

### **CANADIAN CANNABIS**

# Cultivating a New Industry: Expansion, Opportunities, Challenges

# **About MNP**



- MNP LLP is Canada's 5<sup>th</sup> largest national accounting and business consulting firm, with more than 70 locations and 4,000 team members across the country.
- MNP is the 2<sup>nd</sup> largest firm in BC with more than 900 team members located in 20 communities.





# **MNP's Sample Engagements**



- Trusted advisor to cannabis industry and public sector
- Supported numerous LPs with their IPOs
- Domestic, international, indirect and SR&ED tax advice
- Strategic advisor to First Nation communities
- Completed feasibility studies and business plans for cannabis cultivation facilities, distribution centers and retail stores
- Due diligence and transaction advisory
- Internal control and business process implementation
- Technology selection



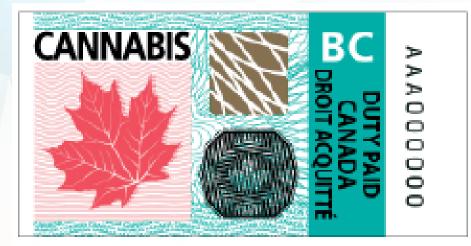


# **THE CANADIAN CANNABIS LANDSCAPE**



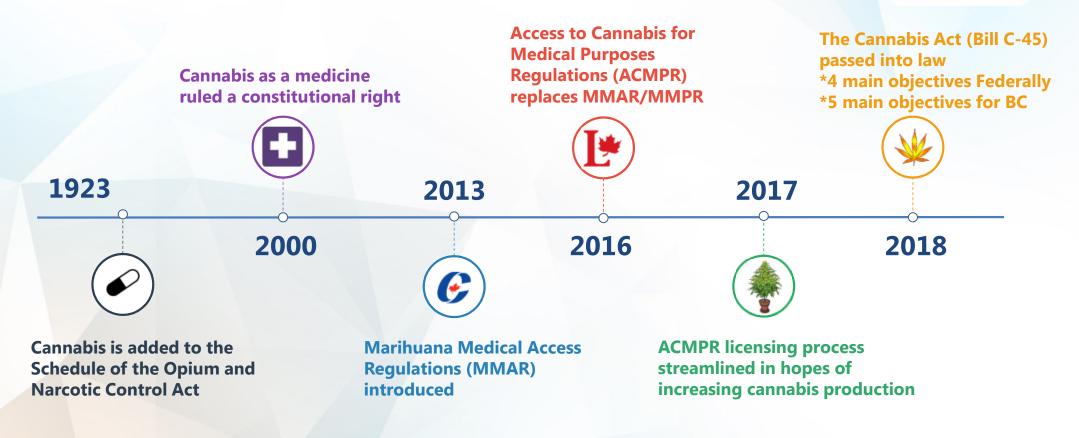
# Is it legal?













Industry Statistics at a Glance 146 342,103 Licensed ACMPR Producers \* Patients \* \*As of January 29, 2019 \*As of Sept 30, 2018 I 102 tons Dried Product & Oil as at Septer MNP 18,086 AHPs Prescribing \*

\* As of Sept 30, 2018

Dried Product & Oil as at September 30, 20184.9 million\$5.7 billion926 tonsEst. Canadian<br/>Consumers<br/>in 2017Est. Canadian<br/>Cannabis market in<br/>2017Est. Canadian<br/>Demand<br/>in 2019

