

Australis Capital

Taking advantage of the cannabis boom

Australis Capital is a cannabis-focused company spun out from Aurora Cannabis (ACB) to take advantage of the rapidly growing US cannabis market. It has acquired a range of assets across the industry, with a focus on durable assets and those that can be leveraged across multiple geographies such as brands, IP and technology. The company has assets and has entered into deals with a total nominal value of C\$47.8m to date.

Year end	Revenue (C\$m)	PBT* (C\$m)	EPS* (C\$)	DPS (C\$)	P/E (x)	Yield (%)
03/19e	0.3	(5.1)	(0.02)	0.0	N/A	N/A
03/20e	0.5	(3.4)	(0.02)	0.0	N/A	N/A
03/21e	0.5	(4.2)	(0.03)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding amortization of acquired intangibles, exceptional items and share-based payments. We do not include forecasts for most of the company's assets due to limited disclosed information.

A history tied to Aurora

Australis was spun off from Aurora in late-2018 because Aurora is prohibited from investing in US cannabis assets due to TSX and NYSE listing rules. Aurora is a Canadian medical cannabis company and one of the largest publicly traded cannabis firms (market cap US\$8.2bn). The goal is for Australis to take advantage of this market and establish a presence in the US prior to US federal legalization change. Aurora retains warrants on Australis to currently acquire 27% control in the event it can freely invest in the US cannabis market in the future.

Rapid growth fueled by state legalization

The US cannabis market is growing at a remarkable pace given the continuing legalization of medical and recreational cannabis across individual states. We estimate a market of approximately US\$10bn in 2018, but that there is a potential market of US\$18.8bn in recreational cannabis alone in those states that have already approved it. Approvals in New York and New Jersey, where legislators have proposed recreational cannabis, could increase this by US\$7.4bn.

Investments goal: Flexible and durable

The company's nine assets include the brands "Body & Mind," "Mr. Natural," and "Green Therapeutics," which the company believes may resonate across multiple markets. Additionally, Australis has invested in technology such as "rthm", a developer of a cannabis tracking and loyalty app, and "Wagner Dimas", a creator of an industrial cannabis pre-rolling machine, which provides synergies with other owned companies and generates licensing revenue.

Valuation: Justified on rapid growth

The company is valued at C\$144.4m after adjusting for the market price of "Body & Mind" (with the other investments valued at cost rather than to market). The shares currently trade at a 57% premium, if fully diluted. We estimate that this implies a 19% CAGR. Considering we forecast 24% market growth and expect rapid value inflection on federal legalization, this premium is easily justifiable.

Initiation of coverage

Healthcare & consumer

31 May 2019

Price US\$0.84

Market cap US\$133m C\$1.35/US\$

Net cash (C\$m) at 31 December 2018, 23.8 less investments

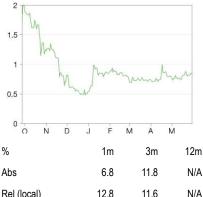
Shares in issue 157.8m

Free float 97.4% AUSA

Primary exchange **CSE**

Secondary exchange OTCOR

Share price performance



Rel (local) 52-week high/low US\$1.99 US\$0.48

Business description

Australis Capital is a company focused on US cannabis assets. It is acquiring a range of lowvaluation cannabis assets that it believes will have staying power in the rapidly developing cannabis market, and has the goal of forming them into a fully operational and integrated US cannabis business.

Next events

Green Therapeutics deal closes Late 2019

Analysts

Maxim Jacobs

Nathaniel Calloway +1 646 653 7036 +1 646 653 7027

healthcare@edisongroup.com

Edison profile page

Australis Capital is a research client of Edison Investment Research Limited



Investment summary

Company description: Multiple angles on cannabis

Australis is a cannabis company building a portfolio of diversified assets across the industry. The company is targeting acquisitions and investments that it believes have staying power in a rapidly developing market and will generate a significant return as cannabis legalization continues to progress. These assets include established brands "Body & Mind," "Mr. Natural," and "Green Therapeutics," which already have products for sale, as well as technology companies such as "rthm", a developer of cannabis tracking and loyalty apps, and "Wagner Dimas", a creator of an industrial cannabis pre-rolling technology. These assets are coupled with dispensaries, producers and processors also owned by Australis. With its acquisition of "Green Therapeutics" and "Mr. Natural" the company has pivoted towards becoming a fully functional cannabis provider.

Valuation: Premium justified considering industry growth

The company has deployed C\$43.6m (of C\$47.8m total) in its core portfolio of cannabis assets, which is currently valued at C\$116.1m, and the whole company is valued at C\$144.4m after adjusting for the current market price for "Body & Mind" (with the remainder of the portfolio valued at cost). The company's stock price currently trades at a 57% premium on a fully diluted basis. Considering that we model the cannabis industry growing at a CAGR of 24% per year, we do not believe this premium is unreasonable. Additionally, it does not account for the valuation inflection we expect following US federal legalization, which we predict will substantially increase the access to capital.

Financials: Revenue expected soon with shift to operations

Australis has not reported a full fiscal year yet and we do not consider its financials to date predictive, given they are rapidly evolving as the company integrates additional businesses. However, the company reported a small revenue stream (C\$132,000) for Q319 (ending December 2018) and operational expenses of C\$2m, which include corporate overhead and "rthm". We expect revenue to increase with interest expected from recent investments and the addition of the "Mr. Natural" brand and "Green Therapeutics" business in 2019, although we await additional details. Currently, we do not forecast that any near-term financing will be needed for operational costs, but the company may raise additional capital for future investing. Australis has spent or earmarked its cash set aside for deployment (C\$24.5m at the end of December 2018) with subsequent deals, so we expect future raises or share-based agreements to complete additional transactions.

Sensitivities: Rapid growth coupled with uncertainty

Australis faces a series of risks associated with investing in a rapidly developing market. Although the cannabis market is growing very rapidly, this is coupled with a high degree of uncertainty. Certain segments of the industry are highly competitive, such as producers and dispensaries, and Australis is involved in both of these segments. The supply side of the industry is, in some cases, developing faster than the demand. For instance, authorities in Oregon have estimated that they have six years of supply in the system and this would double if they approved all licences. The company's strategy is to invest in more durable assets such as brands, IP and technology, and although these may be more resistant to some competition, they are not immune. One of the highest causes of uncertainty is the industry's regulatory status. Although quickly evolving, with an increasing number of US states approving medical and/or recreational cannabis, there can be no guarantees that this trend will continue. Federal legalization could be the single biggest turning point in the company's valuation and, although we are optimistic, its timing is dependent on a wide range of factors beyond our ability to predict.



