



EY Insights:
Cannabis
valuations

October 2019



Introduction

A year has now passed since recreational cannabis was legalized in Canada. The past year has seen many interesting developments in the cannabis sector.

Now the next important transformation looms. New cannabis product formats – edibles, extracts and topicals – will be legalized in Canada. Some of these new formats are expected to be available to consumers in December 2019, but the majority will likely not be available until Q1 and Q2 of 2020.

With this next transformation, commonly called Cannabis 2.0, it's a good time to take a refreshed look at the complexities of valuations in the cannabis sector.

At EY Canada, we published [EY Insights: Cannabis valuations](#) in October 2018, just prior to legalization of recreational cannabis in Canada. Post-legalization, cannabis valuation insights continue to evolve. At this stage, some key factors to consider include:

- ▶ Key internal factors: the level of success experienced in supply chains, operating efficiencies, products, branding, management and governance.
- ▶ Key external factors: impacts of regulatory changes and outlooks, evolving estimates for market size and consumer preferences, the expanding options for raising capital, the level of M&A activity, and the pricing and financial results of indicative public companies.

In the past year, the perception of risks and opportunities has changed for the cannabis sector. In this document we look at some of those changes and the impacts on valuations.

Current state of the cannabis sector

Cannabis companies continue to race for market share, in a rapidly developing environment.

Consumer market size – Forecasts vary by source, but spending on adult-use cannabis is forecasted to increase substantially by 2025, especially as the number of licensed cannabis retail stores increase across the country and additional product formats – edibles, extracts and topicals – hit retail shelves. See EY Canada's [Defining the Cannabis Sector in Canada by 2025](#) and [Canadian Cannabis Consumer Insights for Legalization 2.0](#) (the latter published in conjunction with Lift & Co). The challenge cannabis companies will face is converting this potential into profits.

Governance in the spotlight – In the past year, there have been notable events in the press about changes at the C-suite and board levels within cannabis companies and some significant regulatory compliance issues and concerns. These events are not surprising given the transformations currently happening in the cannabis sector. These transformations require in-house competencies that will allow cannabis businesses to develop and scale operations to pursue expanding domestic and international markets.

Regulatory developments in Canada – Since recreational cannabis was legalized in Canada, significant regulatory developments have occurred, including:

- ▶ As of May 8, 2019, Health Canada requires that new applicants for licences (to cultivate cannabis, process cannabis or sell cannabis for medical purposes) must have a fully built site that meets all the requirements of the Cannabis Regulations at the time of application, as well as satisfying other application criteria. This change has created more barriers to entry for start-up (or increased start-up risk), but may make the application process more predictable for more mature applicants.
- ▶ After October 17, 2018, Health Canada started accepting applications for micro cultivation, micro processing, and outdoor cultivation licences. These new licence categories allow for more diversity and competition, via new commercial models. It will be interesting to continue to follow this development, to assess the impact these smaller-scale craft producers and outdoor cultivators will ultimately have on the recreational cannabis industry.

The Canadian market is small relative to the global one.
All eyes are on the US market.

Current state of the cannabis sector (cont.)

Regulatory developments in the US

In the past year, many significant regulatory developments have occurred in the US, including:

- ▶ The 2018 Farm Bill was passed into law in December 2018, which allows each state to decide how to regulate the cultivation and processing of hemp and the sale of CBD products within its borders by removing hemp (*cannabis sativa* with less than 0.3% THC) from the Controlled Substances Act. This change is accelerating interest in a wide range of products containing CBDs (e.g., alcohol, cosmetics, pet care, tobacco, ice cream – to name just a few). However, infusing CBD into ingestible food and beverage products is still prohibited by the FDA. Despite this, professional chefs in the US recently named CBD-infused and cannabis-infused food and beverages as the top food trend for 2019 (source: National Restaurant Association survey).
- ▶ The SAFE Banking Act, which would provide federal protections to financial institutions and insurance companies that serve state-legal cannabis businesses and ancillary companies, was passed in the House of Representatives in September 2019. This banking bill will need to be passed in the Senate prior to becoming law.
- ▶ Cannabis legalization has advanced in additional states. The count has increased to 11 states (plus other areas or territories, such as the District of Columbia) with full legalization (including recreational use). Medical use cannabis is now legalized in 34 states (plus DC and certain territories).

Other US cannabis sector developments

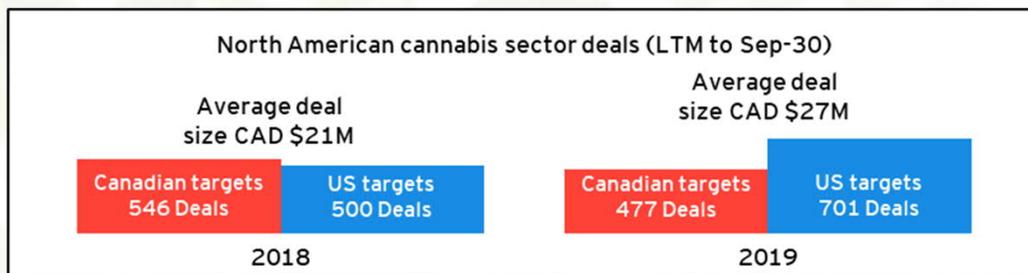
- ▶ Even before the SAFE Banking Act passed in the House of Representatives, a growing number of banks in the US were working with cannabis companies so that these companies could move away from cash transactions and the risks associated with keeping significant cash on hand.
- ▶ Investment banking firms have initiated exchange traded funds referencing cannabis and have initiated cannabis sector coverage.