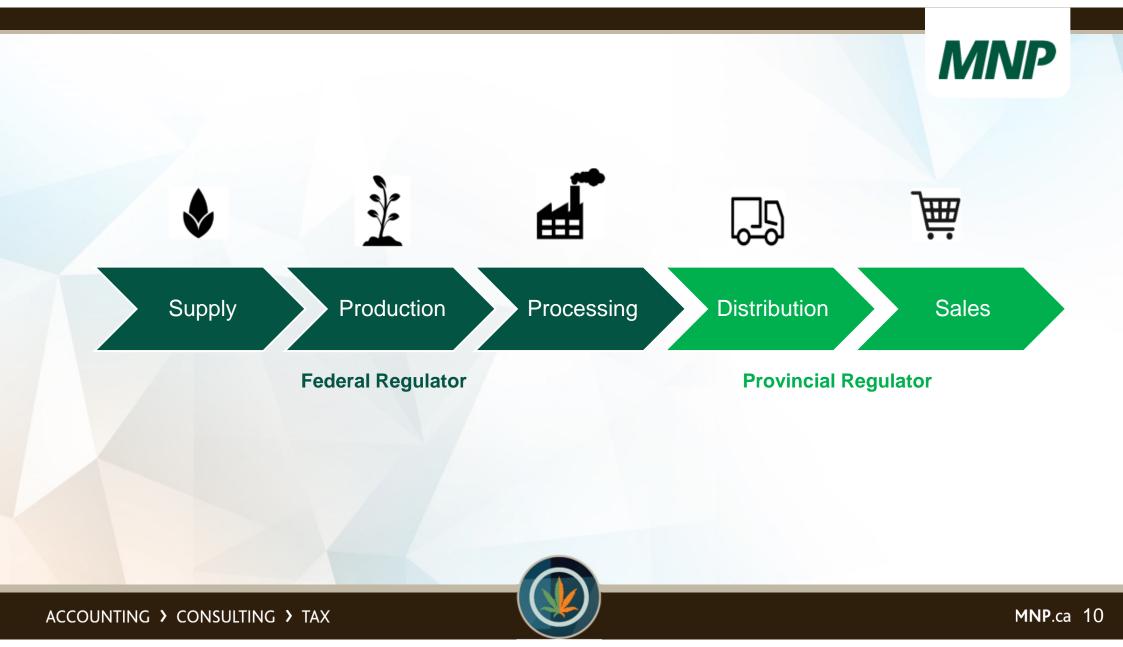
# **Industry Statistics at a Glance**

Stats Cannabis	December 2018	
	Dried (kg)	Oil (litres)
Sales - medical	1,821	4,979
Sales - non-medical	5,431	2,148
Sales	7,252	7,127
Federal licence holders	8,873	27,478
Provincial distributors/retailer	10,213	11,351
Finished inventory (end of month)	19,085	38,829
Federal licence holders	109,236	26,038
Unfinished inventory (end of month)	109,236	26,038



- Note: Medical sales are direct from LP; non-medical sales must go through provincial distributor
- Oil is being stock-piled by both LP's and provinces; estimating an increase in demand or holding on for edibles?
- "Shortages" are based on specific products that are in-demand; provincial distributors have finished inventory > monthly sales
- Oil sells significantly more in medical markets because combustible concentrates are not yet legal in the adultuse market