A diversified cannabis company

Australis is a publicly traded company focused on acquiring assets in the US cannabis industry. The company was formed through a 2018 spin-off from Aurora Cannabis (NYSE: ACB), a Canadian cannabis conglomerate. Due to TSX and NYSE listing rules, Aurora is unable to make investments in US-based cannabis businesses and it spun off Australis as a vehicle to pursue these opportunities, among others. However, pursuant to spin-off, Aurora was issued warrants enabling it to regain substantial control over the company at some point in the future: one warrant to acquire 20% of the shares issued in the spin-off (22.6m at C\$0.20 per share), and one warrant to acquire 20% of outstanding shares at the time of exercise (at the five-day average market price). Both warrants were issued with 10-year terms. The position that Aurora can acquire with these warrants has subsequently been diluted to approximately 27% of the total shares.

The arrangement with Aurora puts these companies in a unique position. These warrants can serve as a way for Aurora to regain at least partial control of Australis in the event that cannabis is legalized in the US. Therefore, although the companies are officially independent, it is in Aurora's best interest to promote the advancement of Australis. In this way, Australis can potentially serve as an unofficial vehicle for Aurora to establish a US presence ahead of federal legalization. Also, Australis Capital's management has communicated that it is in very close contact with Aurora, which lends credence to the idea that it may later be reacquired by Aurora.

Broadly speaking, the company's acquisition strategy is to exploit attractive valuation opportunities in the cannabis industry to establish a diversified company ahead of federal legalization. Legalization marks the biggest value inflection point across the industry, and if the company can establish a foothold across different market segments, this could translate into a significant return on investment. The company is interested in acquisitions and, to a lesser extent, investments across a range of industry market segments, including end-user products (both extracts and flower), cultivation, medical cannabis, technology and dispensaries, among others. The company has nine acquisitions and investments to date with a combined book value of C\$47.8m (Exhibit 1).

Exhibit 1: Austra	alis investments			
Investment	Description	Equity ownership	Investment (C\$m)	Notes
Australis Holdings LLP	Real estate	100%	2.83	
SubTerra	Cultivator	N/A	1.40	For royalties and other payables
rthm	Developer of health tracking apps	100%	3.86	
Body & Mind	Vertically integrated multi-state operator, brand	36%	17.03	34.9m shares, C\$1.6m convertible note
Wagner Dimas	Developed a pre-roll rolling machine	15%	3.00	
Quality Green	Cultivator	N/D	2.00	C\$2m equity, 3.6m warrants at C\$1.00
Folium Biosciences	Vertically integrated CBD products, financial services	N/D	3.99	
Mr. Natural	Brands	100%	1.21	
Green Therapeutics*	Cultivator, processing, brands	100%	12.50	
Source: Australis C	apital. Note: N/D = not disclosed.	Definitive a	greement si	gned.

The US cannabis market

The US, which will likely be the most important market for cannabis for some time, is a hybrid state. Ten states and the District of Columbia (around 25% of the US population) have legalized both the recreational and medical use of cannabis. Another 23 states, representing 43% of the US population, have legalized the medical use of cannabis. Additionally, 14 states have legalized CBD (either for medical-only use or for any use), which is not psychoactive and hence deemed not psychoactive and hence deemed not abusable, and only three relatively small states continue to deem all forms of cannabis illegal. In addition, both New Jersey and New York have discussed legalization for recreational cannabis.



State	Recreational legalized	Medical legalize
Alabama	·	2014
Alaska	2014	199
Arizona		201
Arkansas		201
California	2016	199
Colorado	2012	200
Connecticut	·	201
Delaware		201
Florida		2014
Georgia		2015
Hawaii		200
Idaho		
Illinois		201
Indiana		2017
lowa		2014
Kansas		2018
Kentucky		2014
Louisiana		201
Maine	2016	199
Maryland	2010	200
Massachusetts	2016	200
Michigan	2018	200
Minnesota	2010	200
Mississippi		2014
Missouri		2014
Montana		2014
		200
Nebraska	2040	200
Nevada	2016	200
New Hampshire		201
New Jersey		201
New Mexico		200
New York		201
North Carolina		2014
North Dakota		201
Ohio		201
Oklahoma		2015
Oregon	2014	199
Pennsylvania		201
Rhode Island		200
South Carolina		2014
South Dakota		
Tennessee		2014
Texas		2015
Utah		2014
Vermont	2018	200
Virginia		2015
Washington	2012	199
West Virginia		201
Wisconsin		2014
Wyoming		2015

US federal law is different. Derived from hemp (a cannabis plant with only trace levels of THC), CBD is legal at federal level (but also requires state-level legalization to be sold) thanks to the 2018 Agriculture Improvement Act. Marijuana itself remains illegal in all forms at the federal level. The federal authorities, however, have not been enforcing federal law, instead deferring to state law, and have reaffirmed this policy under the most recent attorney general. As this policy is not based on legislation, it could change at any moment, although President Trump has indicated his support of a legislative solution to take the US cannabis industry out of regulatory limbo. However, until there is federal legislation that decriminalizes cannabis, importing cannabis or even moving it across state lines continues to be illegal (state laws would not apply in either situation). Any manufacturer of



cannabis products needs to have facilities in each state where it sells products, which does hamper a company's ability to scale up into a multi-state business.

One major motivation for the recent state legalization has been to transform an illegal market into a legal one that could then be taxed. There is significant pressure on states to find new sources of revenue due to massive unfunded liabilities related to state employee pensions and state retiree health benefits, as well as servicing debts from prior budgets. Also, they are taking advantage of the new legalizations with gusto as all the states that have legalized so far have high effective sales taxes of between 20% and 47% on sales.

Exhibit 3: State tax rates for recreational marijuana							
	Year of commencement of recreational sales	Effective sales tax rate (total local + state taxes and fees)	Tax revenue (US\$m)				
Colorado	2014	~29%	263.8 (2018)				
Washington	2014	~47%	319.1 (2017)				
Oregon	2015	~20%	78 (2017)				
California	2018	30–45%	345.2 (2018)				
Source: Institute of Economic Affairs, Colorado Department of Revenue, California Department of Tax and Fee							

Administration

Federal legalization outlook

A key inflection point for Australis, and the cannabis industry as a whole, is the prospect of decriminalization at federal level. Federal legalization is unlikely to affect individual state-level regulations (as ultimate cannabis legality will still depend on the state), but it will have immediate operational and financial impacts on the industry. Currently, cannabis products cannot cross state lines, forcing operators of all types to have independent business units in each jurisdiction. The repeal of these existing federal measures would allow for truly interstate businesses, which we expect to lead to increasing consolidation of the industry. We expect cultivation operations to concentrate more heavily in geographies better suited to cannabis production and, similarly, for processing to be consolidated to take advantage of economies of scale.

