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SUMMARY OVERVIEW

EMBLEM CORP. IS A FULLY INTEGRATED LICENSED PRODUCER OF MEDICAL CANNABIS IN CANADA, LED BY A TEAM OF CANNABIS EXPERTS AND FORMER HEALTH CARE AND PHARMA EXECUTIVES WHO HAVE BUILT AND RUN MULTI-BILLION DOLLAR COMPANIES.
INVESTMENT HIGHLIGHTS

Clear strategy across three verticals of marijuana production, patient education, and pharmaceutical development.

High quality experienced management team leading each vertical who have aligned interests with shareholders, and a track record of building successful companies.

State of the art production facility in Paris, Ontario:

- 10,200 sq. ft. of controlled environment cultivation rooms
- 5,000 sq. ft. GMP quality extraction lab & pharmaceutical production facility to be finished in 2017.

Expansion plans for recreational market for 70,000 kg of production.
<table>
<thead>
<tr>
<th><strong>EXPERIENCED SENIOR MANAGEMENT TEAM</strong></th>
</tr>
</thead>
</table>

### John H. Stewart
**President, Emblem Pharmaceuticals**
- President & CEO of Purdue Pharma Canada (1991-2006) and Purdue Pharma US (2007-2013), one of the largest privately held pharmaceutical companies in the world
- Launched 11 new products, including Ms Contin, OxyContin and Biphentin
- Extensive experience in formulation development, clinical trials and medical communications

### Nate Nienhuis
**Cultivation, Extraction, Facilities Design**
- Preeminent expert in cannabis horticulture in North America
- Expert in extraction
- Mechanical engineer; vast experience in design of environmental and lighting systems, and building envelope science for indoor cannabis facilities

### Gordon Fox
**CEO, Emblem Corp.**
- Partner at Goodman & Carr LLP from 1979 to 1995, practicing securities law
- Co-Founder of White Cedar Pharmacy, a pharmacy serving over 2,600 patients in Ontario
- Founder of Lytton Capital in 1995, a Limited Market Dealer

### Harvey Shapiro
**President, GrowWise Health**
- Co-founder & CEO of Dynacare (1988 - 2002) - A TSX listed medical diagnostic services company. Acquired by Laboratory Corp. of America in 2002
- Practiced Securities Law at Goodman & Carr LLP from 1973 to 1987
- Closely connected within the Canadian pharmacy community

### Experience and Investments
- The Emblem team has built and managed multi-billion dollar companies
- Founders own a significant percent of the company
- $6M Amount management, founders, advisors and employees have invested personally
EMBLEM CORP. HAS BUILT THREE UNIQUE VERTICALS
1. Lead by cannabis cultivation & extraction expert Nate Nienhuis
2. State-of-the-art 23,500 Sq Ft facility (indoor grow)
3. Current production Phase 1 - 600-700kg per year
4. Production on completion of Phase 2 (June) - 1,800-2,100kg per year
5. 25 strains available for cultivation, 10 currently in production
6. Oil production license received December 2016 - Sales license expected in April
7. 4.1 acre property licensed now on industrial land - allows for capacity expansion
1. Lead by veteran pharma exec, John H. Stewart

2. Cannabinoids have real therapeutic value, as evidenced by Cesamet, Marinol and Sativex all having been approved as prescription drugs

3. The active components in cannabis are extracted, purified and incorporated into advanced formulations

4. GMP quality extraction facility, laboratory and pharmaceutical production facility to be operational in 2017
1. Cannabis education for patients & physicians in Canada
2. GrowWise operates in medical clinics, currently averaging 90+ patient orders per week
3. Eleven education centres now operational
4. 96% of patients register on site with a preferred LP
5. Expected to be a major source of referrals for Emblem
THE FACILITY

**Emblem’s state of the art facility in Paris, Ontario**

- Three buildings situated on 4.1 acres of land
- Production facility, Extraction/Pharma Lab + Offices
- 49 employees and growing (including management)
- Enclosed building with hospital grade environmental control

**Emblem has invested heavily in it’s environmental control systems**

- Each grow room individually controlled for temperature, humidity and air circulation
- Custom HVAC units
- Ideal temperature, humidity and climate control for the production of the highest quality dried flower
- Each room outfitted with dedicated CO$_2$, humidification, and HVAC
- Strict SOP’s & IPM’s in place (Standard Operating Procedures & Integrated Pest Management)

