obviously, the nature of this work is confidential so, for now, investors will need to have faith in the skill of the Avanti team. However, Avanti expects to use this model in 80% of its exploration activities with the hope to find "elephant"-type plays in various zones. That should translate into larger resources with longer RLI.

Initial Plays In Montana and Alberta

To date, the company has identified 20 or so opportunities in western Canada and Montana and is currently pursuing 10 of those where AVN is focusing on areas with confirmed reservoir rock and multiple DSTs with analysed gas. Land acquisitions have occurred in both areas and drilling could begin this summer.

Exhibit 3: Musselshell County, Montana



Source: Company presentation, Beacon Securities Limited

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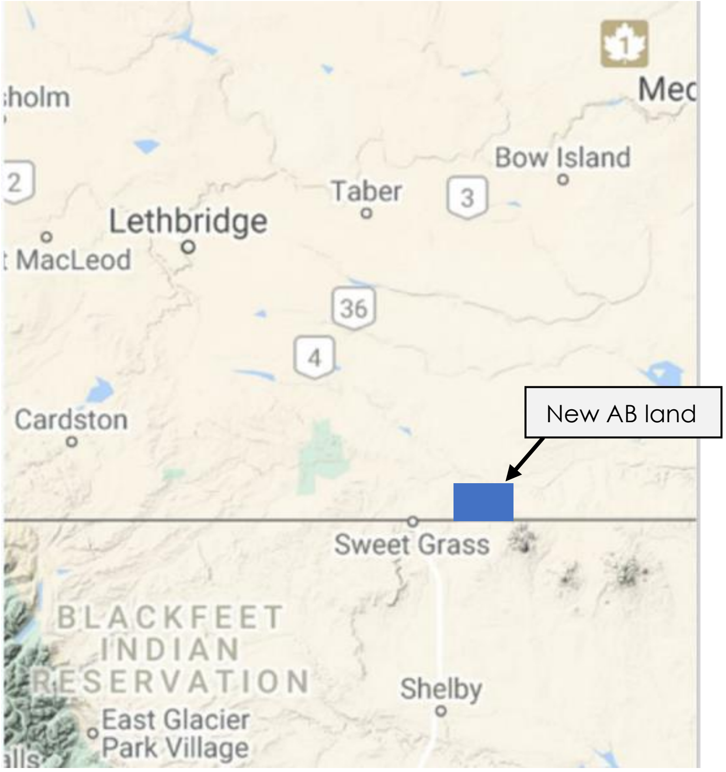
- The first parcel of land for AVN is in Musselshel County, Montana where 2,749 acres directly south of where some of AVN's peers (North American Helium and Royal Helium) are drilling in SW Saskatchewan (see Exhibit 3).
  - AVN sees potential in the Deadwood and Madison formations at Musselshell, based on nearby well data. Possible drilling here in Q3/21.
- AVN has now acquired over 6,000 acres in Alberta, located just north of the U.S. border (see Exhibit 4). The lands are highly prospective for helium and contain several O&G wells.
  - An abandoned gas well showed 2.18% helium (comparing favourably to commercially viable grades ranging from 0.3% to 1%) and 96% nitrogen in the Cambrian, and 0.3% helium and up to 98% nitrogen in the Devonian.
  - Offsetting wells have multiple tests in Cambrian and Devonian intervals with up to 1.79% helium and 83-93% nitrogen content.

Exhibit 4: Alberta Land



Source: Company presentation, Beacon Securities Limited

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As its model rounds out, Avanti will continue to evaluate and map deeper Paleozoic zones in detail as mapping the basement structure will be crucial to high grading areas with structural or stratigraphic trapping of helium.

It is important to note that "high nitrogen content is advantageous over wells with high hydrocarbons as the nitrogen can be safely vented to the atmosphere after the 1% to 2% helium content is removed" as per Ms. Nadaraju.

- The company hopes to add additional lands in Montana where it has been applying its G&G model. Multiple drill targets have been identified, so now it needs to get the land tied up.
- We anticipate that the company will make postings for future Alberta land sales as it identifies suitable targets.
- Avanti has also identified a 55,000 acre project in the mid-west U.S. that potentially has very large He reserves. This is a potential acquisition target for the company.