Additionally, prohibition currently places a high federal tax burden on cannabis companies. Cannabis companies currently cannot deduct operating costs outside of COGS for their federal taxes due to special regulations regarding the "trafficking" of Schedule I and II substances (Section 280e of the Internal Revenue Code). Repeal of this measure could substantially reduce the tax burden of these companies.

Federal legalization should also lift some of the barriers to financing that these companies have faced. Banks have historically restricted or barred access to the industry, and the Aurora/Australis spinout highlights the restrictions that publicly listed companies face. Access to banking and US capital markets is likely to increase substantially with federal legalization and we expect this to facilitate expansion of the market. We expect federal legalization to significantly increase valuations in the industry due to the above combined factors.

There is increasing support for legalization across political affiliations. We believe this is due to both a shift in political attitudes towards prohibition and cannabis in general, as well as increasing lobbying and advocacy. Despite its quasi-legal status, cannabis has grown into a substantial industry, which employs lobbyists to pursue its interests in Washington. Additionally, all polling on the subject agrees that support for legalization is as high as or higher than it has ever been before. A bi-yearly survey of social attitudes, the General Social Survey, performed by the NORC Center for Public Affairs Research at the University of Chicago, found that 61% of the US population supports cannabis legalization including, for the first time, a majority of Republicans (54%).

As one example of these changes in attitude, in June 2018 the Strengthening the Tenth Amendment Through Entrusting States (STATES) Act was proposed in both chambers of Congress, and sponsored by 57 senators and representatives on a bipartisan basis. The bill would formally give precedence to state law in the case of cannabis legality. When asked about the bill, President



Trump indicated that he would likely support the legislation. The bill was reintroduced in the 2019 congressional year on 4 April 2019. Additionally, Cory Booker, Democratic Senator from New Jersey and presidential candidate, has introduced a more aggressive bill, the Marijuana Justice Act of 2019, which would legalize cannabis outright by removing it from the list of controlled substances and expunge the criminal records of people prosecuted for cannabis-based crimes. This act was co-sponsored by several prominent senators vying for the Democratic nomination for president, namely Bernie Sanders, Elizabeth Warren, Kamala Harris and Kirsten Gillibrand. Based on this, we believe that policy statements regarding cannabis will become increasingly necessary for candidates in the upcoming 2020 federal elections and beyond. However, we believe initial legalization is likely to take the form of the former bill, which seeks to defer to state regulations.

Although federal legalization or decriminalization appears to have significant positive momentum, it is difficult to predict the probability or timing of such legislation as it is limited by a wide range of factors such as other legislative or procedural priorities. However, one study, published by researchers at the University of Colorado Boulder, used historical data from 170 policies that were adopted at state level and that eventually became federal law to predict when cannabis would become legalized at federal level (among other policy issues). The study predicted 2021 as the most likely year for approval, with a median cumulative chance of approval in 2023 (ie a 50% chance of approval in or before 2023).

The cannabis market today

Even with this regulatory limbo, the market for cannabis products is the largest of any developed market and rapidly growing (see Exhibit 4). Colorado, for example, which has a population of 5.5 million (1.7% of the total US population), had legal cannabis sales of US\$1.5bn in 2018 according to the Colorado Department of Revenue, with 79% of that being recreational. As the ability to buy and sell cannabis for recreational use only started in California in January 2018, it is too early to definitively estimate the size of that market, but it is likely to be very large. As of August 2017, there were 1.5 million medical marijuana patients in the state, according to the Marijuana Policy Project, with sales totaling US\$2.7bn in 2016, according to the Hemp Business Journal.

Country	Prevalence of use (age 15–64)	Estimated using population (millions)	Medical marijuana status	Recreational marijuana status
United States	17.0%	36.7	Legal in 33 states. Marijuana itself is illegal at federal level. The only FDA approvals have been for synthetics and CBD	Legal in 10 states but marijuana itself is illegal at federal level. Hemp (<0.3% THC) was descheduled in December 2018
Canada	14.7%	3.5	Legal	Legal
Germany	6.1%	3.3	Legal for seriously ill patients with no alternative	Illegal but not always prosecuted. CBD <0.2% THC is legal
Italy	9.2%	3.4	Legal	CBD <0.2% THC is legal. Small amounts with higher levels are decriminalized.
France	11.1%	4.5	Cannabinoid drugs are legal with a prescription	Illegal. CBD oil with less than 0.2% THC is legal
Spain	9.5%	2.9	Cannabinoid drugs are legal with a prescription	Somewhat legal in private areas unseen from public spaces via cannabis social clubs, although sale continues to be illegal. CBD is legal.
UK	6.3%	2.7	Legal	Illegal. CBD oil without THC is allowed
Israel	27.0%	1.4	Legal	Decriminalized
Australia	10.4%	1.7	Legal	Decriminalized in three territories
Uruguay	9.3%	0.3	Legal	Legal

The market for legal cannabis has been growing very quickly and has a meaningful size, but it is a small fraction of its full potential. In the US, the legal cannabis market is estimated to have been US\$8bn in 2017 (both recreational and medical) by Ackrell Capital, an investment bank focused on cannabis companies. If there was full legalization in the US, at Colorado per-capita usage levels, the US could potentially be an US\$88bn market. As a comparison, total alcoholic beverage sales in the US were US\$223bn in 2016, according to the Beverage Information Group.



Exhibit 5: Annual legal sales in the US by market	
Market	Annual sales (US\$)
Total legal cannabis market in the US (recreational and medical, 2017)	\$8.0bn
Total medical marijuana market (2016)	\$4.7bn
California medical marijuana market (2016)	\$2.7bn
Colorado (recreational and medical, 2017)	\$1.5bn
Washington (recreational and medical, 2017 annualized)	\$1.4bn
Oregon (recreational and medical, 2017)	\$470m
CBD oil (2017)	\$358m

Source: Ackrell Capital, LLC, New Frontier Data, Colorado Department of Revenue, Washington State Liquor and Cannabis Board, Hemp Business Journal.

