



EIGHTH
REVOLUTION



ARCVIEW
CONSULTING

Cannabinoid MONTHLY PLAYBOOK

August 2022





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Dear Reader,

We want to thank you for your trust, and, most importantly, your time. With the endless number of resources at your disposal, we appreciate you leaning on us as your guide through the muddy waters of this industry's limitless news and intelligence.

In an industry that changes as aggressively as ours, we can't stress the importance of effective decision-making enough. Though the information in the report is never meant to dictate specific actions or guarantee certain outcomes, we hope that we're able to provide another voice in the room, one that illuminates, simplifies, and supports you.

If you find one area of information more helpful than others and want us to expand on the topic, please never hesitate to reach out. For any suggestions or questions, we can be reached directly at info@8threv.com

Welcome to the Revolution



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IN THIS ISSUE

August 2022

Cannabinoids Still Do NOT Have Clear Guidance

Kellen Finney, Eighth Revolution

Welcome to August of 2022, where we still do not have clear guidance on the federal acceptance of most cannabinoids. Regardless, the industry continues to push forward subject to similar global economic forces as the other industries. The CBD industry continues its trend of looking for the bottom, with historically low prices being reported by Hemp Benchmarks for CBD biomass. Minor cannabinoids continue to be a buzzword and hot commodity, especially in states with limited to no adult use THC market. The conversion of CBD to Delta 8 and 10 THC has spread rapidly, more recently though it is the conversion of CBD to Delta 9 THC that will blend the two industries. Only time will tell how this cat-and-mouse game plays out between new minor cannabinoids and the regulations surrounding them.

Access to Capital is Crushing the Cannabis Industry

Bryan Fields, Eighth Revolution

The lack of liquid capital is crushing the cannabis industry and it's not just hurting plant-touching operators. Companies across the supply chain are affected. Vendors are having to wait past normal terms to receive payment leading to massive cash flow issues. Industry operations are being forced to prioritize spending internally vs. externally which leads to possible defaulting to outside vendors to prioritize internal payroll. Add in rising inflation, high tax rates, and decreasing wholesale prices, and you have a potentially disastrous domino scenario set up. As an optimist, recognizing these variables at risk makes it even more challenging to understand the macro implications.

“

**"Biden Says He's
'Working On'
Fulfilling
Marijuana
Campaign Pledge
To Free Prisoners"**

Cannabis is a Pawn

Americans continue to go back in time. This time, it's by bringing back *Reefer Madness*.

Cannabis continues to rise amongst conservatives as the new scapegoat. With other discussions going back in time, it was only inevitable that cannabis joined the group.

Raise your hand if you had *Reefer Madness* on your bingo board.

It's no secret that cannabis is a political pawn. Is there another motive for trying to stop cannabis legalization?

Currently, the political use of this pawn is being aggressively carried out by the media's most prominent and controversial hosts. She-who-will-not-be-named shared her theory on the "pot psychosis-violent behavior connection." She, who—in my opinion—is closer to a WWE character than an accurate news anchor, is back with aggressive rhetoric to find a scapegoat on whom to place the blame for mass shooting.

One of the wildest parts is recognizing that she's going against a concept that 70% of Americans agree on: legalizing cannabis. Her thoughts are "that politicians should be working to stop legalizing marijuana, rather than trying to enact common sense gun laws and make weapons harder for people to access."

Ladies and gentlemen, *Reefer Madness* is back!

The 1936 movie, which aimed to discredit cannabis, was tied to the Great Depression years. Based on my research, the movie was NOT funded by the U.S. Government or by traditional production companies. Instead, it was funded by a church group. So, why-during a recession-is a controversial media host reaching for topics that were popular during the Great Depression?

She's trying to draw comparisons, acquire donors, is fueled by ignorance, using misdirection techniques, or all the above.

Recently, we had Leslie Bocskor on our podcast *The Dime*, where he said:

"We live in Media; the Media is the message. It's all individualized to every person. What each person gets is their own specific feed of information- that's different from the person right next to them. We are surrounded by media, and we have no idea. Every aspect of our lives is influenced by it."

Changing public perception isn't even the most paramount issue right now. With 70% of Americans in favor of legalized cannabis, the focus shouldn't be on changing the public perception. It's already been changed in favor of the issue; the focus should be on solidifying the emotional importance.

As Emily Paxhia said on *The Highrise*, cannabis needs its "Got Milk?" ad. We need an emotional tie back to the millions of people for whom cannabis is providing medicinal benefits. For those who are battling illness and leaning on cannabinoid therapeutics that have been life-changing for them. For the ones that are scared to give their child cannabis.