$11M Invested to date in facility, land and infrastructure.
Facility breakdown

- 23,500 sq. ft. total facility on 4.1 acres of land
- 11,700 sq. ft. of total cultivation space by June
- 10,200 sq. ft. for 6 flowering rooms by June
- +/- 2,000kg per year production capacity by June
- 300 sq. ft. vault, level 8, allows 625kg of storage
Emblem is taking a diligent approach to establish optimal grow rates for quality and quantity. With two high quality grow rooms yielding 100% medical grade product, we are testing different methodologies in our phase 2 expansion to create the ideal balance of quality and quantity.

2,000KG
Potential running capacity Phase 1 & 2

$16M
Total potential annual revenue from phase 1 + 2 (excluding oils)
EXPANSION
PREPARING FOR THE ANTICIPATED RECREATIONAL REGIME

EXPECTED ARRIVAL OF RECREATIONAL REGIME:
• Q1 2019

STRATEGY:
• Produce for the premium quality end of the recreational market
• Margins expected to be highest at the premium end of the market

REQUIREMENTS:
• Highest quality production facilities
• Building envelope, HVAC, lighting systems, control systems
• Pharmaceutical clean room environment grow rooms
• Access to gas & hydro

OBJECTIVES:
• 70,000kg of annual production of dried flower
• +/- 300,000 sq ft of purpose built production space

ECONOMICS @:
• $8 per gram
• $350 per sq ft building cost
• 1 gram per watt production & 4.5 crops per year
• 25% net margins & 27% tax rate
• Payback: +/- 1.8 years
<table>
<thead>
<tr>
<th>Emblem Name</th>
<th>Strain Name</th>
<th>$ Per Gram</th>
<th>THC%</th>
<th>CBD%</th>
<th>Plant Type</th>
<th>Main Terpene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua Flora</td>
<td>Shark Shock CBD</td>
<td>$8</td>
<td>4-6%</td>
<td>7-9%</td>
<td>Indica dominant</td>
<td>Terpineol</td>
</tr>
<tr>
<td>Zen’s Garden</td>
<td>Black Widow CBD</td>
<td>$10</td>
<td>6-8%</td>
<td>11-13%</td>
<td>Indica dominant</td>
<td>Terpineol</td>
</tr>
<tr>
<td>Pacific Station</td>
<td>Training Day</td>
<td>$8</td>
<td>13-15%</td>
<td>0%</td>
<td>Indica dominant</td>
<td>Caryophyllene</td>
</tr>
<tr>
<td>Provence Jardin</td>
<td>Lavender Kush</td>
<td>$9</td>
<td>12-14%</td>
<td>0%</td>
<td>Indica dominant</td>
<td>Pinene</td>
</tr>
<tr>
<td>Yellow Submarine</td>
<td>Larry OG Kush</td>
<td>$9</td>
<td>16-18%</td>
<td>0%</td>
<td>Indica dominant</td>
<td>Terpineol</td>
</tr>
<tr>
<td>Day Dream</td>
<td>Sour Kush</td>
<td>$9</td>
<td>18-20%</td>
<td>0%</td>
<td>Indica dominant</td>
<td>Myrcene</td>
</tr>
<tr>
<td>Sweet Escape</td>
<td>Strawberry Cough</td>
<td>$8</td>
<td>17-20%</td>
<td>0%</td>
<td>Sativa dominant</td>
<td>Limonene</td>
</tr>
<tr>
<td>Paradise Island</td>
<td>Dela Haze</td>
<td>$9</td>
<td>18-20%</td>
<td>0%</td>
<td>Sativa dominant</td>
<td>Caryophyllene</td>
</tr>
<tr>
<td>Liv by Lift</td>
<td>Liv by Lift</td>
<td>$12</td>
<td>22-24%</td>
<td>0%</td>
<td>Sativa dominant</td>
<td>Caryophyllene</td>
</tr>
</tbody>
</table>

Strains subject to change based on demand.
• Rapid growth of patient base - over 2000 patients registered in first four months of sales