While the illegal market was primarily focused on buying and selling the cannabis flower product, the legal market has evolved into something more complex. Approximately half of product sold is still flower, but the rest is concentrate (vape, wax and shatter), edibles and pre-rolled (see Exhibit 6).

Exhibit 6: Market share (%) of cannabis product types by state, 2017									
Flower Concentrates Edibles Pre-rolled									
California	55	25	12	5	4				
Washington	55	23	9	11	1				
Oregon	51	22	14	7	6				
Colorado	48	27	15	5	5				
Source: Statista									

Also, the individual state markets seem to mature quickly, with the high-growth phase lasting two to three years and then leveling off as outlets to purchase product have already become ubiquitous (see Exhibits 7 and 8). Another factor that might be curtailing sales in individual states is the aftereffects from legalization in additional areas of the country. Around 12% of marijuana use in Colorado is estimated to have come from tourists in 2017, with California being the largest home state for these visitors (although we see this trend declining as more territories legalize). Another important item to note is that medical marijuana sales tend to fall post-recreational legalization as a prescription is no longer necessary. In Colorado, medical marijuana had represented 39% of legal sales two years after legalization, but currently only accounts for around 20% of sales. During this time medical sales dropped by approximately 25% on a monthly basis while the total market expanded by approximately 40%.

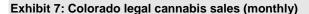
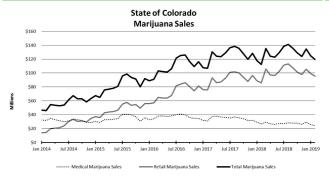


Exhibit 8: Oregon legal cannabis sales (monthly)





Source: Colorado Department of Revenue. Note: Y-axis=US\$m.

Source: Oregon Liquor Control Commission. Note: Y-axis=US\$m.

Pricing and supply

In addition, as more producers and retailers enter the growing cannabis market, prices have fallen precipitously (see Exhibits 9 and 10). In Colorado, according to the Colorado Department of Revenue, wholesale prices fell 47% from the beginning of 2017 to the beginning of 2019. During the same period, prices fell by almost 40% in Oregon for indoor growers and over 50% for outdoor growers, according to the Oregon Liquor Control Commission. Oregon especially is facing a massive supply glut. Recreational producers harvested 2,000 metric tons (4m pounds) of marijuana



in 2018, with current inventory levels amounting to 6.5 years' worth of supply. The Oregon Liquor Control Commission estimates that if all pending producer applications were approved, production would nearly double, so there is probably no end in sight to the supply glut and falling prices. While there is no definitive shelf life for cannabis flower, quality does degrade over time and we expect excess product to be processed into more shelf stable forms such as concentrates. It is worth noting, however, that the supply issues are not universal at this time, and California, for instance, only produced an estimated 1.55–1.69m pounds in 2018.

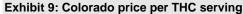
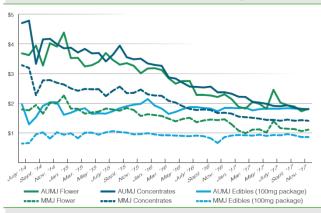
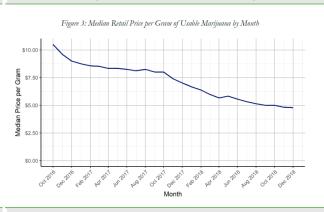


Exhibit 10: Oregon median retail price per gram





Source: Colorado Department of Revenue. Note: AUMJ = adult use marijuana, MMJ = medical marijuana.

Source: Oregon Liquor Control Commission

A supply glut may make it more challenging for businesses involved in the cannabis supply chain such as growers, processers and dispensaries, and many will likely fail. However, just as we saw with dot-com businesses, branding helps to separate the wheat from the chaff. The top five brands have a 52% market share in California, a 71% share in Colorado and a 73% share in Oregon, according to BDS Analytics.

While historically the CBD market has been a relatively small proportion (~5%) of the overall cannabis market, it will likely get a boost by the removal of CBD derived from hemp (a cannabis plant with only trace levels of THC) from DEA scheduling, thanks to the 2018 Agriculture Improvement Act, which was signed into law in December 2018. This removed federal restrictions on hemp-derived CBD, but restrictions are still in place in certain states. There is also a move towards 'CBD-infused' products, although the FDA has recently reiterated that adding CBD to food and drinks is still not allowed. Therefore, while that market is growing, the industry is awaiting some regulatory guidance from the FDA that will put it on firmer footing. A public hearing is currently scheduled for 31 May on the topic.

Australis investment strategy

Australis has a multi-faceted investment strategy aimed at taking advantage of low valuation, capital starved opportunities in the cannabis industry, leveraging synergies in the portfolio and building an operationally robust and eventually profitable company in preparation for federal legalization of cannabis. Initially, Australis was focused on being an investment company but has pivoted towards making outright acquisitions as evidenced by Green Therapeutics and Mr. Natural, with the intention of becoming a profitable operational enterprise.

Although the cannabis industry is growing at a rapid pace, historically it has faced significant financing hurdles. Private operators have not had access to traditional banking services or capital markets. However, a large portion of companies in the space operate in highly competitive markets, for example there are relatively few barriers to entry in the grower and dispensary businesses. Therefore, Australis has adopted the strategy of targeting assets it believes have a higher degree of staying power in the market. These include technologies such as rthm and Wagner Dimas, which



are not directly tied to the cannabis supply chain and contain intellectual property, as well as premium brands such as Body & Mind and Mr. Natural that can be flexibly adapted to different infrastructures.

Management has indicated that it intends to build Australis into a profitable operational cannabis company, and its acquisitions/investments to date have reflected this, as it has acquired multiple aspects of the supply chain. The company's acquisitions and investments to date highlight a focus on potential synergy generation within the portfolio. For instance, the stake in Wagner Dimas could be used to enhance the pre-roll offering of its brands (and is likely the intention for its new facility being built in North Las Vegas). Its investment in Folium could be used to provide a CBD offering under these brands as well. Australis has also demonstrated its interest in being an active investor. It has complete control of the rthm, Mr. Natural and Green Therapeutics investments, and a board seat at Body & Mind. We expect Australis to take more controlling stakes in businesses with the goal of becoming an operator in the space. The company's strategy is consistent with building a robust company for this eventuality.