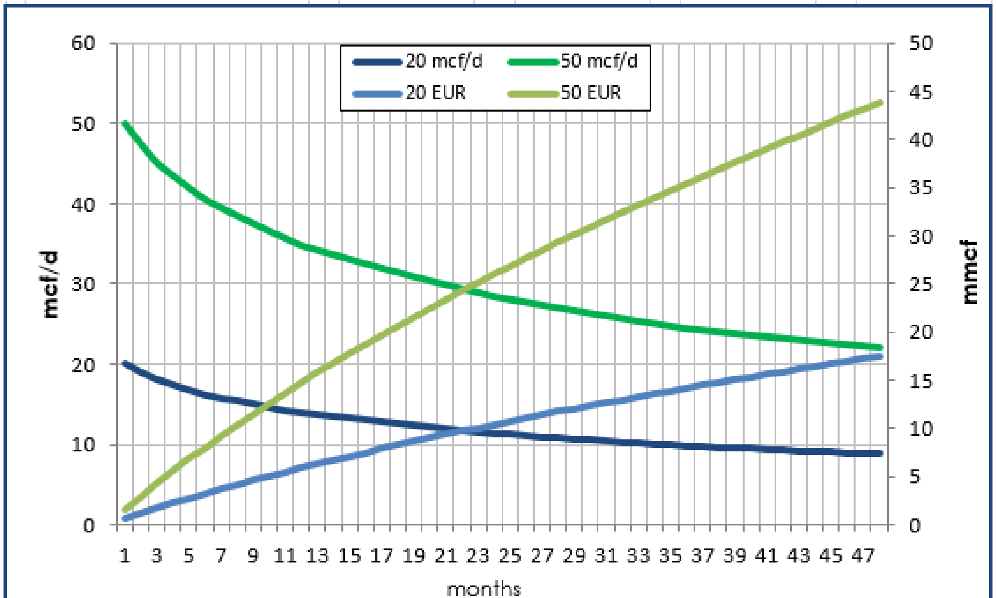
The Right Helium Can Be Highly Economic

Helium has historically been extracted as a by-product of natural gas with the vast majority of the economics being associated with the natural gas production. However, with the recent increases in helium prices it is readily apparent that He E&P can stand on its own and deliver impressive economic returns. Whereas AVN's peers may continue targeting natural gas reservoirs in search of helium, Avanti will look for reservoirs where nitrogen and/or carbon dioxide make up the bulk of the raw gas stream, which is typically cheaper to produce and process.

Avanti is still in the early stages of its He exploration as it has been acquiring various land parcels and has yet to drill a well. However, based on the data of previous wells in and around its lands, AVN believes wells with helium contents in the 1%-2% is very achievable with the potential to be even higher.

Although Avanti has not developed a type curve for any of its projects, it has significant experience in the exploration phase (including drilling) and the operations phase. With that background, we have developed a potential type curve and associated economics based on our discussions with the AVN team.

Exhibit 5: Potential Helium Economics



Well Properties	US$300 helium 20 mcf/d	US$300 helium 50 mcf/d	US$500 helium 20 mcf/d	US$500 helium 50 mcf/d
Raw gas IP90 rate (mmcf/d)	2.0	2.5	2.0	2.5
Helium % of gas stream	1.0%	2.0%	1.0%	2.0%
Helium EUR (mmcf)	65	150	65	150
Summary Economics				
Capital cost (C$mm)	$1.2	$1.2	$1.2	$1.2
P/I Ratio	6.7x	17.8x	12.8x	32.3x
F&D cost (C$/mcf)	$18.46	$8.00	$18.46	$8.00
Recycle ratio	16.7x	38.6x	29.7x	68.6x
IRR	122%	349%	238%	635%
Payback period (months)	8	3	4	2
NPV_{10} (C$mm)	**$8.0**	**$21.3**	**$15.4**	**$38.8**

Source: Beacon Securities Limited

In Exhibit 5 we present a summary of the economics for new He wells in Alberta and Montana based on a few assumptions that include:

- A raw gas rate of 2.0 to 2.5 mmcf/d, which seems reasonable for wells drilled to 2,500 to 3,000 metres in depth.
- Helium content of 1% to 2%
- A helium price of US$300 and US$500 per mcf

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- Fx of $0.80
- DCCT costs of C$1.2 million per well
- A royalty rate of 4.25%, which is applicable for both Alberta and Montana.
- Operating costs of $50/mcf, based on a third-party facility. We expect the company to process its helium via either:
  - pressure swing adsorption (PSA) or temperature swing adsorption (TSA), which removes He from other gases via preferential adsorption to specific adsorbent materials; or
  - membrane separation, which uses high-pressure membranes to purify the He via selective diffusion through the microscopic pores in the membrane

The results are impressive due to the strong operating netbacks of C$309/mcf at a US$300 price and C$548/mcf at a US$500 price. Perhaps most impressive is that **the wells should payout in only two to eight months and generate an IRR of 122% to 635%**.