These are the types of messages we need to get out into the media. Tap into emotional responses, and these events will overtake the madness that irresponsible hosts continue to put out to large audiences.



The Dime    Listen Now

A weekly podcast covering the entire Cannabis Industry.

[00:14:21] On whether the hemp industry can be environmentally friendly:

Absolutely. Just look at the packaging problem that the legal cannabis industry has. Plastic has packages that are wrapped in plastic that have plastic packages inside. It's like three layers of plastic packaging for something that doesn't really need it. It should really be in hemp, plastic, and hemp paper. And even if it's not hemp, it should just be packaged more intelligently.

So, the answer is yes, it can be. It is potentially and much easier to do things that are environmentally feasible and positive in these industries. It still requires the intention, the diligence, and the follow-through to do it the right way.

We need to be more efficient in how we utilize all of our resources, and this is a great way. One of the things I've said, this is not just a new industry. It's an opportunity to conduct industry in a new way so that it sets examples that other industries can follow.

[00:28:02] On getting worldwide industry adoption of hemp:

So the answer is how do we get the consumers to be able to make those right choices? It has to be driven by economics. Yes, you have to do the right thing and it has to be economically feasible. So we have to get to the point where it's cheaper to produce plastic straws with hemp plastic, where it's cheaper to produce paper products with hemp paper, where it's cheaper, [for all of these things] which already it is.



Leslie Bocskor, CEO of Indoor Harvest

It's cheaper to produce paper products with hemp paper.

It's more effective to produce fabrics based upon hemp [than] done on cotton, [and it required] less water, ... and is easier to process in some ways. So we need to make it efficient.



*** The following transcript is AI-generated and some words have been removed for spacing. Please listen to the episode for full context.

Jurisdiction Roundup

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The Fyllo Regulatory Database creates unparalleled visibility at every level of government across the United States with access to more than 800,000+ files and entries addressing cannabis regulations. Today's leading MSOs, SSOs and law firms rely on Fyllo to accelerate research, track licensing opportunities and make better decisions. To learn more or schedule a demo, please visit hellofyllo.com.



Federal

The U.S. House of Representatives has again approved the S.A.F.E. Banking Act, this time attached as an amendment to the 2023 National Defense Authorization Act (NDAA). Despite bipartisan support for the reform, which would protect financial institutions that work with state-licensed cannabis businesses, Senate leadership has been reluctant to take up the issue. As a stand-alone bill, the measure is stalled in the Senate Banking Committee primarily because it does not include cannabis crime sentencing reform. This news comes as Democratic Senators Cory Booker and Ron Wyden say they are preparing to file a bill of their own that will address cannabis reform and decriminalization, including both banking and criminal justice.



Missouri

After months of hopeful anticipation, the efforts of cannabis reform advocates in Missouri may soon be halted for the time being. Two separate campaigns submitted signatures this election season for the November ballot, but one, Better Elections, did not reach the required amount. Signatures from the other advocacy group, Legal Missouri, are currently being verified and tabulated, but projections of the districts yet to be counted aren't looking good. As a congressional amendment initiative, the campaign faced a laborious signature collection process requiring eight percent of the 2020 vote in each of the state's eight districts.



New York

Officials have released a new set of recreational cannabis regulations in preparation for the emerging market. At a July meeting, the Cannabis Control Board approved the retail establishment license application form and its related rules. The initial round of licensing will be open only to certain social equity applicants (those that have been convicted of a cannabis crime or have a convicted family member) beginning in August. This provision means multistate operators will have to wait for a foothold in New York's burgeoning cannabis scene. With over 220 cultivators permitted thus far, regulators expect recreational sales to begin later this year.