The US regulatory environment for the cannabis sector is significantly less restrictive than it was one year ago. However, marijuana continues to be an illegal substance at the federal level in the US.

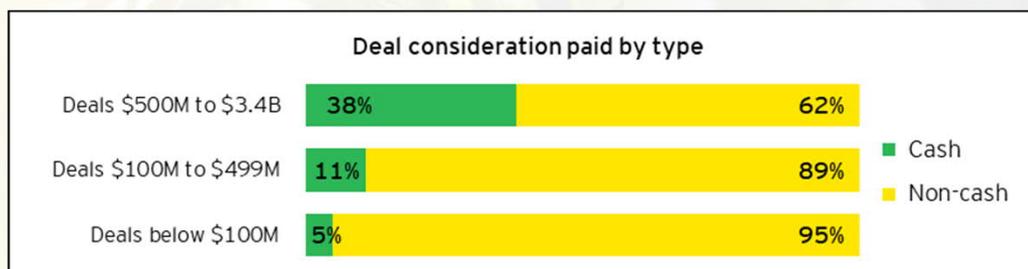
Recent cannabis transactions

Interesting times lead to interesting transactions...

- ▶ In the past year, M&A transaction activity continued at a strong pace. A summary of North American M&A transaction activity involving public companies in the cannabis sector for the past year is portrayed in the chart below. Selected information on larger deals in the past year is set out in Appendix A of this document.



- ▶ US led M&A activity was strong. Of the 20 largest North American cannabis sector transactions in the past year involving public companies, 11 were transactions with buyers headquartered in the US.
- ▶ Valuation multiples based on earnings are still not meaningful. Generally, negative earnings continue to be the norm for North American public cannabis companies. Accordingly, earnings-based multiples for public companies in the cannabis sector are typically not meaningful.
- ▶ Stock (not cash) is king. With many uncertainties in the cannabis sector, it's not surprising to see significant levels of non-cash consideration in deal structures. Based on approximately 100 reported transactions analyzed by EY Canada (with the earliest closing date in December 2016), deal consideration is primarily the buyer's stock – all cash deals have been rare.





Recent cannabis transactions (continued)

- ▶ Deal terms favour options and contingencies. Options and contingencies are being used to lock in an ability to participate if favourable scenarios unfold, while bridging the sector's current uncertainties. A significant example is the \$3.4B (CAD) "contingent" transaction announced in April 2019 by Canopy Growth Corporation, which would see Canopy Growth acquire Acreage Holdings, Inc. The closing of that transaction is contingent on US federal legalization of cannabis by 2027. That closing condition could be interpreted as providing an indication of the expected timeframe until the federal legalization of cannabis in the US.
- ▶ The rate of initial public offerings for cannabis companies in North America has slowed, but continues to be significant. There were 51 cannabis IPOs for the 12 months ended September 30, 2018 (leading up to the legalization of recreational cannabis in Canada), and 43 IPOs in the next 12 months to September 30, 2019 – a drop of 15.7% in IPO transactions between the two 12-month periods.
- ▶ The Canadian Securities Exchange has become an important exchange for cannabis companies seeking public company status. At September 30, 2019, there were approximately 170 marijuana companies listed on the Canadian Securities Exchange (CSE). The CSE Composite Index® and CSE 25 Index™ are benchmarks significantly weighted with stocks in the life sciences category, including many cannabis companies.
- ▶ Cannabis companies are eager to raise financing via the US equity markets. While the Canadian federal legalization of recreational cannabis has put Canada at the centre of banking, listing, and M&A activity, because the US equity markets are much bigger than the Canadian markets, there were approximately 200 cannabis companies headquartered in Canada that were listed on US exchanges at September 30, 2019.
- ▶ The number of public companies overall has grown. The North American public company count in the cannabis sector has grown to approximately 600 public companies at September 30, 2019. See Appendix B to this document for information on the 25 largest North American public cannabis companies, many of which are headquartered in the US.

For more details, see the deals and market data in the appendices of this document.



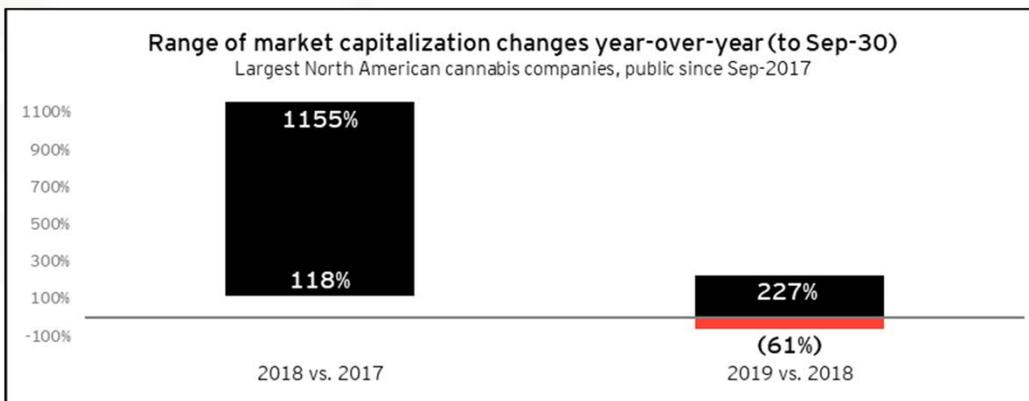
Valuation insights

The cannabis sector is grappling with important valuation questions. Here, EY Canada explores some of these questions.