As with any O&G or helium play, the aforementioned economics can be quite sensitive to variations in the assumptions. However, the two inputs that have the largest impact on the NPV10 are the top line price and the volume of helium produced, which is determined from the raw gas rate and the He content. In Exhibit 6, a matrix of the NPV10 before-tax is provided based on different helium prices and volumes. We note the breakeven point is below 5 mcf/d at US$200/mcf.

Exhibit 6: Helium Economics NPV10 Btx Sensitivities

NPV ($mm)		Helium Price (US$/mcf)						
		$200	$250	$300	$350	$400	$450	$500
Helium production (mcf/d)	5	$0.1	$0.4	$0.8	$1.1	$1.5	$1.9	$2.3
	10	$1.8	$2.7	$3.7	$4.6	$5.5	$6.5	$7.4
	20	$4.5	$6.2	$8.0	$9.8	$11.6	$13.3	$15.4
	30	$7.1	$9.7	$12.3	$15.0	$17.6	$20.2	$22.8
	40	$9.7	$13.2	$16.6	$20.1	$23.5	$27.0	$30.4
	50	$12.6	$17.0	$21.3	$25.7	$30.1	$34.4	$38.8

Source: Beacon Securities Limited

As there are myriad ways for AVN to achieve 20 mcf/d or more (e.g.: 2 mmcf/d raw gas at 1% He or 1 mmcf/d at 2%), we believe the matrix in Exhibit 6 represents reasonable outcomes that are almost all quite impressive.

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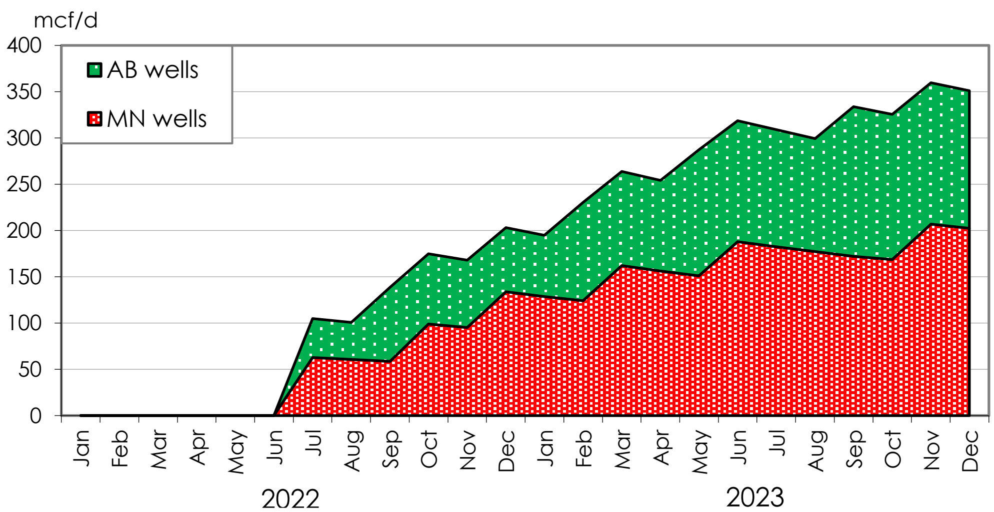
From Concept To Production

With the land that Avanti has already accumulated, the company expects to begin drilling this summer with at least three wells in 2021. We note that since the transfer of drilling knowledge from the O&G industry should be seamless, we do not envision undue risks as it pertains to drilling the vertical helium wells.

Additional lands are expected to be added to the asset base consistently, which is sure to provide many more drilling locations. With this in mind, we have built an operating and financial forecast based on the following:

- Initial production and cash flow to begin in Q3/22 as it will take several months to have a processing facility built
- Production facilities are a standard design from several suppliers that have been proven in the field for many years
- Pipelines are not required as He can be sold at the plant gate
- a $15-$16 million capex program in each 2022 and 2023, based on a 10-well drilling program each year
- average initial production of 35 mcf/d per well
- 60% drilling success

Exhibit 7: Preliminary Production Profile



Source: Company reports, Beacon Securities Limited

The production profile in Exhibit 7 is forecast to deliver $6 million of cash flow in 2022 (remember its only for six months) and $40 million or $0.74/sh (after an assumed 5 million share equity issuance).