INTERNATIONAL UPDATE



WHOLESALE FLOWER PRICING

CBD vs. THC Flower

Cannabinoid Flower Pricing

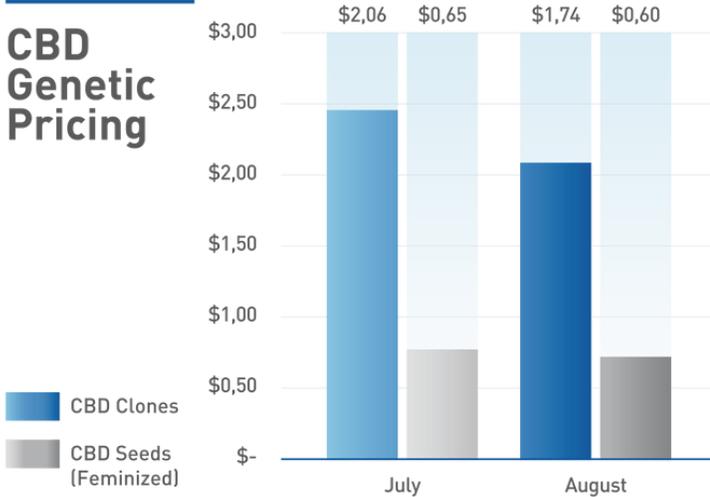


The average spot price in the United State for THC flower dropped to \$1058 / lbs., down \$10 from last month. In contrast, the spot price for CBD flower was up 10% to \$256 / lbs. We spoke with Leslie Bocskor on our weekly podcast, *The Dime* about hemp flower. His take was profound. **Technically the only legal product nationally in the hemp industry is CBD flower.** Every other product is generated from an extraction of the CBD from the plant. The plant will always have a small amount of THC, typically >1%. When the cannabinoids are extracted and concentrated however the THC percentage will almost always exceed the federal threshold. There is a massive remediation process that occurs to remove the THC so the CBD can be used to infuse a consumer product. States such as Colorado even allow for the transport of intermediate products in the manufacturing stream (i.e. crude CBD oil) between interstate operators even if it exceeds the federal limit for THC. It will be interesting to see how the federal government regulatory bodies end up dealing with these types of issues as the two industries become more blended.

WHOLESALE DATA

WHOLESALE HEMP GENETICS PRICING

CBD Genetic Pricing



We've entered the heat of the summer, and with almost no new plants being put into the ground, genetics prices fall to a yearly low with CBD clones averaging \$1.74 each. Feminized seeds also saw an 8% price drop averaging \$0.60 / seed, down from \$0.65 in the previous month.

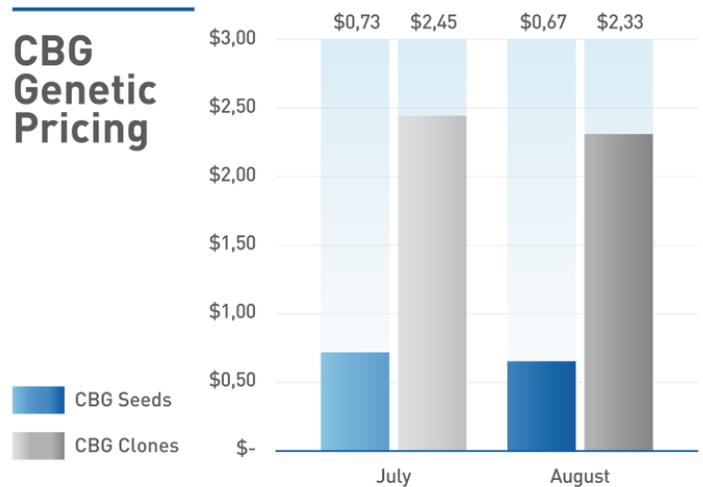
It is important to note that feminized seeds are one of the only product categories that have yet to reach their annual low. Due to this factor, we believe there is still more room for the price to drop.

CBD clone prices
fall 16%
month over month



The genetics market for CBG dominant varieties also experienced similar price drops with clones dropping 5% and seeds dropping 8% from July. Even though the CBG market is paired with the CBD market, we believe that due to the size and lack of full mainstream exposure the CBG industry is influenced fundamentally differently. Most consumers' exposure to CBG products comes from THC-infused products paired with minors such as CBG.