1 How are valuations of public cannabis companies performing overall?

The news is not good. Generally, despite new share offerings, market capitalization growth rates in the last 12 months for North American public cannabis companies have narrowed to a significantly lower range than the high growth rates from one year ago. For many such companies, the growth rates have flipped from positive to negative.

As an example, for the largest North American cannabis companies (by market capitalization) that have been public since September 30, 2017, the range of annual growth rates in market capitalization for 2018 and 2019 are illustrated in the chart below. We found that 60% of the companies experienced a decline in market capitalization for the twelve months ended September 30, 2019, and the entire range of growth rates lowered dramatically for this group of companies.



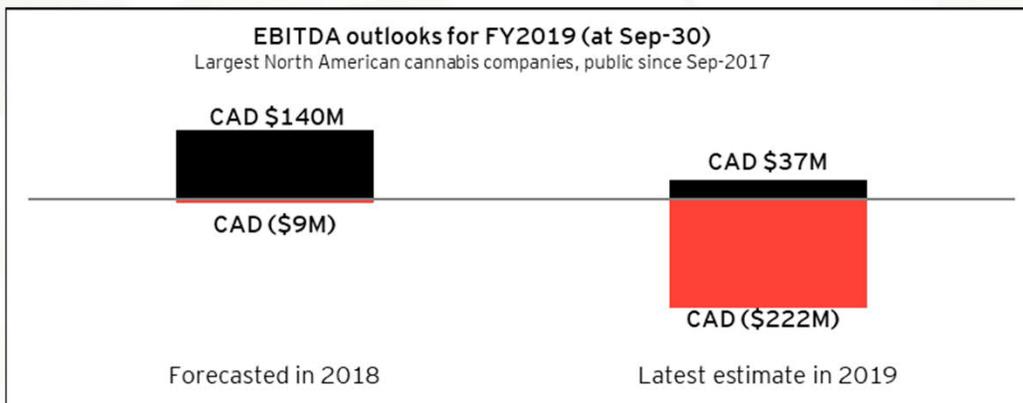
The tremendous pre-legalization annual growth rates in market capitalizations have dropped off to much lower rates post-legalization.



2 In the past year since legalization, did companies live up to earnings and share price expectations?

Overall, public company EBITDA results fell short of expectations.

In EY Canada's cannabis valuation insights publication from one year ago, we provided an analysis of the 25 largest cannabis companies on the Canadian stock exchanges. At that time, available outlooks (management guidance and analyst expectations per Capital IQ) generally predicted that EBITDA would improve significantly within one year. Unfortunately, EBITDA levels generally did not meet expectations. As shown in the chart below, one year ago, most of these companies were forecasting positive 2019 EBITDA, but current outlooks for 2019 have flipped to generally negative EBITDA.



Public cannabis companies are attributing the disappointing 2019 EBITDA results to many factors on both the demand and supply sides of the business equation. Regardless of the cause(s), these EBITDA shortfalls tell the market that companies have been spending funds that are not currently income producing.

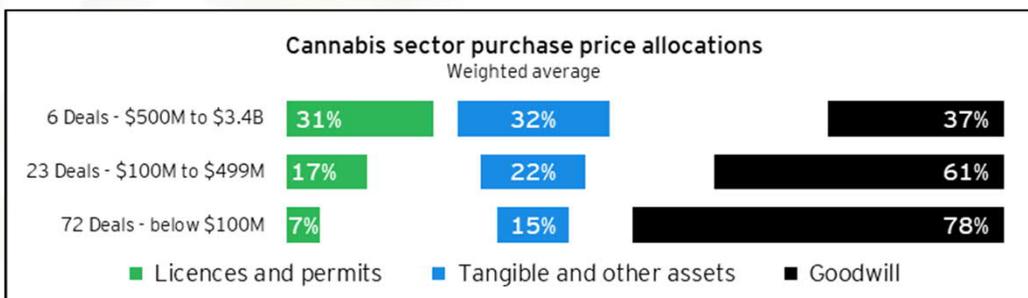
The market has reacted strongly to the EBITDA shortfalls, with share prices at September 30, 2019 typically falling below share prices from one year earlier.



3 How much did buyers pay for intangible assets? And, how significant is the early-licence advantage?

Deals included significant payments for intangible assets, most notably large levels of goodwill. Generally, the smaller the transaction, the larger the proportion of goodwill, and the larger the transaction, the higher the percentage allocated to licences, permits, and other assets.

EY Canada analyzed the financial reporting of approximately 100 deals reported by North American public cannabis companies (the earliest closed in December 2016). We found that a large portion of the deal price was typically allocated to goodwill. Licences and permits also typically had significant purchase price allocations, particularly for larger transactions and for targets headquartered in the US. Allocations to other assets (e.g., working capital, facilities and equipment, brands, distribution networks) were noteworthy on a collected basis, but not significant individually, as shown in the following chart.



The allocations to licences and permits may appear surprisingly low. However, the value of these intangible assets will depend on the regulatory environment of each jurisdiction. Valuations consider the legalized cannabis products and uses, and the extent of the local barriers that prevent additional entrants from obtaining licences and permits. Other important considerations include the expected pricing and margins, which also vary across jurisdictions.

In performing cannabis valuations, the devil is clearly in the details. The extent of the early licence advantage must be carefully considered.



4 Are goodwill and investment write-offs (impairment adjustments) coming?

The economics of booked goodwill and investment values will be considered on a case-by-case basis, by looking at both elements of the equation: the carrying value (originally based on the historical price paid) and the current valuation. Many stakeholders will be watching for indications of impairment.