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Capital Structure

- 38.8 million basic shares outstanding. This includes the 4.9 million shares issued to the technical team, which are subject to restrictions on resale expiring on July 12, 2021.
    - 3.0 million options at an avg strike price of $0.30.
    - 7.9 million warrants:
        - 0.3 million with an exercise price of $1.00 that expire March 2022.
        - 0.9 million with an exercise price of $0.60 that expire June 2022.
        - 6.8 million with an exercise price of $0.20 that expire in November 2022.
- 49.7 million fully diluted shares outstanding.
- Estimated current net positive working capital of $8.4 million.

Valuation & Recommendation

A valuation calculation for Avanti Energy is somewhat difficult as its Canadian-listed peers are all pre-production. Several of the peers have accumulated vast swaths of land, but until we have more clarity as to the prospectivity of those lands, much of those "assets" may turn out to be cow pasture (i.e.: no resource value). This is exactly the reason AVN is using a "rifle-approach" to its land accumulation.

To determine our $3.80 per share 12-month target price, we apply a 4.0x EV/EBITDA multiple to our 2023 forecasts. In our opinion, if Avanti achieves the success we anticipate (or better), the company is likely to trade at a higher multiple than 4.0x. However, we will watch for results before getting too aggressive.

We are initiating coverage of Avanti Energy with a Spec Buy rating as we believe the company offers exposure to a potentially high growth industry that may deliver very impressive economic returns.

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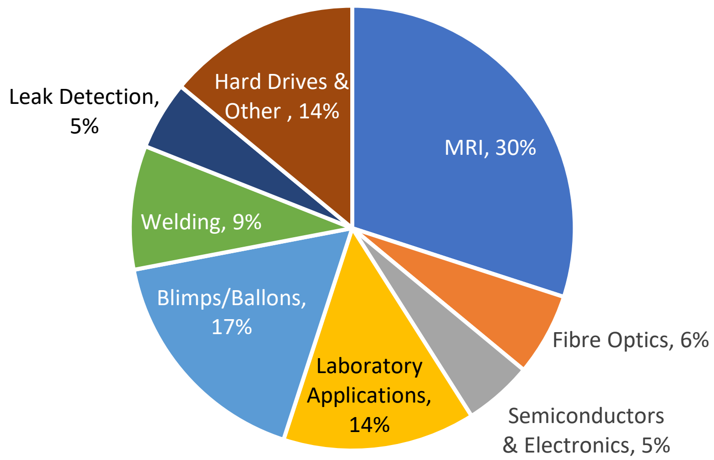
Appendix I: Helium Market

The helium market is unique in that helium itself is unique due to its characteristics and properties that make helium a critical component in myriad applications that have few (in any) substitutes:

- He is the 2nd lightest and 2nd most abundant element in the universe
- It is colorless, odorless and non-toxic
- It is an inert gas due to its molecular structure; the 1st noble gas group in the periodic table. As such, it does not react easily with other elements
- It has the lowest boiling point among all elements at -268.9°C, making He the world's best coolant
- non-renewable and cannot be artificially produced

It is precisely these properties that make the demand for helium relatively inelastic. From the days when helium was known mainly for its use in balloons, dirigibles and welding, the market has moved into the new-age economy. As shown in Exhibit 8, U.S. domestic demand from technology-based end users accounted for approximately 55% of total usage.

Exhibit 8: U.S. Helium Demand Breakdown



Source: Bureau of Land Management, USGS, Beacon Securities Limited

In terms of where demand for helium is headed, it is estimated that the market will reach US$8.9 billion by 2027, which represents a 5.1% CAGR from the 2020 estimated size of US$6.3 billion. China is expected to be a main driver of this growth as its use of helium in electronics, semiconductors and healthcare are to give it a 7.8% CAGR.