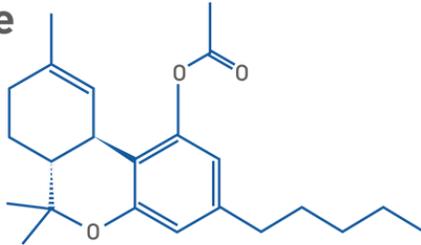
CBG Genetic Pricing



Minor Cannabinoid Wholesale Pricing

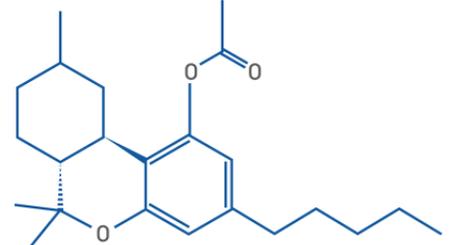
THC-O-Acetate Distillate

July 22	\$ 915.00 / kg
August 22	\$ 893.34 / kg



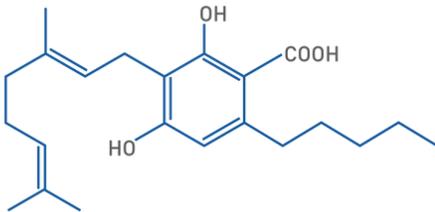
HHC-Acetate Distillate

July 22	\$ 1,362.00 / kg
August 22	\$ 1,358.34 / kg



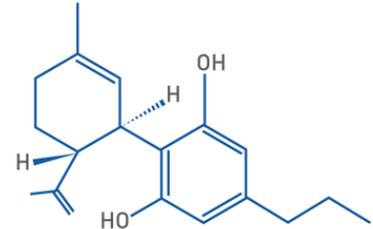
CBGA Isolate

July 22	\$ 3,512.00 / kg
August 22	\$ 3,550.00 / kg



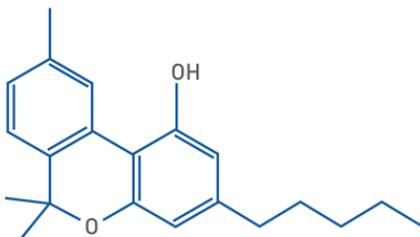
CBDV Distillate

July 22	\$ 2,500.00 / kg
August 22	\$ 1,990.00 / kg



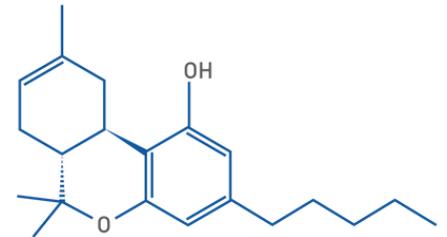
CBN Isolate

July 22	\$ 3,058.00 / kg
August 22	\$ 2,858.50 / kg



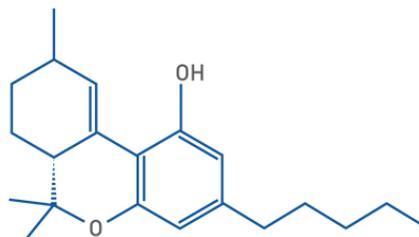