Because the post-legalization performance of many cannabis companies in Canada missed expectations, and given the significant levels of goodwill recorded in business acquisitions, cannabis sector stakeholders will naturally be watching for indicators of goodwill impairment, and over-valuations in general, on the balance sheets of cannabis companies.

Common questions will include whether recent or near-term performance shortfalls are temporary, which performance gaps can be closed, what are the fundamental changes in the sector and its industries over the past year, and what knowledge do we have now that we didn't have one year ago.

For large goodwill and other asset values recorded based on deals executed at high valuation multiples, as time passes, the historical deal metrics will become increasingly outdated and therefore less compelling as protection for current valuations.

So far, there have been only a handful of notable (significant) goodwill or investment impairment adjustments reported pertaining to North American public cannabis companies. However, impairment adjustments are likely to increase as the cannabis sector and its industries mature, identifying (with the benefits of hindsight) the successful business acquisitions and the struggling ones.



5 Is the cannabis sector getting organized around key metrics for comparability?

At this early stage, many companies are using non-standardized metrics to describe production, capacity, volumes, and earnings. Such metrics are prone to subjectivity and comparability issues.

Management and analysts are frequently using non-standardized metrics to describe cannabis business performance – metrics that are not defined by the accounting standard setters. Examples of such metrics:

- ▶ Revenue per population
- ▶ Cash cost of sales per gram / lb
- ▶ Cash cost to produce per gram / lb
- ▶ Operating cost per metre / square foot
- ▶ Production capacity / facility size / canopy area
- ▶ Normalized or adjusted EBITDA

Because there are no standardized methodologies for calculating such specialized metrics, one company's approach to such calculations may differ from another's. This divergence can lead to comparability challenges.

With this divergence of practice for key metrics, it would be prudent to look at the details of the calculations of these non-standardized metrics, rather than accepting them at face value. Adjustments to reported metrics across cannabis companies may be required before using the metrics for valuation or capital allocation decisions.



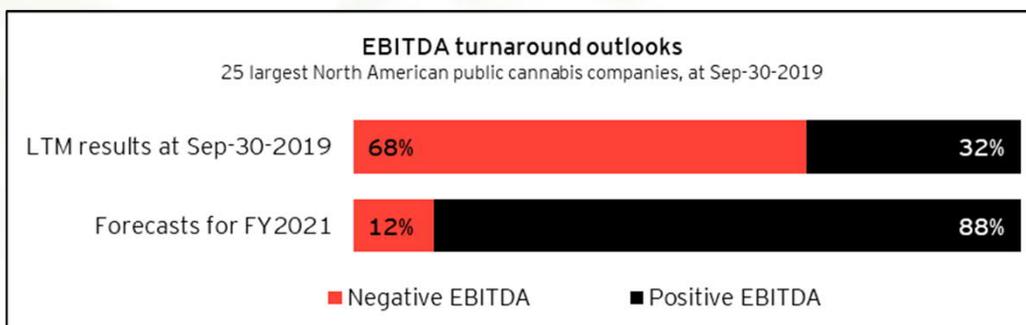
6 What are the impacts on earnings that companies are expecting from planned improvements in operating processes?

As cannabis companies mature, not surprisingly, they expect to realize operating efficiencies which they forecast will result in EBITDA flipping from negative to positive.

Cannabis companies are expecting that operating efficiencies will come from many areas, including improving their facilities, honing and automating their processes, and improving quality control measures. Innovations in technology and rapidly advancing know-how in the talent pool of the businesses will be key drivers for these improvements. As a result of such planned improvements, companies and analysts are generally forecasting profit margin improvements for cannabis companies over the next few years.

As summarized in Appendix B, EY Canada analyzed the forecasted gross profit margins and EBITDA margins of the 25 largest North American public companies in the cannabis sector as at September 30, 2019 and found that:

- ▶ These companies expect gross profit margins to improve on average from 54% in 2019 to 62% in 2021, and
- ▶ While most of these companies (68%) reported negative EBITDA for the past year to September 30, 2019, most (88%) are forecasting positive EBITDA by 2021, as shown in the chart below.



The cannabis sector expects that its future cash burn will translate into positive EBITDA by 2021 – a turnaround from the generally negative outlook currently held for 2019.



7 Which valuation approach works best in the current environment?

It depends on the available information.

In practice, valuation professionals will use professional judgment to select the appropriate valuation approaches and techniques, depending on available information. In the Cannabis sector, income and market based valuation approaches are frequently applied given the relatively early stage of development, and a variety of key metrics are considered.

Guidance from the accounting profession may be helpful in contemplating valuation approach.

- ▶ International Financial Reporting Standards and US Generally Accepted Accounting Principles (collectively, GAAP) provide a framework for measuring fair value for various business elements in financial reporting.
- ▶ GAAP establishes a hierarchy for the inputs used to derive fair value, requiring an entity (in certain contexts) to maximize observable inputs and minimize the use of unobservable inputs (the fair value hierarchy). The three levels in the fair value hierarchy are summarized below.

	Definition	Example
Level 1	Quoted prices (unadjusted) in active markets for identical assets that the entity can access at the measurement date	The price for the identical subject stock traded in an active market
Level 2	Inputs, other than the quoted prices included within level 1, that are observable for the asset, either directly or indirectly	The price for a comparable stock traded in an active market
Level 3	Unobservable inputs for the asset	Projected cash flows used in a discounted cash flow calculation

The fair value hierarchy focuses on prioritizing the inputs used in valuation techniques, not the techniques themselves (and valuation adjustments beyond these inputs may be required). However, the availability of inputs would affect the valuation technique(s) selected to measure fair value. Level 1 and 2 inputs are used in techniques under the market approach to valuation. Level 3 information is used in techniques under the income approach.