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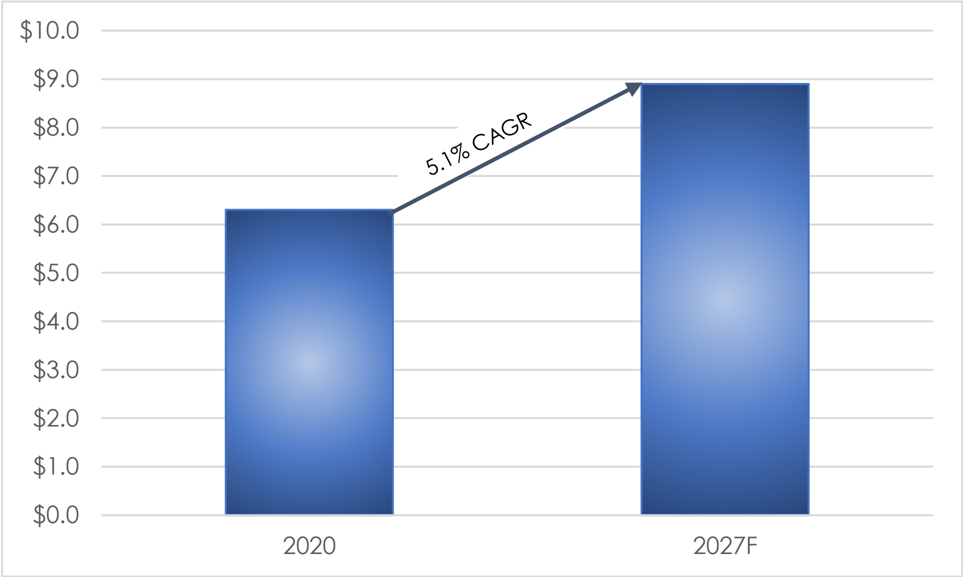
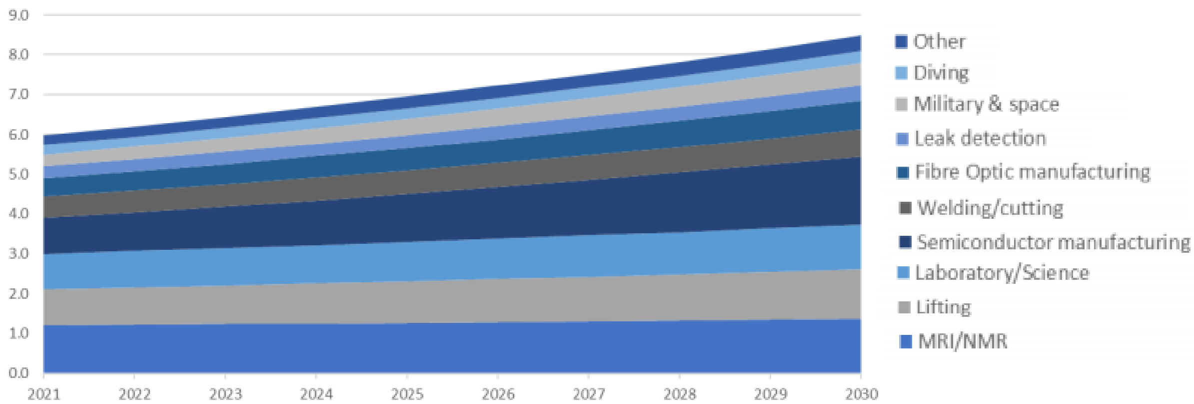
Exhibit 9: Forecast Helium Market Growth (US$ B)



Source: Mordor Intelligence, Beacon Securities Limited

There are many drivers of this growth from an end-user perspective; however, it seems the technology-related sectors will continue to provide the push from approximately 6 bcf/yr currently to over 8 bcf/yr by the end of the decade.

Exhibit 10: Forecast Helium Demand by Industry (bcf/yr)



Source: Helium One, Beacon Securities Limited

Semiconductors & electronics: this is a wide-ranging sector that has perhaps the largest upside.

- He is essential in semiconductor and silicon crystal manufacturing as a purging and cooling gas. Demand for this

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use could skyrocket due to the current global shortage of semiconductors, which has impacted several sectors including the computer and automotive industry (it is used to monitor engine performance, manage steering and parking sensors, automatic windows and entertainment systems).

- He is used in the manufacturing of LCD screens in TVs, monitors and smartphones
- using He in the manufacturing of hard drives results in 50% more storage capacity while being 23% more efficient
- Google (GGOG-Q, NR), Netflix (NFLX-Q, NR) and Amazon (AMZN-Q, NR) have been buying massive quantities of He for their data centers

MRI & healthcare: Helium is the best option for cooling the magnets of MRI machines and is used for observation and treatment of acute and chronic forms of respiratory ailments (of particular importance during the Covid pandemic).

- Healthcare is a major component of spending around the world. U.S. annual growth of ~5.7% from 2020-2027 expected.
- The MRI segment is expected to grow at a CAGR of 5.2% from 2020-20207.

Fibre optic manufacturing: Helium is vital during manufacturing to prevent air pockets inside the fiber cables.

- 5G roll-out is expected to help drive a 14.5% CAGR in the fibre optic market from 2021-2026 to US$20.8 billion
- China is developing a fiber optic network in the Arctic region

Nuclear: Helium's cooling ability and inert property makes it a key element in nuclear reactors.