• Over 45,000 grams sold in four-month period

• Largest presence of any licensed producer on Instagram (over 6,000 followers)

• Co-branding partnership with Lift, a Canadian company focusing on customer reviews & the largest cannabis-focused expos in Canada

• 5-star rated customer service team (based on 290+ reviews from Lift.co)

• Strong branding focused on health & wellbeing

• Excellent relationships with cannabis clinics beyond GrowWise's network

• Quality of dried flower product a major contributor to early marketing success
Beginning Q2 2017, Emblem will be launching cannabis oils. By the end of 2017 Emblem intends to begin launch of cannabinoid-based medications in customary pharmaceutical dosage forms such as liquids, gel caps, oral sprays and inhalers.

**HEADED BY JOHN H. STEWART**

- 30+ years experience in developing and commercializing pharmaceutical products
- Launched 11 new products, including Biphentin, MS Contin, Zytram XL and the $2B per year OxyContin

**FACTS**

- The active components are extracted from cannabis plants and can be used in liquid form (cannabis oil) or incorporated into other formulations
- LP’s can now monetize more of the cannabis plant, not just dried flower
- Patients are seeking more discreet and easily managed dosage forms of medical cannabis
- Physicians are looking for more precise control of cannabinoid dosages, and assurance of consistency and stability
- The availability of pharmaceutical formulations of cannabis will significantly expand the medical marijuana market

**JOHN H. STEWART**

President & CEO of Purdue Pharma (Canada 1991-2006, US 2006-2013) launched 11 new products including OxyContin
A major differentiating factor of Emblem is the separate pharma division, and the associated development of cannabinoid medications in advanced dosage forms.

- **Cannabinoids** have real therapeutic value with Cesamet (THC - Lilly), Marinol (THC - AbbVie) and Sativex (THC & CBD - GW Pharma) approved as prescription drugs by Health Canada.

- Pharma Companies actively developing NCE’s that target the Endocannabinoid System

- Over 1,000 medical / scientific papers have been published pertaining to the use of cannabinoids

- Evidence of efficacy in patients with chronic pain, neuropathic pain, muscle spasms, nausea, palliative care and PTSD

- Canadian Pain Society recommends cannabinoids as third-line treatment for neuropathic pain

“Cannabinoids and other components of marijuana have real therapeutic value. Emblem is identifying the marijuana strains with the greatest evidence of benefit in various conditions, cultivating those strains at medical grade and developing advanced dosage forms to provide patients with accurate, consistent, high quality and convenient to use cannabis formulations.” says John H. Stewart.
ADVANCED DOSAGE FORMS

- Overcome the significant limitations of smoking or vaporization of dried flower
- Provide for dose-to-dose and lot-to-lot consistency, quality and effects
- Change the dosage regimen from grams of dried flower per day to mg per dose / mg per day
- Allow for dosage forms to be targeted to specific purposes
- Creating sustained release, and rapid release for pain and sleep respectively
- Opportunity for dosage form related intellectual property
- Will greatly increase both patient and prescriber acceptance of cannabinoid therapy
Fewer pills prescribed in medical pot states

Difference between annual drug doses prescribed per physician in medical marijuana states, and in states without medical marijuana laws, by drug category.

<table>
<thead>
<tr>
<th>Drug Category</th>
<th>States without marijuana</th>
<th>States with marijuana</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>31,810</td>
<td>29,984</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Nausea</td>
<td>10,068</td>
<td>9,527</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Seizures</td>
<td>9,399</td>
<td>8,913</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>11,220</td>
<td>10,658</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Sleep Disorders</td>
<td>7,558</td>
<td>7,196</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>11,421</td>
<td>10,902</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Depression</td>
<td>9,577</td>
<td>9,312</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Spasticity</td>
<td>2,068</td>
<td>2,036</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>2,551</td>
<td>2,586</td>
<td>+1.4%</td>
</tr>
</tbody>
</table>

Source: Bradford & Bradford, Health Affairs, July 2016
PATIENT ACQUISITION STRATEGY
GrowWise Health is a cannabis education company, operated jointly between Emblem and White Cedar Pharmacy. GrowWise provides a healthcare solution for physicians and patients currently lacking in the Canadian medical marijuana industry.