Where the valuation target is listed on a stock exchange, or is in a jurisdiction where comparable precedent transactions exist, the market approach, using observable inputs, may be the appropriate primary approach. Market based approaches will often include adjustments for factors such as control premiums and non-public information. However, when meaningful market data is not available, the income approach (in particular, the discounted cash flow technique), even with its unobservable inputs, will often be applied.

Appendices



Appendix A – Cannabis deals: North America

Selection of deal information reported by public companies in the North American cannabis sector for the twelve months ended September 30, 2019

	Date	Buyer		Target		% Acquired (or N/A)	Consideration to shareholders (CAD\$M)	Implied EV (CAD\$M)	1-day prior control premium	LTM EBITDA of target (CAD \$M)
		Company	Headquarters	Company	Headquarters					
1	18-Apr-2019 Announced	Canopy Growth Corporation (TSX:WEED)	Canada	Acreage Holdings, Inc. (CNSX:ACRG.U)	United States	100%	3,400.0	3,400.0	42%	(158.6)
2	08-Mar-2019 Closed	Altria Summit LLC	United States	Cronos Group Inc. (TSX:CRON)	Canada	45%	2,376.1*	N/A	N/A	(5.2)
3	10-Mar-2019 Announced	Verano Holdings, LLC	United States	Harvest Health & Recreation Inc. (CNSX:HARV)	United States	100%	1,140.6*	1,140.6*	N/A	(14.8)
4	01-Apr-2019 Announced	Cresco Labs Inc. (CNSX:CL)	United States	Origin House (CNSX:OH)	Canada	100%	974.5	973.8	5%	(41.3)
5	17-Jul-2019 Announced	Curaleaf Holdings, Inc. (CNSX:CURA)	United States	GR Companies, Inc.	United States	100%	898.9	898.9	N/A	N/A
6	01-May-2019 Announced	Curaleaf Holdings, Inc. (CNSX:CURA)	United States	Cura Partners, Inc.	United States	100%	703.3	851.7	N/A	N/A
7	10-Jun-2019 Announced	Vertical Companies	United States	Umbra Inc	United States	100%	605.2	605.2	N/A	N/A
8	05-Feb-2019 Closed	iAnthus Capital Holdings, Inc. (CNSX:IAN)	United States	MPX Bioceutical Corporation	Canada	100%	517.6	635.3	30%	(16.9)
9	27-Feb-2019 Closed	Tilray, Inc. (NasdaqGS:TLRY)	Canada	Fresh Hemp Foods Ltd.	Canada	100%	414.1*	414.1	N/A	(67.2)
10	09-Jul-2019 Announced	Green Growth Brands Inc. (CNSX:GGB)	Canada	MXY Holdings, LLC/PurePenn, LLC/Pure CA, LLC	United States	N/A	405.7*	N/A	N/A	N/A
11	05-Jun-2019 Closed	GTI Core, LLC	United States	Integral Associates, LLC/ Integral Associates CA, LLC	United States	100%	385.0	385.0	N/A	N/A
12	05-Sep-2019 Closed	Zeus Cannabinoids, LLC	United States	Redwood Wellness, LLC/Redwood IP Holding, LLC/Redwood Retail, LLC/Redwood Operations CA, LLC	United States	100%	366.7	384.3	N/A	N/A
13	30-Apr-2019 Closed	Canopy Growth Corporation (TSX:WEED)	Canada	C3 - Cannabinoid Compound Company GmbH	Germany	100%	340.2	340.2	N/A	N/A
14	24-May-2019 Closed	HEXO Corp. (TSX:HEXO)	Canada	Newstrike Brands Ltd. (TSXV:HIP)	Canada	100%	314.4	244.6	4%	(30.0)
15	16-Sep-2019 Announced	Cresco Labs Inc. (CNSX:CL)	United States	Certain Assets of Tryke Companies	United States	100%	301.6	301.6	N/A	N/A
16	27-Dec-2018 Announced	All Js Greenspace LLC	United States	Green Growth Brands Inc. (CNSX:GGB)	Canada	N/A	300.0*	N/A	N/A	N/A
17	23-Nov-2018 Closed	11065220 Canada Inc.	Canada	All Assets of ebbu, Inc.	United States	100%	253.3	419.1	N/A	N/A
18	14-Mar-2019 Closed	Aleafia Health Inc. (TSX:ALEF)	Canada	Emblem Corp.	Canada	100%	241.7	212.7	27%	(13.1)
19	20-Aug-2019 Closed	The Flwr Corporation (TSXV:FLWR)	Canada	Holigen Limited	Malta	80%	237.5	298.3	N/A	N/A
20	14-Jan-2019 Closed	Santé Veritas Holdings Inc. (CSE:SV)	Canada	Jupiter Research, LLC	United States	100%	230.6	283.9	N/A	N/A

Ranked by consideration to shareholders.

*Total Transaction value used in lieu of consideration to shareholders for certain deals.

N/A = Not available EV = Enterprise Value LTM = Last twelve months

Market information per Capital IQ at Oct-23-2019. Capital IQ search filters: North American headquarters, Cannabis, Marijuana, Marihuana, Hemp or Cannabinoid.