Australis investments

Green Therapeutics

The company's most recent deal in May 2019 is a definitive agreement to acquire Green Therapeutics, a Nevada-based cultivation and processing operation with three brands. When complete, this will be the largest transaction to date. The transaction includes a US\$6.4m stock deal to acquire the existing Green Therapeutics business, IP and brands, and US\$2.93m in stock (with a separate partner, Meridian Companies LLC) to acquire real estate in North Las Vegas for future expansion. Additionally, the company has said that it intends to invest approximately US\$12m to build the new facility, and it has included two milestone payments of US\$800,000 (in stock) to Green Therapeutics as part of the deal. The deal is expected to close in late 2019 and the new facility is expected to be completed in mid-2020.

Green Therapeutics is licensed in Nevada for the cultivation and processing of cannabis and has an existing business of an 8,000 square foot production facility in Clark County, Nevada. The company has three brands: flower is sold under the Green Therapeutics brand, and concentrates through the Tsunami and Provisions brands.

Australis intends to significantly expand the company's footprint with the construction of a 55,000 square foot production facility in the North Las Vegas location. The existing business is running at capacity, and this expansion should enable the company to expand its existing brands as well as other Australis brands such as Mr. Natural. Moreover, there are opportunities to leverage the company's other investments to generate revenue, such as using Wagner Dimas technology to set up pre-roll production in the space. The company forecasts US\$10–12m in EBITDA in the new facility's first full year of operations.

This transaction is fully in line with the company's goal of becoming operationally involved in the cannabis industry, because following its completion, Australis will be a cannabis producer in the state of Nevada. As mentioned above, Nevada had over US\$500m in recreational sales alone in its first fiscal year following legalization (ending June 2018). We expect Nevada to surpass per capita expectations from other states given its status as a tourist destination. This is compared to peak market estimates of US\$800m based on Colorado per capita data.

Body & Mind

Body & Mind (BaM) is a publicly traded (CSE: BAMM) dispensary operator and provider of cannabis products. The company currently operates a production operation in Nevada and operates dispensaries in California, Ohio and soon Arkansas. It recently invested in the dispensary chain



ShowGrow to expand the company's reach into California (more details below). ShowGrow currently has dispensaries in Long Beach and Santa Anna, CA. The combined markets for the above states (medical in Ohio and Arkansas, medical and recreational in California and Nevada) is estimated at US\$12.2bn by extrapolating results from other states.

BaM is a so-called multi-state operator, which are becoming increasingly prevalent in the industry. Because of the federal regulations restricting cannabis, any given cannabis supply chain must be isolated to a particular state. Under current US law, multi-state operators manage independent supply chains in multiple states, with a focus on ensuring consistent quality and brands in each locale. BaM had sales of US\$1.2m in the quarter ending 31 January. BaM also markets its products as a premium brand with a 15-year breeding program, producing 'small batch' product without synthetic pesticides.

BaM is Australis Capital's second largest investment to date. The company has completed five separate financings involving BaM (see Exhibit 11), two equity financings, two warrant exercises and one loan agreement to aid BaM in the acquisition of ShowGrow (that was subsequently repaid with interest and penalties in May 2019). BaM's investment in ShowGrow (a separate note of the same size with slightly different terms) is convertible into 89.7% ownership in ShowGrow. Australis currently controls approximately 36% of BaM's outstanding stock (38% upon conversion of the C\$1.6m note) and has taken an active operational role in the company, with Australis CEO Scott Dowty on the board.

Exhibit 11: Investment in BaM									
Date			Equity				Debt		Total
	Shares (m)	Price (C\$)	C\$m	Warrants (m)	Strike price (C\$)	C\$m	Rate	Converts at (C\$)	C\$m
2 November 2019	16.00	0.40	6.40	16.00	0.50	1.60	8%	0.55	8.0
28 November 2019	1.11	*0.72				5.34	15%		5.34
30 November 2018**	3.21	0.50	1.6	-3.21					1.60
1 February 2019	1.77	0.59	1.03						1.03
30 May 2019**	12.79	0.50	6.40	-12.79		***(5.34)			1.06
Total	34.87		15.43			1.60			17.03

Source: Australis Capital. Note: *Nominal value as part of debt financing. **Exercise of warrants from 2 November offering. ***Repayment of 28 November ShowGrow debt, resulting in cash flow of US\$4.5m.

rthm

Australis completed the acquisition of rthm Technologies in November 2018 in a cash and stock transaction valued at C\$1.25m. rthm is a developer of health tracking apps based in Toronto. It previously developed an app with the same name (rthm) to track biometric data for general health purposes, which had over two million downloads. But the company has subsequently shifted its focus to the development of Coil, an app designed to build loyalty with participating dispensaries. Coil combines biometric tracking with information on cannabis strains and "guided wellness experiences." These guided experiences include music and art aimed at pairing with a person's cannabis strain. The goal is to guide individuals towards their ideal cannabis strain and provide connections to supported dispensaries where these products can be purchased. The Coil app was launched in April 2019.

rthm is an important investment because, unlike products directly associated with the cannabis supply chain, it does not face the same restrictions on interstate commerce. The product can be directly leveraged to promote Australis brands and dispensaries, as well as potential licence revenue. We expect the app to generate revenue though partnering with dispensaries and producers for promotional and brand support services.



Wagner Dimas

Wagner Dimas is a company that has developed a mechanical process for mass producing prerolled cannabis cigarettes (pre-rolls). Cannabis has a number of characteristics that make the
production of pre-rolls cumbersome and labor intensive using devices designed for tobacco
cigarettes. Wagner Dimas has developed a novel process specific to cannabis, which it has
licensed to manufacturers for pre-roll production to reduce labor costs. One report stated that the
technology was employed in the production of 5m pre-rolls in California in 2017. The company has
relationships with 'more than 40 of the largest cannabis brands, dispensaries, and cultivators.' In
November 2018, CannaRoyalty Group sold its shares in Wagner Dimas, 15% of the outstanding
shares, to Australis for C\$1.5m in cash and C\$1.5m in stock. Earlier in 2018, CannaRoyalty sold its
Canadian licence to the Wagner Dimas technology to Aurora for C\$4.48m.

As noted above, pre-rolls are currently a small part of the market (5–11% depending on the state), which may be due to the extra cost associated with these products. Certainly, comparisons to the cigarette market highlight the potential of the pre-rolls if their convenience can be provided at a low cost. There are other companies developing or <u>marketing</u> similar <u>devices</u> for producing pre-rolls, and it is difficult to gauge market share in the space. However, we expect Wagner Dimas's existing relationships to aid in establishing its footprint.