- Nuclear is seen by many as a clean energy electricity generation solution that will play an important role in the expanding electricity market
- President Biden has included this in his clean energy initiative

Space exploration: As a purge gas in rockets and as a liquid in the quantum computing used by the space industry (among others). Researchers are also exploring the use of super-cooled helium to improve GPS for airplanes and submarines.

Welding: As an inert gas shield, this is not necessarily a new-age sector, but the expected CAGR of 5.2% between 2020-2027 is material.

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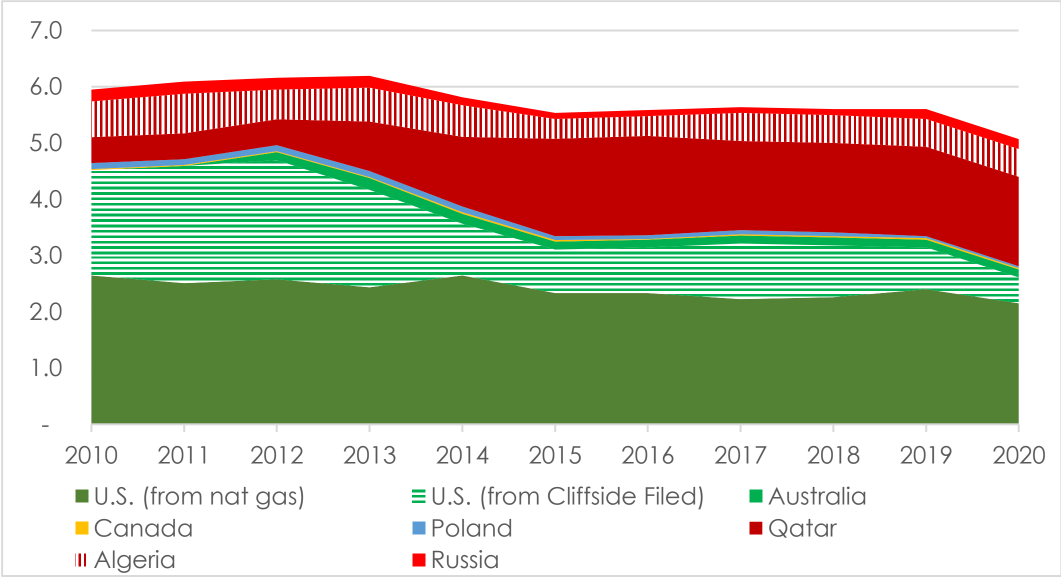
Exhibit 11: Global Helium Supply (bcf/yr)



Source: USGS; Beacon Securities Limited

The global supply of helium is faced with a tough challenge in meeting expanding demand for the molecule. Over the past 10 years, the supply of He has decreased from 6.0-6.2 bcf/yr to approximately 5.1 bcf/yr in 2020. With the loss of supply from the U.S. BLM in a few months, global supply is going to be under even further duress with potential periods of supply shortages.

Due to the opaque nature of the helium business, along with other factors like planned and unplanned plant maintenance outages and seasonality of demand, it is a challenge to pinpoint the precise magnitude of the shortage at any point in time.

Exhibit 12: Potential Helium Supply Sources

Project	Country	Date	Size	
Helium 3	Qatar	2021	425	mmcf/yr
Amur (1st Tanche)	Russia	2021	700	mmcf/yr
Amur (2nd Tanche)	Russia	2022	700	mmcf/yr
Amur (3rd Tanche)	Russia	2024	700	mmcf/yr
Arzew expansion	Algeria	2021	425	mmcf/yr
Total			**2,950**	**mmcf/yr**

Source: Kornbluth Helium Consulting; Beacon Securities Limited

Another point to consider is that the new sources of helium supply that are potentially going to enter the market over the next few years carry some measure of geopolitical risk for U.S.-based end users (Canada placed He on its "critical minerals" list last month). In Exhibit 11 we have color coded those countries in various shades of red. Note that they make up an increasing percentage of the total.

In Exhibit 12, the nearly 3 bcf/d of potential new supply are all from countries that may have risk associated with them, not to mention the considerable distance that those volumes would need to travel to reach North America in vessels that struggle to hold the 2nd smallest element on Earth.

It is the demand-supply imbalance that has resulted in escalating prices in the recent years. Due to the opaque market, it is difficult know the most recent price that He has sold for, but numerous sources note anecdotal prices in the range of US$300-US$500 per mcf. This is the level that we have included in our model.

Exhibit 13: Historical Helium Pricing

Source: Avanti Energy

In summary, the helium market provides a very encouraging backdrop for Avanti to initiate its exploration program. If prices hold (or increase), AVN will benefit greatly when (not if) its production comes on line.