Appendix B.1 – Cannabis public cos: North America

Market information for the 25 largest North American public companies in the cannabis sector at September 30, 2019 (in CAD \$M)

	Company	Ticker	Market capitalization			LTM (Sep-30-2019)		
			Sep-30-2019	% change 2019 v. 2018	% change 2018 v. 2017	Revenue	EBITDA	EBITDA Margin
Companies headquartered in Canada:								
1	Canopy Growth Corporation	TSX:WEED	10,557.7	(27%)	688%	290.9	(573.3)	(197%)
2	Aurora Cannabis Inc.	TSX:ACB	5,987.4	(50%)	1,059%	247.9	(209.9)	(85%)
3	Cronos Group Inc.	TSX:CRON	4,023.7	58%	582%	26.1	(34.8)	(133%)
4	Tilray, Inc.	NasdaqGS:TLRY	3,228.1	(81%)	N/A	116.1	(113.1)	(97%)
5	Aphria Inc.	TSX:APHA	1,733.4	(61%)	354%	254.6	(22.4)	(9%)
6	HEXO Corp.	TSX:HEXO	1,344.0	(21%)	1,140%	33.5	(32.8)	(98%)
7	OrganiGram Holdings Inc.	TSX:OGI	710.6	(19%)	196%	67.3	68.0	101%
8	TerrAscend Corp.	CNSX:TER	620.2	0%	1,155%	39.0	(42.2)	(108%)
9	Ignite International Brands, Ltd.	CNSX:BILZ	611.3	N/A	N/A	6.1	N/A	N/A
10	Sundial Growers Inc.	NasdaqGS:SNDL	597.2	N/A	N/A	20.8	(40.3)	(194%)
11	Village Farms International, Inc.	TSX:VFF	590.8	90%	206%	198.4	(12.0)	(6%)
12	The Green Organic Dutchman Holdings Ltd.	TSX:TGOD	559.3	(69%)	N/A	7.2	(55.7)	(776%)
13	PharmaCielo Ltd.	TSXV:PCLO	499.9	N/A	N/A	N/A	(32.2)	N/A
14	MediPharm Labs Corp.	TSX:LABS	495.6	N/A	N/A	63.6	5.0	8%
Companies headquartered in the United States:								
15	Curaleaf Holdings, Inc.	CNSX:CURA	3,351.9	N/A	N/A	179.3	(30.4)	(17%)
16	Arena Pharmaceuticals, Inc.	NasdaqGS:ARNA	3,019.0	3%	135%	1,065.2	776.1	73%
17	Green Thumb Industries Inc.	CNSX:GTII	2,355.2	(28%)	N/A	144.7	(34.9)	(24%)
18	Charlotte's Web Holdings, Inc.	TSX:CWEB	1,788.5	591%	N/A	112.4	17.1	15%
19	Innovative Industrial Properties, Inc.	NYSE:IIPR	1,382.3	227%	417%	31.6	20.1	64%
20	Trulieve Cannabis Corp.	CNSX:TRUL	1,239.7	(26%)	N/A	218.0	222.2	102%
21	Harvest Health & Recreation Inc.	CNSX:HARV	1,195.7	N/A	N/A	96.7	(60.2)	(62%)
22	Cara Therapeutics, Inc.	NasdaqGM:CARA	1,127.4	(7%)	118%	26.4	(117.1)	(443%)
23	Columbia Care Inc.	OTCPK:CCHW.F	1,001.3	N/A	N/A	47.1	(0.04)	(0.1%)
24	Cresco Labs Inc.	CNSX:CL	954.9	N/A	N/A	101.9	2.4	2%
25	Acreage Holdings, Inc.	CNSX:ACRG.U	882.0	N/A	N/A	61.0	(158.6)	(260%)

Ranked by market capitalization as at Sep-30-2019.

N/A = Not available LTM = Last twelve months

Market information per Capital IQ at Oct-23-2019. Capital IQ search filters: North American headquarters, Cannabis, Marijuana, Marihuana, Hemp or Cannabinoid.

Appendix B.2 – Cannabis public cos: North America

Market information for the 25 largest North American public companies in the cannabis sector at September 30, 2019 (in CAD \$M)