Similar to rthm, Wagner Dimas provides immediate commercial opportunities that are not tied to a particular geography. It provides both leverage in the portfolio to provide immediate opportunities to establish the existing brands in the pre-roll market, as well as outside licensing revenue.

Australis intends to place a Wagner Dimas machine in its new North Las Vegas facility to manufacture pre-rolls for its Green Therapeutics and Mr. Natural brands as well as to produce pre-rolls for third parties.

Quality Green

Quality Green is a Canadian medical cannabis grower based in Canfield, Ontario. The company was founded in 2013 and is a licensed medical cannabis producer in Canada. According to the press release in which Australis announced its investment, the company is 'poised to produce 35,000 kilos annually, and aligned to serve over 28,000 registered medical patients'. Australis committed C\$2.0m (for 3.6m shares and warrants exercisable at C\$1.00) as part of the company's pre-IPO financing. The specific stake owned by Australis has not been disclosed as the financing is currently ongoing.

Folium Biosciences

Folium is a leading producer of hemp oil and derivative products. Australis announced a US\$3m investment (for an undisclosed stake) in Folium in January 2019. Hemp oil is defined as a cannabis extract with 0% THC and is not subject to the same restrictions as THC containing products. Folium's particular hemp oil is a broad-spectrum extract containing a range of cannabinoids beyond just CBD. The company provides both bulk oil for downstream manufacturers as well as a range of formulations such as gels, gummies, vape liquid and others. Additionally, it has water-soluble formulations for use in other products. Folium has the largest cannabinoid extraction facility in the US and is targeting the opening of a Canadian facility in 2019. In addition, in April 2019 the company announced that it was launching Folium Finance, an initiative to provide financial services to companies in the hemp industry. Anticipated offerings range from credit to insurance and merchant services. The company believes it may be able to fill a gap in service that hemp companies face due to resistance from traditional financial companies in the cannabis and hemp business.



Mr. Natural

Australis Capital has also invested in Mr. Natural, a brand of premium organic medical cannabis products. The purchase of 100% of the equity of Mr. Natural Productions gives Australis access to multiple strains developed over decades-long breeding programs, as well as the rights to the life story of its founder, Bob 'Natural' Luciano. Mr Luciano is a disabled veteran, with a long history of organizing medical cannabis collectives in California to provide product. His advocacy for veterans and others is linked to the broader acceptance of medical cannabis in the state. He has actively worked for the Veterans' Affairs (VA) department since 1972, advocating for access to medical cannabis for the treatment of PTSD and has registered certain strains with the VA. The company specialises in high THC products with intense profiles using techniques adapted by Mr Luciano from his time in Jamaica. Mr. Natural was the first brand to win top honors in the first High Times Cannabis Cup. According to Australis, from a strategic perspective it believes it can position Mr. Natural as a premium brand, which may have potential outside historical geographies. The product has been almost exclusively targeted at the medicinal market and there is immediate potential to expand the brand into recreational use. However, we currently have no details regarding the existing sales of the product. Australis acquired 100% of the brand in February 2019 for US\$1.2m. The company intends to produce Mr. Natural branded output in its North Las Vegas facility and in California.

Aurora divestments

During the spin-off process from Aurora, the parent company transferred two assets to Australis that had potential to conflict with its listing rules. These include the real estate venture Australis Holdings and a royalty stream from SubTerra. We should note that inclusion of these assets in the portfolio is more a function of Aurora maintaining compliance with NYSE listing rules and not necessarily the investment strategy of Australis, although it may deliver value in the future.

Australis Holdings LLP is a real estate venture in Whatcom County, Washington. It was initially formed as a joint venture between Aurora and AJR Builder's Group in 2015. The property consists of two parcels of land totalling 24.5m acres, which was purchased with the intention of developing a new cannabis production facility. Shortly after this, Aurora decided not to continue with developing the facility, in order to maintain NYSE compliance. However, shortly before the spin-off of Australis in June 2018, Aurora acquired the remaining 50% of the venture from AJR and spun out its entire interest to Australis. There is potential to develop the property in the future, but it is not a priority and the property is currently listed for sale.

The company's investment in SubTerra was executed during the spin-off process when certain assets were acquired from Prairie Plant Systems (PPS), a wholly owned subsidiary of Aurora. PPS was previously a subsidiary of CanniMed, which was purchased by Aurora in 2018.

PPS was founded in 1988 and focused on the subterranean cultivation of crops in repurposed mines, but as cannabis was legalized in different geographies, it shifted to cannabis production. It established SubTerra in 2003 as a US operation based in Michigan, initially for biomedical research, but announced in 2012 the intention of growing cannabis following the legalization of medical cannabis in Michigan. However, as of the last report, SubTerra had not yet received a grower licence. As part of the transaction, Australis is due a 5% royalty on cannabis-based revenues from SubTerra and US\$150,000 per year until 2028. The company is not producing cannabis at this time, so revenue is limited to the latter, although it may receive its grower licence in the future.



Sensitivities

Australis faces a series of risks, both those associated with the cannabis market and those inherent in investing in general. The high degree of growth expected in the cannabis market is paired with a high degree of uncertainty as the market develops. Many segments of the industry are highly competitive and have low barriers to entry, such as growing and dispensary operations. Australis is attempting to hedge some of this risk by acquiring more durable assets like technology, IP and brands, but a certain amount of exposure is unavoidable. For instance, we expect even premium brands to face similar pricing pressure seen in cannabis markets following legalization.

There is also a high degree of uncertainty regarding the regulatory status of cannabis in the US. Although both medical and recreational cannabis have been increasingly legalized at state level, no assurances can be made regarding the continuation of this trend. Moreover, although we have a positive outlook for the legalization of cannabis at federal level, there is a high degree of uncertainty about if and when this legislation progresses. Continued prohibition may affect the ability of companies like Australis to divest assets at attractive valuations. Given Australis Capital's operational goals, we do not expect it to divest its core assets piecemeal, but delayed legalization may limit the company's options. Although conversely, continued prohibition provides the investment opportunities for the company. Federal legalization is a lynchpin in Australis Capital's investment strategy, and although the company may be able to adapt, we expect a high degree of the value in its assets to be tied to this event.