Delta-8 THC Distillate

July 22	\$ 579.00 / kg
August 22	\$ 484.50 / kg



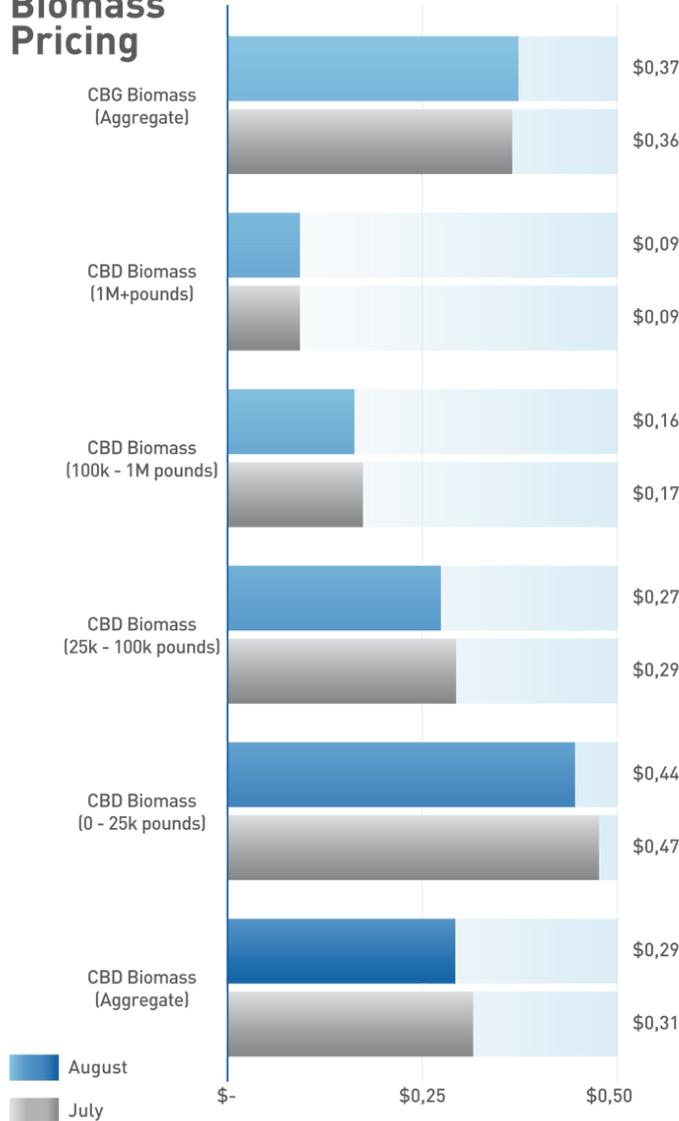
Delta-10 THC Distillate

July 22	\$ 1,890.00 / kg*
August 22	\$ 1,622.00 / kg



WHOLESALE HEMP BIOMASS PRICING

Biomass Pricing

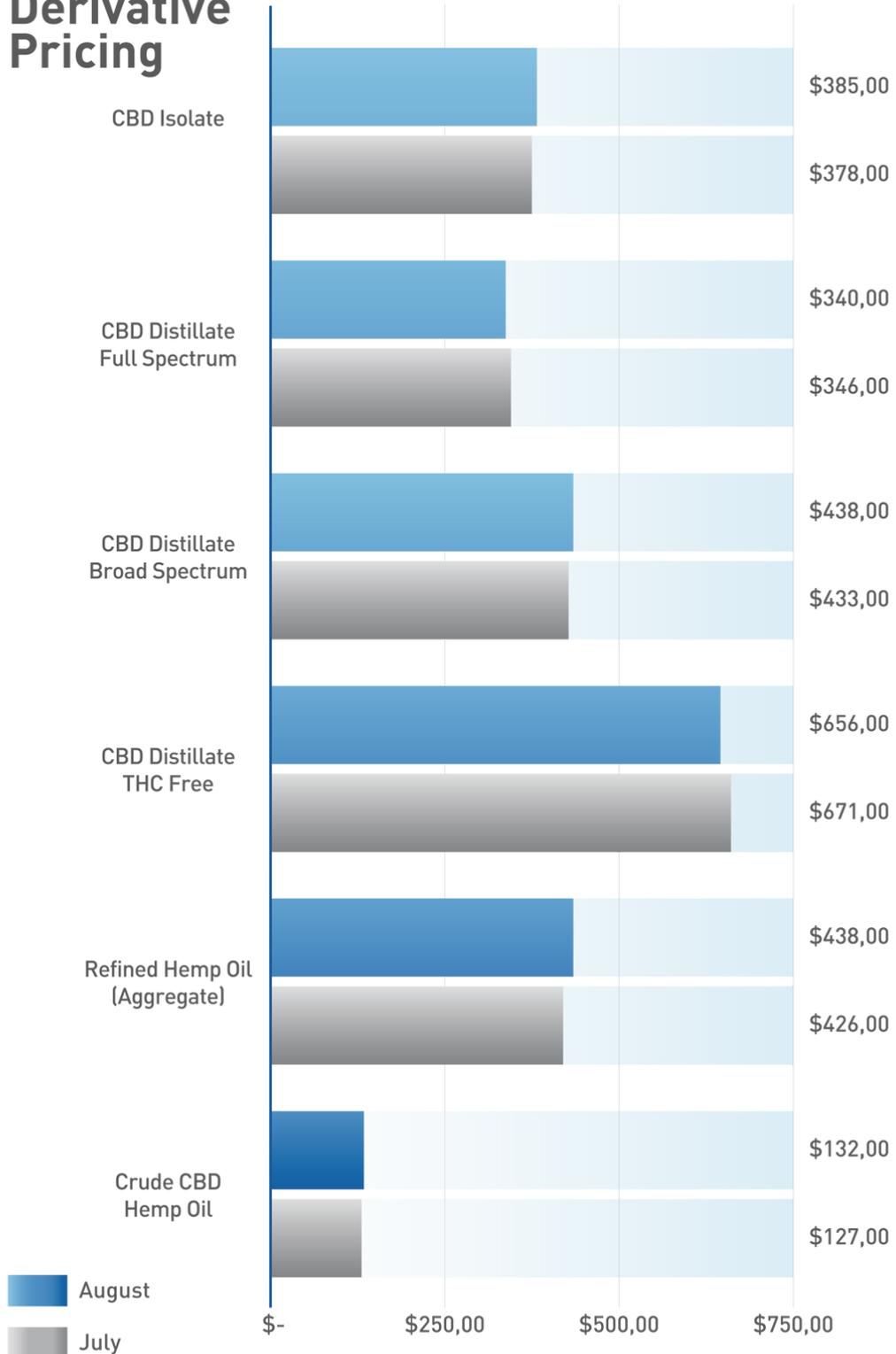


The average price for CBD biomass dropped to historical lows of \$0.29 / % CBD / lbs., potentially causing several operators to hang up their hats. Decreasing prices coupled with increasing input costs to harvest the crop will create a challenging situation come harvest time. We do believe there will be price stability in the coming months; however, the industry will experience volatility for the coming years.