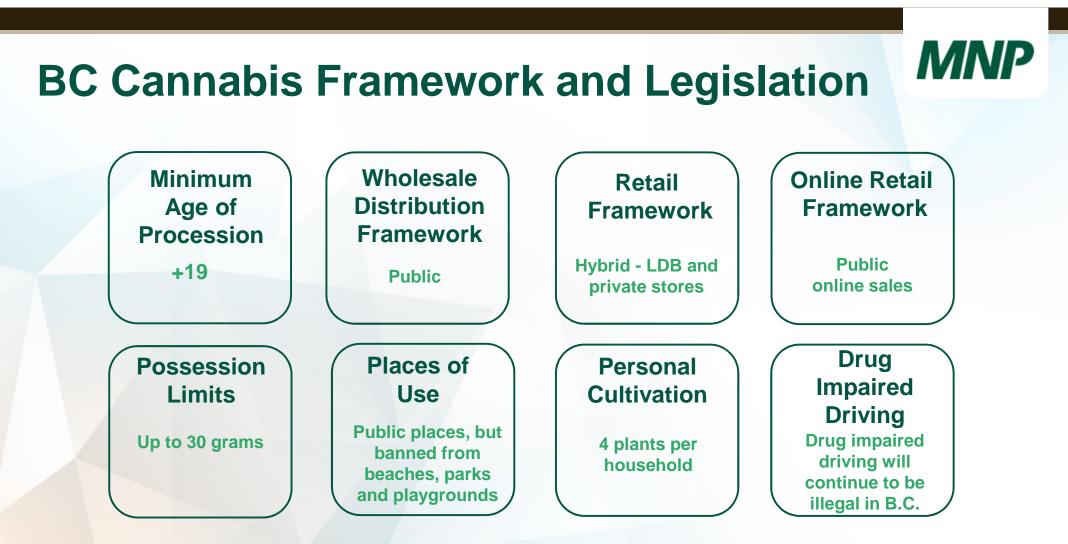




# **Provincial Cannabis Frameworks**











# **INDUSTRY BOTTLENECKS**



**Retail licensing** 



Region	Applications Approved with Conditions <sup>2</sup>	Licences Issued <sup>3</sup>
Vancouver Island/Powell River/Gulf Islands	1	0
Greater Vancouver/Sunshine Coast	1	3
Surrey/Fraser Valley	0	0
Interior and the North	4	5
Location Not Yet Specified	0	0
Total	б	8

#### 408 Paid Applications

284 Applications – forwarded to Local Government or Indigenous Nation 226 Applications – forwarded to a 'ready' jurisdiction  $6 \text{ Licences}_{AIP}$   $8 \text{ Licences}_{Issued}$ 



# Pot shops caught between Victoria heritage bylaws, province's cannabis rules

Bill Cleverley / Times Colonist NOVEMBER 25, 2018 06:00 AM



Victoria city councillors are considering a rezoning application from Farm, a cannabis retailer that wants to increase the floor space of its storefront at 1402 Douglas St. to meet anticipated growing demand. Photograph By DARREN STONE, TIMES COLONIST



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 Provincial cannabis retail regulations require windows in cannabis storefronts to be opaque

MNP

 "Victoria bylaws stipulate downtown street-level windows should be transparent to enhance the pedestrian experience, promote safety, and help create a vibrant downtown experience"

#### BNN Bloomberg

#### MARIJUANA

Jan 22, 2019

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### Canada's pot shortage could last 5 years amid edibles demand: Expert

By David George-Cosh



### Bulk exports to Germany, Australia, New Zealand, Prague, Czech Republic, Israel, Cyprus, Croatia

 Concentrate yields are between 5-10% raw flower to end product





# **Production Methods and Outputs**



Indoor Facility		
Category	Measuremen	
<b>Yield</b> (gram per sq ft annually)	250-400	
Crops per Year	4-5	

Crops per Year	4-5
COGs (\$/g)	\$1.60- \$2.00
Percent of top grade flower	95%

High yield, high cost, 95% top grade flower

Greenhouse		
Category	Measurement	
Yield (gram per sq ft annually)	40-80	
Crops per Year	1-2	
COGs (\$/g)	\$0.95	
Percent of top grade flower	50%	

Unimproved

Low yield, moderate cost, 50% of top grade flower

Outdoor		
Category Measuremen		
<b>Yield</b> (gram per sq ft annually)	25-50	
Crops per Year	1	
COGs (\$/g)	\$0.10	
Percent of top grade flower	25%	

Low yield, low cost, 25% of top grade flower

<u>CannTrust - Niagara</u> erpetual Harvest Greenhouse		
Category	Measurement	
Yield (gram per sq ft annually)	200-300	
Crops per Year	5-6	
COGs (\$/g)	\$0.75	
Percent of top grade flower	95%	

High yield, moderate cost, 95% top grade flower





# Lowest Cannabis Cost across Canada







# **INDUSTRY OPPORTUNITIES**



# **Cannabis Segments**

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Agriculture technology	Ancillary products & services	Biotechnology	Consulting services
		() *	
Consumption devices	Products and extracts	Industrial hemp	Retail



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# Miners & Merchants; who profited the most from the California Gold Rush?

- Tools & technology
- Materials
- Waste management
- Service providers
- Banking & finance
- Real estate & construction





# Examples of Support and Auxiliary Products and Services



- Cultivation equipment and technology (e.g., climate control, lightning systems, fertilizer systems)
- Utility services (e.g., water, electricity)
- Compliance services
- Professional services (e.g., (e.g. legal, accounting, consulting, marketing, architecture, engineering)
- Financing /capital
- R&D services
- Lab testing services
- Security services
- Software

- Extraction technology
- Packaging

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- Marketing services
- Lab testing services
- Utility services (e.g., water, electricity)