Australis faces risks typical in investing and running the businesses it controls. Its current investment strategy is contingent on taking advantage of attractive valuations in the current environment, but as the market develops, it may become more difficult to find attractive valuations. The company's investment strategy is focused on developing the operations of its businesses by leveraging synergies and controlling multiple parts of the cannabis pipeline. However, currently it does not have a fully vertically integrated business and still depends on multiple partners to drive revenue. Finally, we expect Australis to require additional capital to operate these businesses and execute on its investment strategy, which may result in dilution of either the parent or its underlying businesses.

Valuation

We are providing a valuation analysis of Australis based on its capital deployed to date and how our expectations for the market compare to those implied by the company's current market valuation. In short, we believe that the current market valuation is easily justified based on our expectations and there is further upside with a shift in the US federal legal framework for cannabis. We may provide a more detailed analysis of the underlying assets and their value in the future as more details are released and as the company shifts into a more operational role.

Our current nominal value for the core portfolio is C\$43.6m, based on the capital deployed in these investments. We do not include Australis Holdings or SubTerra in these core assets because they are not currently employed in cannabis, although we may amend this in the future. Also, we include Green Therapeutics in this value, because although the transfer of assets is not complete, a definitive agreement has been signed. We should note that these nominal valuations are not marked to market, for instance in the case of BaM, which is currently trading at C\$2.37 (30 May 2019 close) per share for a market value of its 34.9m shares of C\$82.7m, or C\$89.5m accounting for the conversion of the convertible debenture. The company ended December 2018 with C\$24.5m in cash to deploy for investments, of which we estimate that c C\$18m remains, although the



majority of this is earmarked for the Green Therapeutics build-out. We calculate a total nominal value (including cash and legacy assets) of C\$71.9m (see Exhibit 12). However, if we mark BaM to market, this value increases to C\$144.4m.

Asset	Nominal value	Adjusted value
rthm	3.86	
Body & Mind	17.03	89.54
Wagner Dimas	3.00	
Quality Green	2.00	
Folium Biosciences	3.99	
Mr. Natural	1.21	
Green Therapeutics*	12.50	
Core portfolio value	43.59	116.11
Legacy portfolio (Australis Holdings & SubTerra)	4.23	4.23
Cash for investing	17.98	17.98
Other cash	6.05	6.05
Total value	71.85	144.37
Source: Australis Capital reports, Edison Investment Research	ch. Note: *Definitive agreement sign	ned.
Exhibit 13: Australis market valuation		
Shares outstanding (m)		157.80
Share price (C\$)		1.10
Market cap (C\$m)		173.58
Dilutive warrants and options (m)		48.09
Weighted average exercise price (C\$)		0.23
Diluted shares (m)		205.89
Diluted market cap (C\$m)		226.48

Australis is trading at a basic market cap of C\$174m (with 157.8m shares outstanding), or C\$226m accounting for 48m in dilutive securities. The fully diluted market cap is a 57% premium over our adjusted nominal value. This fully diluted valuation is justifiable if the company can maintain an average CAGR of approximately 19% until the year 2024 (with a value of C\$393m). This considers only growth in the core assets and cash for investing and, when a 10% discount rate is applied, equals the current market cap. Moreover, the majority of the assets are valued at cost.

We believe this is a reasonable expectation given our forecasts for the cannabis market. We estimate that the current US cannabis market is approximately US\$10bn (for 2018) and expect the market to grow to over US\$35bn in 2024, with a CAGR of approximately 24%. This assumption considers that if the level of consumption per capita becomes similar in the states that recently legalized recreational cannabis to the level currently seen in Colorado, the market could grow to US\$18.8bn in just a few years, as markets mature in these states alone. Additional legalizations (New Jersey and New York could be a combined US\$7.5bn market at Colorado per capita usage levels) and medical cannabis sales outside the fully legalized states make our estimates achievable. These estimates are driven by state-level legalizations as we forecast that the initial federal legalization pathway will likely defer legalisation to the individual states.

Additionally, this does not account for the shift in valuations that we expect following US federal legalization. We believe legalization will significantly reduce the cost of capital in the industry, which could increase valuations, particularly in smaller private businesses with less access to capital. This allows assets to be acquired at a discount prior to legalization. This is a difficult effect to quantify in practice, but if we assume that assets are trading with a 20% cost of capital now, it implies 70% upside if these assets are revaluated with a 10% cost of capital. It is worth noting that many publicly listed cannabis companies with access to capital command high valuations, and this likely includes BaM. The appreciation in this asset highlights the potential returns from the company's strategy. If federal legalization does not occur in a timely manner, the cost of capital for many assets may



remain high, impairing the ability of Australis to potentially realize these better valuations, if it chooses to divest, although this is not currently a focus of its operational strategy.

Financials

Australis has limited financial history to draw on, and we expect its financials to change significantly as it bolts on additional businesses. In the most recent period (Q319, ending 31 December 2018), the company reported a small revenue stream of C\$132,000 primarily associated with the consulting services it provides to BaM and SubTerra. It also generates interest revenue from the BaM debenture (C\$1.6m at 8%) and we record revenue for FY20 from the interest and repayment penalties for the ShowGrow note (US\$0.5m). Revenue may also be generated in the future though sales of Mr. Natural, rthm and Green Therapeutics products. As we have no financial details regarding these businesses, we do not include them in our forecasts, although we expect to update this in the future as the company develops operationally into a company with recurring revenue. However, the company has stated that it expects US\$10-12m in EBITDA from its Green Therapeutics North Las Vegas facility in its first full year of operation (expected in 2020–21). Additionally, we do not speculate about future investments or divestments and the revenue streams these may generate. Operational expenses were C\$2.0m, which we will use as a baseline going forward (with additional costs from acquisitions). We do not have a long-term outlook on the capital needs of Australis, as we expect this to be highly contingent on the amount of capital it deploys and the operational expenses of the businesses it acquires, but at this time do not include any additional financing in our forecasts.