GrowWise Education Centres - “Filling the role of the Pharmacist”
- GrowWise operates in medical clinics in which doctors are prescribing cannabis
- Patients are referred to GrowWise once a prescription has been issued
- Nurses counsel patients on safety, strain selection, and assist patients with registering, and placing orders with a licensed producer
- 96% of patients register on site with a licensed producer
- GrowWise has partnered with several preferred LP’s to expedite the patients ordering process and variety of strains to patients
- GrowWise will be a reliable and consistent source of patients for Emblem

GrowWise operates two platforms
1. Cannabis education centres within incumbent medical clinics
2. Stand alone medical cannabis clinics
   - GrowWise currently operates in a total of 11 locations
   - Additional locations scheduled to open in Ontario, Alberta, & British Columbia in 2017
   - Hundreds of doctors are now referring to GrowWise supported clinics

96% of patients register on site with a GrowWise recommended LP.
1. **Summer 2014**  
   Company founded. Founders initial seed investment of $760,580

2. **Winter 2014**  
   Facility retrofit begins and $10.5MM funding closed

3. **Summer 2015**  
   Cultivation licence granted, first crops planted. John H. Stewart joins as Co-founder & CEO of Pharmaceutical division

4. **Spring 2016**  
   Emblem identifies Saber Capital as RTO vehicle. Closes $3,000,000 offering and hires new CFO

5. **Summer 2016**  
   Emblem receives sales license and closes $5,000,000 offering

6. **Fall 2016**  
   Emblem lists on TSX-V and closes $23,500,000 offering

7. **Winter 2016**  
   Emblem received extraction license and announced $16 million bought deal led by PI financial

8. **Spring/Summer 2017**  
   Emblem completes phase 2 expansion, and oil sales underway

9. **2018**  
   Estimated launch of Pharmaceutical production: liquids, gel caps, oral sprays, inhalers and pills

10. **Pre Recreational**  
    Initial target production capacity for recreational market of 25,000kg
## Basic Structure

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Shares Outstanding</td>
<td>71,307,096</td>
</tr>
<tr>
<td>Fully Diluted Shares Outstanding</td>
<td>121,119,385</td>
</tr>
</tbody>
</table>

## Fully Diluted Structure

<table>
<thead>
<tr>
<th>Warrants &amp; other</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrants (A)</td>
<td>13,822,722</td>
<td>$0.75</td>
</tr>
<tr>
<td>Warrants (B)</td>
<td>3,433,601</td>
<td>$1.20</td>
</tr>
<tr>
<td>Warrants (C)</td>
<td>10,964,763</td>
<td>$1.75</td>
</tr>
<tr>
<td>Warrants [D]</td>
<td>12,192,834</td>
<td>$4.75</td>
</tr>
<tr>
<td>Stock Options [A]</td>
<td>4,670,000</td>
<td>$0.50</td>
</tr>
<tr>
<td>Stock Options [B]</td>
<td>1,165,000</td>
<td>$2.58</td>
</tr>
<tr>
<td>Management Performance Escrow</td>
<td>14,065,285</td>
<td></td>
</tr>
</tbody>
</table>
Emblem

A FULLY INTEGRATED MEDICAL CANNABIS, HEALTHCARE AND CANNABINOID-BASED PHARMACEUTICAL COMPANY

CONTACT

Ali Mahdavi
Director, Investor Relations
alimahdavi@emblemcorp.com
416-962-3300
A study from June’s Journal of Pain
Concluded cannabis use was “associated with 64% lower opioid use in patients with chronic pain” (in states where medical cannabis is legal)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Change in Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>1,826 fewer doses</td>
</tr>
<tr>
<td>Anxiety</td>
<td>562 fewer doses</td>
</tr>
<tr>
<td>Nausea</td>
<td>541 fewer doses</td>
</tr>
<tr>
<td>Psychosis</td>
<td>519 fewer doses</td>
</tr>
<tr>
<td>Seizures</td>
<td>486 fewer doses</td>
</tr>
<tr>
<td>Sleep Disorders</td>
<td>362 fewer doses</td>
</tr>
<tr>
<td>Depression</td>
<td>265 fewer doses</td>
</tr>
<tr>
<td>Spasticity</td>
<td>32 fewer doses</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>35 more doses</td>
</tr>
</tbody>
</table>

U.S. Alcohol Consumption
Post prohibition
Gallons of alcohol consumed per person annually

U.S. Cannabis Sales
Billions

America’s 2015 Cannabis Sales in Context
2015 legal cannabis sales and selected 2014 company sales in the U.S.