Processing

Professional services (e.g., (e.g. legal, accounting, consulting, marketing, architecture, engineering) Transportation services

Distribution

- Consulting services
- Security services



### Retail

- Inventory control
- Consumption devices
- Apparel manufacturing
- Retail design services
- Graphic design services
- Professional services (e.g., (e.g. legal, accounting, consulting, marketing, architecture, engineering)
- Security services

# **MNP**

### **Examples of Spin-Off Industries**

- Consumption products and devices manufacturing
- Cannabis extraction technology manufacturing
- Hemp-based product manufacturing
- Cannabis related media/events
- Cannabis security services
- Consumer apps related to cannabis consumption



# **Craft Cultivation**

- Micro-cultivation (<200m<sup>2</sup>) licenses available a year early to meet demand
- Lower capital costs may lead to increased ROI
- Time to license 18 months ...or more!
- Costs are escalating





# **Craft Cultivation**



# In Canada, a macro wait for micro licenses in cannabis

Published January 14, 2019 | By Robin Roberts



Small-scale cannabis growers in Canada are facing such burdensome licensing regulations that fewer than 30 such applications have been made to Health Canada since legalization in October.

One of the main problems regarding such licensing comes from restrictions imposed by municipalities, industry experts say.

"Few municipalities have the zoning required to accommodate a micro-cultivation permit," said Tom Doran, founder and CEO of Pattern Micro Cultivation, a British Columbia-based company that looks to partner with micro-cultivators to build facilities that are compliant with good manufacturing practices (GMP).



# **Product Categories**



Bill Schedule	Product Types	Timeline
Schedule 4 (related to Section 33, Subsection 151(3) refers to Classes of Cannabis that an Authorized Person May Sell	<ol> <li>1 – Dried cannabis</li> <li>2 – Cannabis oil</li> <li>3 – Fresh cannabis</li> <li>4 – Cannabis plants</li> <li>5 – Cannabis plant seeds</li> </ol>	Legislation came into effect Oct. 17, 2018
Added in the most recent amendments to Schedule 4	6 – Edibles containing cannabis 7 – Cannabis concentrates	Fall 2019

The only stated prohibitions at this point are combinations with nicotine, caffeine or alcohol.

Green Text Indicates <u>High</u> Market Growth Predicted



## Launching an Edibles Business



### Edibles = new market full of new opportunities



# Challenges for business entering edibles market... Strict laws and regulations!



### **The Edibles Pantry**





**Dixie Elixirs** 



Kiva chocolates

Infused olive oil

ass Va



Vegan protein bars





- Canada has a very sophisticated and complex food regulatory system
- This is why edibles are a second-stage process in legalization Canada wants to have diversity in using existing lawful products
- The only stated prohibitions at this point are combinations with nicotine, caffeine or alcohol
- Apply the learning from US states (incl. CO) to the Canadian market





# Launching an Edibles Business



# Here are some considerations before launching an edibles business

- 1. Thorough market research
- 2. Solid business model
- 3. Consider the impact on your current brand
- 4. <u>Stay informed</u> about the changing cannabis landscape and legislation
- 5. Collaborate
- 6. Get knowledgeable advice





# **Innovation & Tech Boom**

- Vertical growing
  - boosts canopy space 8x, 80% water reductions
- Automated crop monitoring systems
  - Al systems monitor and adjust water, fertilizer, light inputs to push plants to the next level
- Specific wavelength light & adjustment
  - Cameras above crops monitor light wavelengths reflected from the plants and adjust the wavelength of LEDs emitted to match plants needs



# **Innovation & Tech Boom**

- Off-grid grow ops
  - Self-sufficient infrastructure harnessing solar and wind, rainwater, water recapture to reduce cost and impact
- Compost & fertilizer mixtures
  - Different species, different stages
     of plant life have specific nutrient requirements. Goal is to push plants past natural boundaries



# **Innovation & Tech Boom**

- The future looks Organic
  - Integrated pest management, natural fertilizers
- Hemp-based bio-plastics
  - Hemp contains 70% cellulose, the key component in bioplastics, and is a more sustainable and low impact source than most others



- THC/CBD high-potency crystals
  - Better extraction technology increases yield and concentration without chemical contamination



# Thank you!

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