	C\$000s 2019e	2020e	2021
/ear end 31 March NCOME STATEMENT	IFRS	IFRS	IFF
Revenue	263.8	508.9	508
Cost of Sales	0.0	0.0	0
Gross Profit	263.8	508.9	508
EBITDA	(3,173.2)	(3,301.8)	(3,301.
Normalised operating profit	(3,179.5)	(4,135.3)	(4,135.
Amortisation of acquired intangibles	0.0	0.0	0
Exceptionals	0.0	0.0	0
Share-based payments	(1,368.9)	(2,581.6)	(2,581.
Reported operating profit	(4,548.4) 282.8	(6,716.9) 701.7	(6,716.
loint ventures & associates (post tax)	0.0	0.0	(21)
Exceptionals	(2,247.9)	0.0	
Profit Before Tax (norm)	(5,144.6)	(3,433.6)	(4,163
Profit Before Tax (reported)	(6,513.5)	(6,015.2)	(6,744
Reported tax	1,332.2	0.0	```
Profit After Tax (norm)	(3,342.6)	(3,433.6)	(4,163
Profit After Tax (reported)	(5,181.3)	(6,015.2)	(6,744
Minority interests	0.0	0.0	
Discontinued operations	0.0	0.0	(4.402
Net income (normalised)	(3,342.6)	(3,433.6)	(4,163
Net income (reported)	(5,181.3)	(6,015.2)	(6,744
Basic average number of shares outstanding (m)	143	158	1
EPS - basic normalised (\$)	(0.02)	(0.02)	(0.0)
EPS - diluted normalised (\$)	(0.02)	(0.02)	(0.0
EPS - basic reported (\$) Dividend (\$)	(0.04) 0.00	0.04)	(0.0
V-7	0.00	0.00	0.
BALANCE SHEET	07.504.4	04.070.7	00.040
Fixed Assets	27,534.1	61,679.7	60,846
ntangible Assets Fangible Assets	3,535.4 2,925.2	12,111.4 22,097.9	12,111 21,264
nvestments & other	21,073.4	27,470.4	27,470
Current Assets	31,073.6	6.076.7	2,747
Stocks	0.0	0.0	2,7 .7
Debtors	7,206.6	1,866.6	266
Cash & cash equivalents	23,550.9	3,894.0	2,164
Other	316.2	316.2	316
Current Liabilities	(1,020.4)	(1,100.6)	(1,100
Creditors	(1,020.4)	(1,100.6)	(1,100
Tax and social security	0.0	0.0	
Short term borrowings	0.0 0.0	0.0	(
Other Long Term Liabilities	(17.3)	(17.3)	(17.
Long term borrowings	0.0	0.0	(17.
Other long term liabilities	(17.3)	(17.3)	(17
Net Assets	57,570.0	66,638.6	62,475
Minority interests	0.0	0.0	(2,
Shareholders' equity	57,570.0	66,638.6	62,475
CASH FLOW			
Op Cash Flow before WC and tax	(3,173.2)	(3,301.8)	(3,301
Norking capital	2,509.9	5,420.2	1,600
Exceptional & other	(632.9)	701.7	(27
Tax	(1,332.2)	0.0	, (
Net operating cash flow	(2,628.3)	2,820.1	(1,729
Capex	(100.0)	(20,006.2)	(
Acquisitions/disposals	(25,349.5)	(14,972.9)	(
Net interest	0.0	0.0	(
Equity financing	51,938.0	12,502.2	(
Dividends Other	(200.0) (194.5)	0.0	(
Net Cash Flow	23,465.7	(19,656.8)	(1,729
Opening net debt/(cash)	25,465.7	(23,550.9)	(3,894
X	85.1	0.0	(3,034
Other non-cash movements	0.0	0.0	(
Closing net debt/(cash)	(23,550.9)	(3,894.0)	(2,164

Australis Capital | 31 May 2019



Contact details

Revenue by geography

N/A

Australis Capital Inc. 376 E Warm Springs Rd., Suite 190 Las Vegas, NV 89119 USA 1 800-898-0648

www.ausacap.com

Management team

CEO & Director: Scott Dowty

Mr Dowty has 25 years' experience in evaluating companies and markets to identify key business drivers, spur rapid revenue and profit growth in competitive and highly regulated global markets. He has held executive and corporate officer positions with several US-based NYSE and Nasdaq traded companies, and founded several successful start-up companies in North America and abroad. Mr Dowty's extensive operational capital markets experience in the international fintech and gambling sectors is closely aligned to the regulatory path of the US cannabis industry.

Senior Vice President & General Counsel: Daniel Norr

Mr Norr has more than 20 years of diverse, hands-on experience in commercial litigation including deal development and negotiations. In addition to drafting contracts and corporate governance, he has negotiated and drafted commercial leases, trademark licence agreements, food and beverage management agreements, employment agreements, entertainment and performance contracts, and non-disclosure agreements. Mr Norr has focused on regulatory compliance and joint venture negotiations in several of his previous positions.

Executive Vice President & CFO: Michael J Carlotti Mr Carlotti has 23 years' experience in corporate finance, capital raising,

investing and mergers & acquisitions. He spent 10 years of his career as an investment banker, having completed several IPOs and secondary equity raises, M&A transactions, senior and subordinated debt capital raises and leveraged buyouts, and three years as an investment partner at a \$900m hedge fund. Since 2008, he has held various senior corporate roles, most recently as treasurer for three publicly traded gaming companies where he oversaw treasury, financial planning and analysis, optimal capital allocation, capital markets initiatives, mergers & acquisitions, investor relations and risk management.

Senior Vice President, Mergers & Acquisitions: Cleve Tzung

Mr Tzung has over 20 years' experience in M&A transactions, partnerships, investments and strategic planning. Most recently, he was head of corporate development at Mattel, where his team accounted for over \$1bn in brand and product acquisitions, and integrating those acquisitions into the company's dayto-day operations. He also built and led teams to source and initiate growth and technology partnership discussions. Prior to Mattel, Mr Tzung executed numerous M&A transactions as an investment banker and invested in public equities at a \$3bn long-short investment fund. Additionally, he formulated the strategy in PepsiCo's strategic planning group for a number of years.

	0,	•	0 1	00	'	,
Principal shareholders						(%)
Arlene Dickinson						1.57
811529 Canada Inc.						0.69
Roger Swainson						0.38
Companies named in this report						
Aurora (ACB), Body & Mind (BMMJ)						



General disclaimer and copyright

This report has been commissioned by Australis Capital and prepared and issued by Edison, in consideration of a fee payable by Australis Capital. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the Edison analyst at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2019 Edison Investment Research Limited (Edison). All rights reserved FTSE International Limited ("FTSE") @ FTSE 2019. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd who holds an Australian Financial Services Licence (Number: 427484). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person

United States

The Investment Research is a publication distributed in the United States by Edison Investment Research, Inc. Edison Investment Research, Inc. is registered as an investment adviser with the Securities and Exchange Commission. Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a) (11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.