Appendix II: Operating & Financial Summary

AVANTI ENERGY INC. Recommendation: SPEC BUY Target price: $3.80

SHARE INFORMATION	
Price	$2.32
Shares O/S – basic (mm)	0.0
Shares O/S – float (mm)	(7.0)
Shares O/S – f.d. (mm)	0.0
Market cap ($mm)	$0
Enterprise value ($mm)	$82
52-week range	$2.82 - $0.09
Total projected return	**64%**

COMMODITY PRICES	2020E	2021E	2022E	2023E
Helium (US$/mcf)	-	$300	$300	$325
Fx (C$/US$)	$0.75	$0.78	$0.79	$0.78

PRODUCTION	2020E	2021E	2022E	2023E
Helium (mcf/d)	0	0	63	330
Production Growth	-	-	-	424%
Prod Growth Per Share	-	-	-	370%

FINANCIAL ($mm)	2020E	2021E	2022E	2023E
Revenue	0.0	0.0	8.7	50.2
Royalties	0.0	0.0	(0.4)	(2.1)
Operating	0.0	0.0	(1.2)	(6.0)
G&A	0.0	(1.0)	(1.2)	(1.6)
EBITDA	**0.0**	**(1.0)**	**6.0**	**40.4**
Interest	0.0	0.0	0.0	(0.1)
DD&A	0.0	0.0	(1.4)	(7.2)
Taxes	0.0	0.0	(0.3)	(3.3)
Other	0.0	(0.2)	(0.2)	(0.2)
Net Income	**$0.0**	**($1.2)**	**$4.1**	**$29.6**
FFO (mm)	$0.0	($1.0)	$6.0	$40.3
FFOPS (basic)	$0.00	($0.03)	$0.13	$0.78
FFOPS (diluted)	**$0.00**	**($0.02)**	**$0.11**	**$0.76**
EPS Fully Diluted	**$0.00**	**($0.03)**	**$0.08**	**$0.55**
Net Debt	($3.6)	($2.7)	($7.2)	($31.0)
D/CF - trailing	NA	2.7x	NA	NA
D/CF - forward	3.6x	NA	NA	
Borrowing capacity	$0.0	$0.0		

CAPITAL PROGRAM	2020E	2021E	2022E	2023E
Total Capex (mm)	$0	$6	$15	$17
% of cash flow	#DIV/0!	-570%	249%	41%

VALUATION	2020E	2021E	2022E	2023E
EV/EBITDA		n.a.	18.7x	2.2x
P/CF (diluted)		n.a.	20.2x	3.1x
P/E		n.a.	29.6x	4.2x
EV/production ($/mcf/d)		n.a.	$1,313,198	$178,485
Price/ PDP NAV		-	-	-
Price/ 1P NAV		-	-	-
Price/ 2P NAV		-	-	-

NETBACKS ($/mcf)	2020E	2021E	2022E	2023E
Revenue	-	-	$379.75	$416.67
Royalties	-	-	($16.14)	($17.71)
Operating & Trans	-	-	($50.00)	($50.00)
Operating Netback	-	-	$313.61	$348.96
G&A	-	-	($52.17)	($13.28)
Interest	-	-	$0.00	($0.73)
Other	-	-	$0.00	$0.00
Cash Flow Netback	-	-	**$261.43**	**$334.95**
DD&A	-	-	($60.00)	($60.00)
Stock based compensation	-	-	($8.70)	($1.66)
Other non-cash	-	-	$0.00	$0.00
Deferred tax	-	-	($14.61)	($27.33)
Earnings Netback	-	-	**$178.13**	**$245.96**

RESERVES (mmcf)	2020E	2021E	2022E	2023E
PDP	-	-	-	-
Proved (1P)	-	-	-	-
Proved + Probable (2P)	-	-	-	-
PDP NAV ($/Share)	-	-	-	-
1P NAV ($/Share)	-	-	-	-
2P NAV ($/Share)	-	-	-	-

2022 QRTLY FORECASTS	Q1E	Q2E	Q3E	Q4E
Helium (mcf/d)	0	0	100	150
Revenue ($MM)	$0.0	$0.0	$3.5	$5.2
EBITDA ($MM)	-$0.3	-$0.3	$2.6	$4.0
FD FFO	-$0.01	-$0.01	$0.05	$0.08
FD EPS	-$0.01	-$0.01	$0.04	$0.05

Source: Company reports, Beacon Securities Limited

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Appendix III: Terrelium Technical Team

Chris Bakker, MBA – President & CEO

- 20 years of oil & gas experience
- Most recently, he spent six years as a commercial negotiator with Encana/Ovintiv.
- Also spent time as an economist and landman.
- Extensive experience in all facets of natural gas exploration including land acquisition, exploration, drilling, well production and facility integration & construction.
- Additional experience in a start-up tech gaming company, taking it from conception to market; has acted as an advisor for start-ups.