1930’s Alcohol Prohibition ended
2010’s Cannabis Prohibition ending
Maxim Zavet

PRESIDENT

- Founding partner at Levy Zavet PC
- Extensive knowledge of the ACMPR regulations and the cannabis industry in Canada
- In-depth knowledge of medical marijuana genetics, cultivation, and a worldwide network of MMJ contacts

Stephen Dinka

DIRECTOR, PRODUCTION OPERATIONS

- Academically trained and experienced horticulturalist with experience growing medical grade product
- Degrees in Environmental Science, and Plant Biology
- Project Manager, Prairie Plant Systems (prior to the new regime, was Canada’s only licensed producer of medicinal cannabis)

John Laurie, CA

CFO

- Former Treasurer and CFO with several high profile Canadian public and private companies
- Previously with Moore Wallace and George Weston Limited
- Broad financial experience including budgeting and budgetary control, capital expenditure management, internal controls design and monitoring, cash flow modeling, tax, & risk management

Graeme Montrose

MASTER GROWER

- Academically trained horticulturalist, graduated from the University of Guelph
- 12+ years experience working in greenhouse vegetable production
Medical cannabis has real therapeutic benefits

- The majority of patients who are taking medical cannabis are seeking relief from pain, anxiety and sleep disorders
- Because of problems associated with opioid therapy for pain, there is an increasing interest in alternative therapy.
- Sleep disorders also represent a significant market

### THE NUMBERS

**Top pain drugs in the U.S. based on revenue in 2011–2012**

(in million U.S. dollars)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Revenue (in million U.S. dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycontin</td>
<td>2,798.4</td>
</tr>
<tr>
<td>Lyrica</td>
<td>1,833</td>
</tr>
<tr>
<td>Lidoderm</td>
<td>1,246.4</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>847.4</td>
</tr>
<tr>
<td>Hydrocodone/acetaminophen</td>
<td>745.9</td>
</tr>
<tr>
<td>Opana ER</td>
<td>614.9</td>
</tr>
<tr>
<td>Oxycodone hydrochloride</td>
<td>426.8</td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>389.6</td>
</tr>
<tr>
<td>Maxalt-MLT</td>
<td>354.2</td>
</tr>
<tr>
<td>Maxalt</td>
<td>325.4</td>
</tr>
</tbody>
</table>

Source: Statista.com, 2017
PHARMACEUTICAL
NORTH AMERICAN INDUSTRY

Fewer pills prescribed in medical pot states
Difference between annual drug doses prescribed per physician in medical cannabis states, and in states without medical cannabis laws, by drug category.

Top 10 OTC brands for sleep remedies by revenue in the U.S. in 2014–2015 (in million U.S. dollars)

Source: Bradford & Bradford, Health Affairs, July 2016

Source: Statista.com, 2017
CANNABIS
NORTH AMERICAN INDUSTRY

Within 5 years the legal cannabis industry will outweigh the US film industry and triple the revenues of the NFL.

MEDICINAL

- Evidence Cannabis was first used in Chinese medicine (3.000 BC)
  - [wikipedia](https://en.wikipedia.org/wiki/Cannabis)

- Canada is one of the first countries in the world to offer medicinal cannabis to patients in need (2001)
  - [wikipedia](https://en.wikipedia.org/wiki/Marijuana_in_Canada)

- Health Canada approved the Marijuana for Medical Purposes Regulation (MMPR) (2014)
  - [Clarus Securities](http://clarussec.com)

RECREATIONAL

- Liberal Government announces plans to legalize recreational cannabis (2015)

- Annual recreational market demand is projected to exceed 1 billion grams (1 million KG) (2016)
  - [Clarus Securities](http://clarussec.com)

- Liberal Governments planned legalization date (2017)

PHARMACEUTICAL

- FDA approves first ever synthetic cannabis-based prescription (Dronabinol) (1985)
  - [medicinenet](http://www.medicinenet.com)

