

INDUSTRIAL HEMP

from seed to market

Experts predict that the CBD oil market will have a compound annual growth rate of 90% through 2024. With new methods for producing CBD and the realization of the benefits of CBD oil, it's easy to understand why CBD oil will be a significant part of the cannabis industry boom.

THE OPPORTUNITY

The 2018 Farm Bill now makes it legal to cultivate and sell hemp-related products in all 50 states — this is not going unnoticed by Agriculture who are moving quietly into top gear. The crop is treated as any other. Not since 1937 has hemp cultivation been legal to grow in the United States.

Industry research firm Brightfield Group predicts a \$22 billion market by 2024, and the leading demand is for cannabidiol, better known as CBD . . . an oil with a myriad of health benefits.

With this apparent opportunity at hand, Jatro Renewables has decided to establish a division to focus exclusively on this industry — and it's definitely one complimentary to the Company's own focus designing and engineering biodiesel plants the past 15 years.

The Company feels confident they can draw on this experience and offer comparable innovations for the extraction and post-processing of oils for CBD — and in the near-future extracting hemp seeds for biodiesel, and the plant's fibers for cellulosic ethanol.

In fact, since mid-2018, Jatro has already developed a creative oil extraction technique that is, except one, very different from all processes currently in use, and it primarily deals with the choice of extraction chemical agent and some operational methods.

The company has already generated 3rd party oil Certificates of Analysis confirming positive results. However, more research is required to refine the technology before production can begin.

CBD has been shown to help with everything from PTSD and anxiety to MS, epilepsy, relieving skin conditions and more — all without getting you high.

In 2018 \$887 million was spent on CBD products including, tinctures, topicals, cremes, capsules and CBD pet products. 326 million Americans and their 164 million pets are the target customer!

FUNDING/USE OF PROCEEDS

To move ahead with the entire project Jatro is seeking funding of about \$750,000 to complete its next development stage. This consists of building a pilot-sized hemp-to-oil extraction plant.

Additionally, part of the funding proceeds will support an early entry into the CBD retail and wholesale markets as a means of generating early revenue. This will be rolled out in two phases:

- (i) As the company develops and builds the pilot, Jatro will offer CBD oil products at retail and wholesale through a relationship with an existing CBD supplier.
- (ii) Once the pilot is ready to run commercially, Jatro will switch to making all of its CBD products at its in-house processing facility.

This strategy is actually coincidental with an entire new industry essentially getting off the ground, and it conveniently offers the Company an early market entry and revenue generator — also provides critical market insights well before the plant is commercialized.

The table below shows projected revenue and margins, starting in 2019/2020 by leveraging products from an existing CBD producer; then, within six to nine months, all products originating from Jatro’s own production unit. Sales mix consist of about 20 SKUs for retail; bulk wholesale oils to other Producers; and high volume unit sales to Tier I retailers (online and b&m).

CBD Oil 5-Year Retail Production Analysis

1/31/2019	2020	2021	2022	2023	2024
REVENUE					
Price/1,000 mg/unit	\$55	45	35	20	15
CBD Products	\$4,435,000	8,315,625	12,251,688	22,053,038	49,006,750
By-Products	\$665.25	1,247.34	1,837.75	3,307.96	7,351.01
TOTAL REVENUE	\$4,435,665	8,316,872	12,253,525	22,056,345	49,014,101
COST OF GOODS SOLD					
Hemp Cost per lb	\$600.00	700.00	800.00	900.00	1,000.00
Hemp <.3% THC, 10-16% CBD	\$106,662	244,433	463,027	1,458,534	4,321,583
Processing	\$784,764	1,559,792	2,399,267	4,616,194	9,712,575
Promotion	\$340,000	570,000	890,000	1,400,000	2,160,000
Plant Maintenance	\$150,000	285,000	340,000	580,000	770,000
G&A	\$280,000	420,000	560,000	740,000	940,000
TOTAL COSTS	\$1,661,426	3,079,225	4,652,293	8,794,728	17,904,158
EBITDA	\$2,774,239	5,237,647	7,601,232	13,261,617	31,109,943
%	63%	63%	62%	60%	63%

ABOUT CBD

CBD, is the non-psychoactive cannabinoid found in the cannabis sativa plant. Over the past couple of years it has had a huge surge in popularity. It is unlike tetrahydrocannabinol (THC), which comes from a different strain of the same plant that gives weed its signature psychoactive effect.

Previous to the Farm Bill, CBD products have been available mostly in head shops, with a few doctors recommending it for various maladies.

However, in 2017 and 2018, the products spread to natural food stores, beauty aisles, cafés, doctors’ offices . . . and of course the internet!

btw, the term “hemp” is used for cannabis sativa strains containing less than <0.3% THC; the label “marijuana” or “cannabis” refers to strains with over >0.3% and typically up to ~30% THC.