Genga Nadaraju, MSc, Geology/Earth Science – VP, Subsurface Geology

- 25 years of oil & gas experience at Encana in geology, geophysics and reservoir characteristics.
- Most recently, she was the lead technical advisor on the Montney play.
- Focus has been on asset exploration, strategic planning, investor relations, and technical innovation.
- Strong project management and organizational skills with the ability to interact effectively with all stakeholders are key attributes she brings to Avanti.

Dr. Jim Wood – Director, Geoscience

- 30 years of oil & gas experience specializing in reservoir characterization.
- His Geoscience and Petroleum Engineering research focus is on developing practical applications for enhanced evaluation and economic development of gas and liquid hydrocarbons in unconventional resource plays
- He has developed a specific model for the Montney play and is working on creating a model for helium.

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Ali Esmail, P.Eng – Director, Reservoir Engineering

- 24 years of oil & gas experience with the last 13 years specializing in reservoir engineering
- Most recently, he was chief reservoir engineering advisor for Canadian operations at Ovintiv. Previously with Shell, Husky, SemCAMS, Dow Chemical and Nexen
- He has focused on reserves evaluation, O&G development economics, production analysis and petroleum data analytics.

Chad Lerner, Landman

- 23 years of oil & gas experience covering commercial, joint venture, business development and land acquisition in the US and Canada.
- Chad was VP Land at Chinook Energy for seven years, and previously VP positions at Fairborne Energy, Artek Exploration, Power Play Resources.

Daron Torrens – Drilling Completions & Engineering Advisor

- 27 years of oil & gas experience
- He has worked on myriad O&G plays with Talisman Energy, Schlumberger and Anadarko Petroleum

Richard Balon, P.Geoph – Senior Geophysicist

- 30 years of oil & gas experience
- His focus has been on 2D and 3D seismic analysis across some of the largest oil and gas fields in western Canada

Carter Chalmers – VP, Corporate Development

- 15 years of experience in business and/or corporate development
- He has focused on marketing and IR functions across the O&G, mining, technology and O&G data solutions sectors
- He has been involved in several start-ups and TSXV-listed companies

Appendix IV: Risks

- **Commodity Price Fluctuations** – The company has direct exposure to the price for helium, which is an opaque market. Downward movements in this commodity can adversely affect the financial performance of the company. To offset this risk, the company may enter into take-or-pay contracts to manage its exposure to commodity price fluctuations.
- **Financing** – Exploring for and developing helium may require a combination of debt and equity capital. Our models may incorporate fluctuations in net debt and while we have forecast additional equity, there is no certainty that the company can raise equity capital or that its bank lines will remain static or increase.
- **Foreign exchange & Interest Rates** – Any movement in either of these rates has the potential to adversely affect the company's financial performance.
- **Cost Overruns** – Unexpected drilling, completion and/or operational cost overruns can mitigate the operational and financial performance of the company.
- **Exploration risk** – Due to limited number of dedicated helium wells drilled on or in relative proximity to the company's lands, there may be a heighted level of risk associated with the company's exploration drilling.
- **Weather and Seasonal Factors** – Extreme weather conditions may influence results.
- **Change in Fiscal Regime** – A change in the royalty or tax rates as they relate to helium production may adversely affect cash flows.
- **Well Performance** – The company may have a higher than normal amount of risk associated with its wells or plays due to the early-stage nature of its asset base. Lower production volumes, higher decline rates and/or dry holes can adversely affect the results of the company, particularly from a potential negative reserve revision perspective. Past performance may not be indicative of future execution.

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As at March 31st, 2021	#Stocks	Distribution
BUY	66	70.2%
Speculative Buy	19	20.2%
Hold	1	1.1%
Sell	0	0.0%
Under Review	7	7.4%
Tender	1	1.1%
Total	94	100%

BUY	Total 12-month return expected to be > 15%
Speculative Buy	Potential 12-month return is high (>15%) but given elevated risk, investment could result in a material loss
Hold	Total 12-month return is expected to be between 0% and 15%
Sell	Total 12-month return is expected to be negative
Under Review	
Tender	Clients are advised to tender their shares to a takeover bid or similar offer

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