- UK legalizes first cannabis-based prescription medicine in the world (Sativex) (2010)
  - [medicalmarijuana](http://www.medicalmarijuana.com)

- Healthcare professionals demand cannabinoid-based medication in standardized pharmaceutical dosage formats (2016)

- Health Canada approved the Marijuana for Medical Purposes Regulation (MMPR) (2014)
  - [Clarus Securities](http://clarussec.com)
CANNABIS
NORTH AMERICAN INDUSTRY

**US$141.1B**
Current value of illegal cannabis market
havoscope.com

**US$3.1B**
Current estimated value of legal cannabis market
medicalmarijuanainc.com

**US$37B**
Projected value of Full legalization

**23 States**
Legalized medical cannabis

**76%**
Clinicians believe benefits outweigh the risks

**17M**
People already live in states where recreational is legal

**58%**
Americans support legalization

**69%**
Canadians support legalization
OBJECTIVE

- Replicate the environment in which the original genetics arose
- Mountainous regions of the Middle East

HUMIDITY TOLERANCES

- 65% maximum relative humidity at the commencement of the cultivation cycle
- 50% minimum relative humidity nearing the end of the cultivation cycle

TEMPERATURE TOLERANCES

- Minimum 62°F to a maximum 74°F
- Temperature varies throughout the day to match the circadian rhythms of the plants

WATERING

- Closed loop system with reclamation capability of all water and nutrient mixed water introduced into the space
- Reclamation of condensed and evaporated water in the space through HVAC and dehumidification equipment

HOW CLOSED BOX FACILITIES ARE BUILT TO CREATE THIS ENVIRONMENT

- Building envelope (internal and external combined) – R79 insulation
- Air circulation in each grow room is isolated to that room – no shared ambient air between cultivation chambers
- Facility chiller plant de-humidifies air to required humidity tolerances
- Facility boiler plant reheats the de-humidified air for re-introduction into grow rooms
- Re-circulated air is run through high density hepa filters for cleaning
PRODUCTION | EMBLEM
COMPARISON - CLOSED BOX VS. GREENHOUSE

Climate Control Comparison

LIGHTING

• Closed box - 100% artificial light (high pressure sodium)
• Greenhouse - same number of lighting fixtures being used constantly except for a couple of times a day during peak season of sunlight

INSULATION VALUE

• Closed box – R49 interior rooms plus R30 for building envelope
• Greenhouse - less than R3

AIR CIRCULATION

• Closed box – recycles incumbent air and cleans through filtration
• Greenhouse - constantly introducing fresh air and expelling incumbent air

BOILER & CHILLER PLANTS TO MAINTAIN HUMIDITY & TEMPERATURE

• Greenhouse require somewhat more capacity due to low R value of insulation

RESULT

• Environmental sterility is almost impossible in greenhouses
• Control of airborne pathogens once established is quite difficult in greenhouses
• Closed box reduces the risk of introduction of pathogens and single grow room environmental air circulation prevents the spread of impurities that may arise
• Total loss of efficiency in greenhouse as treated or conditioned air is expelled
PRODUCTION | EMBLEM

COMPARISON - CLOSED BOX VS. GREENHOUSE

Capital & Operating Cost Comparison

COST COMPARISON - CAPITAL

• Building envelop – slightly lower cost for greenhouse than closed box
• Chiller & boiler plant – higher cost for greenhouse than closed box (due to additional capacity required for environmental control in Canadian climate with low R value insulation)

RESULT:

• Capital cost for closed box should be comparable to or somewhat less than greenhouse

COST COMPARISON - OPERATING

• Energy costs for lighting – lower for greenhouse due to access to natural sunlight. This saving is modest because significant supplemental lighting is still required in greenhouse cannabis cultivation in the Canadian climate
• Energy costs for environmental control – materially lower for closed box due to insulation values and air re-circulation strategy

RESULT:

• Operating costs in closed box will be lower than in greenhouse

COST COMPARISON - NON-MONETARY COSTS

• Greenhouse architecture involves constant introduction of outside air. There is no sectional air segregation in greenhouse architecture
• Sterility & pathogen control is virtually impossible in greenhouse
• All greenhouse product is irradiated to meet Health Canada standards