	Company	Ticker	Estimated EBITDA			Estimated gross profit margin %		
			FY2019	FY2020	FY2021	FY2019	FY2020	FY2021
Companies headquartered in Canada:								
1	Canopy Growth Corporation	TSX:WEED	(222.3)	(305.8)	(85.5)	27%	29%	44%
2	Aurora Cannabis Inc.	TSX:ACB	(140.1)	(0.7)	217.4	56%	63%	65%
3	Cronos Group Inc.	TSX:CRON	(59.3)	(11.8)	89.8	54%	58%	55%
4	Tilray, Inc.	NasdaqGS:TLRY	(85.9)	(32.3)	77.6	31%	39%	45%
5	Aphria Inc.	TSX:APHA	(42.6)	84.5	172.3	23%	36%	41%
6	HEXO Corp.	TSX:HEXO	(36.2)	43.7	130.4	46%	50%	52%
7	OrganiGram Holdings Inc.	TSX:OGI	37.4	77.2	110.7	58%	64%	64%
8	TerrAscend Corp.	CNSX:TER	N/A	N/A	N/A	N/A	N/A	N/A
9	Ignite International Brands, Ltd.	CNSX:BILZ	N/A	N/A	N/A	N/A	N/A	N/A
10	Sundial Growers Inc.	NasdaqGS:SNDL	11.8	160.1	290.5	48%	56%	59%
11	Village Farms International, Inc.	TSX:VFF	49.8	107.2	172.4	24%	44%	46%
12	The Green Organic Dutchman Holdings Ltd.	TSX:TGOD	(43.4)	46.2	90.3	59%	69%	68%
13	PharmaCielo Ltd.	TSXV:PCLO	(10.4)	37.2	117.1	41%	80%	86%
14	MediPharm Labs Corp.	TSX:LABS	37.0	80.5	137.2	37%	44%	47%
Companies headquartered in the United States:								
15	Curaleaf Holdings, Inc.	CNSX:CURA	39.9	400.2	682.0	55%	57%	58%
16	Arena Pharmaceuticals, Inc.	NasdaqGS:ARNA	700.1	(391.2)	(390.0)	100%	100%	100%
17	Green Thumb Industries Inc.	CNSX:GTII	33.1	177.5	296.1	51%	53%	55%
18	Charlotte's Web Holdings, Inc.	TSX:CWEB	40.7	126.9	210.6	74%	72%	69%
19	Innovative Industrial Properties, Inc.	NYSE:IIPR	42.8	86.7	127.6	97%	97%	96%
20	Trulieve Cannabis Corp.	CNSX:TRUL	140.5	200.5	262.6	66%	67%	67%
21	Harvest Health & Recreation Inc.	CNSX:HARV	0.1	377.5	615.2	50%	58%	62%
22	Cara Therapeutics, Inc.	NasdaqGM:CARA	(135.2)	(133.8)	(171.8)	100%	99%	89%
23	Columbia Care Inc.	OTCPK:CCHW.F	(50.9)	83.0	195.2	34%	48%	54%
24	Cresco Labs Inc.	CNSX:CL	29.0	262.5	476.8	48%	55%	54%
25	Acreage Holdings, Inc.	CNSX:ACRG.U	(54.4)	81.3	233.7	60%	52%	53%

Ranked by market capitalization as at Sep-30-2019.

N/A = Not available LTM = Last twelve months

Market information per Capital IQ at Oct-23-2019. Capital IQ search filters: North American headquarters, Cannabis, Marijuana, Marihuana, Hemp or Cannabinoid.

We can help

In Canada and globally, the cannabis sector is still evolving through the early stages of commercializing legalized recreational cannabis. EY has cannabis sector experience-based insights that can help.

EY's Transaction Advisory Services professionals, including valuation professionals such as Chartered Business Valuators and Chartered Financial Analysts, are available to guide companies through the continued turmoil around capital agendas, including transactions to buy and integrate, and reshaping results. Transparent and robust valuations are part of the key knowledge required to support the current transaction environment — empowering the C-suite, and buyers and sellers.

Businesses, both private and public, and lenders and institutional investors often need external valuations or fairness opinions to support major corporate transactions and decision-making. Acquisitions, divestitures, restructuring, optimization, financing, and supporting financial statement assertions such as purchase price allocations and impairment adjustments — these are just some of the areas where valuations are essential business requirements.

Our valuation professionals apply a powerful combination of experience and technical skills to complex cannabis sector valuation situations. Our valuation services include the following:

- ▶ Business valuation advice and conclusions for strategic planning, transaction advice, financing, and tax planning
- ▶ Intangible asset valuations for financial reporting, transfer pricing, corporate tax planning, and strategic planning purposes
- ▶ Capital equipment and real estate valuations for financial reporting, transaction, financing, taxation, and insurance purposes
- ▶ Financial reporting valuations, including purchase price allocations, impairment studies, and venture investment valuations
- ▶ Dispute or litigation support services, including expert advice on valuation and damage (loss) quantification, and providing expert reports to assist in resolving financial disputes
- ▶ Formal valuation opinions for compliance and regulatory purposes
- ▶ Fairness opinions to assist boards of directors in meeting their fiduciary duties to shareholders and other stakeholders related to capital transactions and non-arm's-length transactions
- ▶ Decision modelling for transaction purposes (such as M&A activities or financing) or for strategic or operating purposes (such as supply chain optimization)
- ▶ Economic analysis, including impact studies, economic development strategies, and econometric modelling

Contact us across Canada

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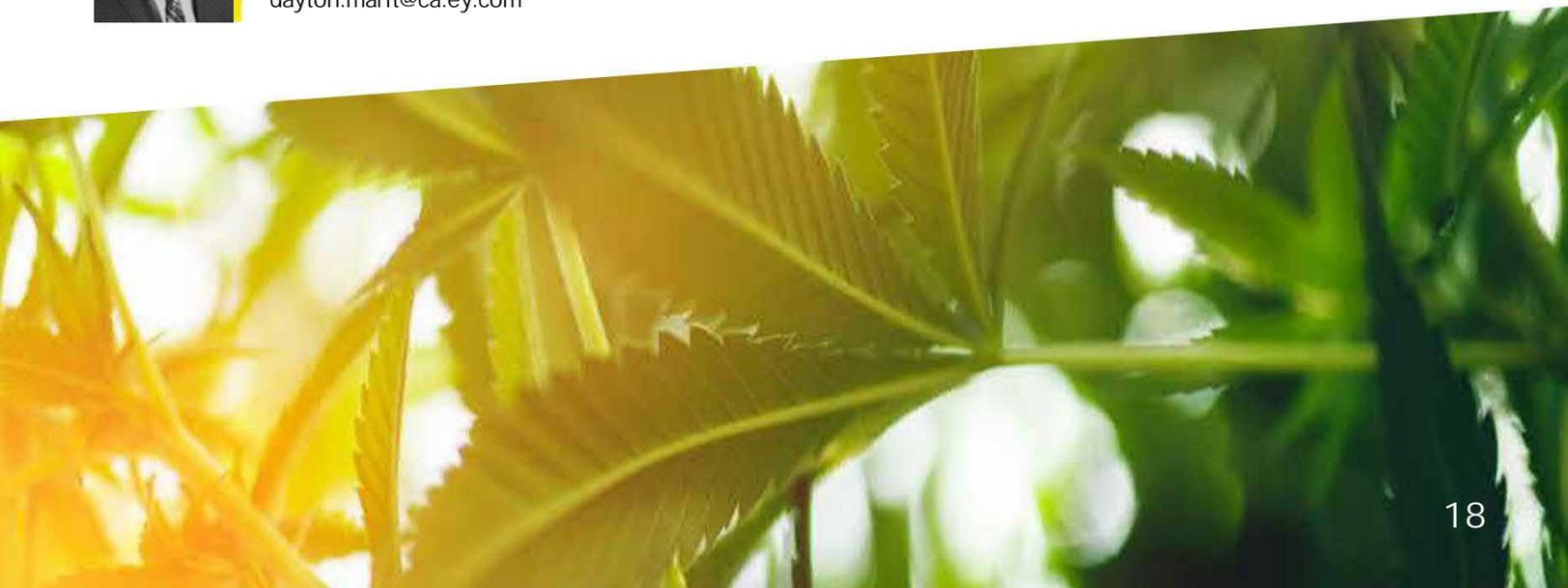
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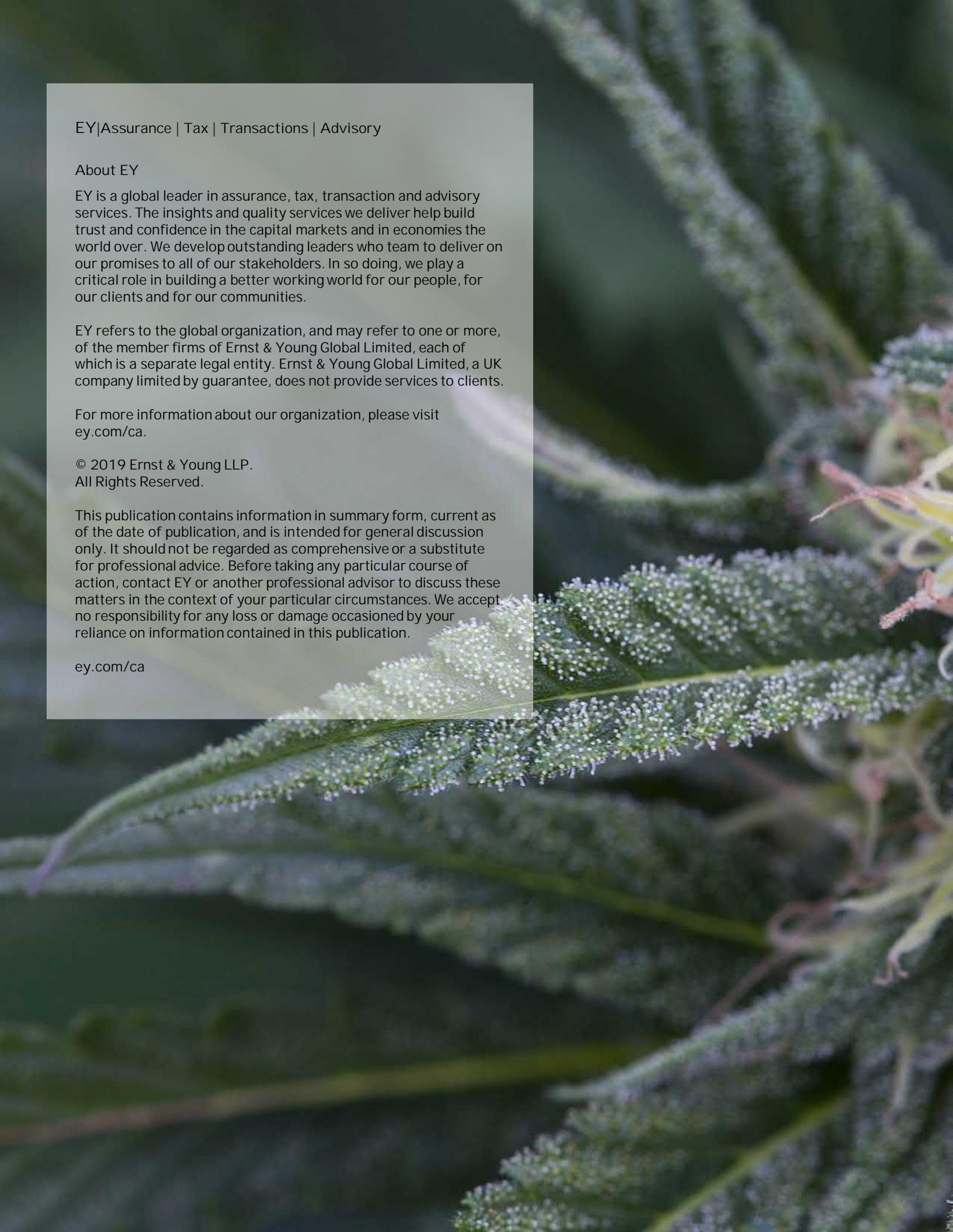


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