CBG biomass prices have been one of the most stable product categories over the past 10, months according to *Hemp Benchmarks*. We, again, believe this is due in part to the smaller market size and different distribution channels. The expansion of the minor cannabinoid market will also continue to provide stability in the short term for CBD distribution until the federal regulations landscape changes surrounding CBD.

WHOLESALE DERIVATIVE PRICING

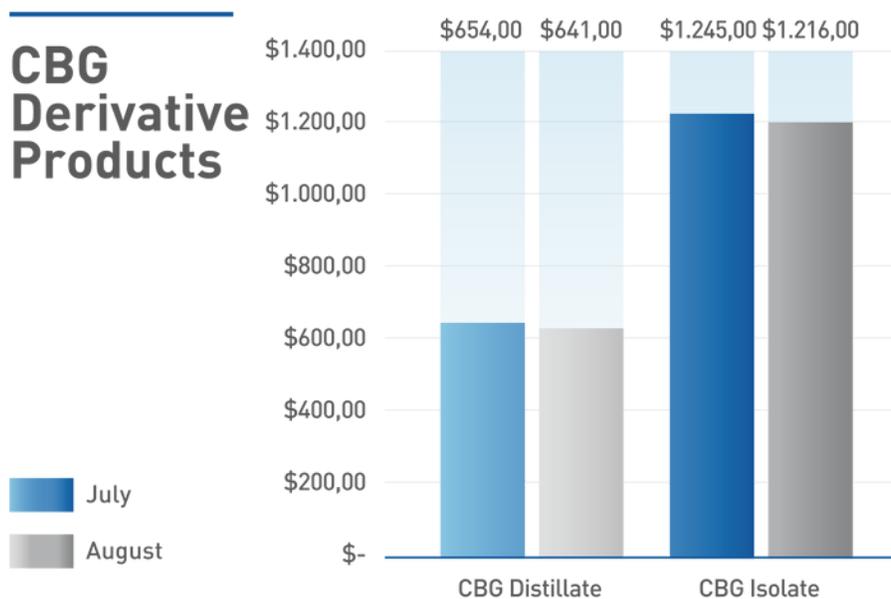
CBD Derivative Pricing



WHOLESALE DERIVATIVE PRICING

There was a slight uptick of ~2% in CBD isolate pricing from last month. Even with CBD isolate trading around historic lows, there is still demand, and the product is a precursor to the ever-growing minor cannabinoid market.

The minor cannabinoid market will continue to be a cat-and-mouse game as new isomers of THC are manufactured and distributed. **Regulations are having a hard time preventing the active injection of new cannabinoids into the grey market that has been created.** The minor cannabinoid market has two sides to the story. On one side there is a conversation surrounding the quality assurance and quality control being implemented at these manufacturing sites as well as the overall safety concern from ingesting these cannabinoids.



The other side of the story is that converting the excess quantity of CBD to a minor cannabinoid is providing a lifeline for struggling CBD manufacturers. Additionally, that economic infusion will hopefully provide stability across the supply chain ultimately ending up back in the hands of the farmers.

The CBG derivative market saw a 2% downward tick in prices for both isolate and distillate. The CBG market continues to experience less price volatility, due to market size and consumer exposure.

SECTOR ANALYSIS*

INDICES	3 MONTH%	6 MONTH %
S&P 500	-7.94%	-13.50%
DOW JONES	-10.56%	-9.10%
NASDAQ	-15.83%	-22.10%
 GLOBAL CANNABIS	-39.66%	-51.48%
AMERICAN CANNABIS	-31.70%	-44.75%



Investors are Casting a Wider Net in Cannabis as Industry Proves its Strength, Longevity

*This text expresses the sole opinion of the writer. The thoughts expressed are independently formed and the writer is not compensated by any third party.

SECTOR	3 MONTH	6 MONTH
HEALTHCARE	-0.96%	-5.54%
TECHNOLOGY Sector	-13.10%	-22.56%
INDUSTRIALS	-12.04%	8.67%
FINANCIALS	-12.30%	-20.89%
CONSUMER CYCLICAL	-15.40%	-23.89%
CONSUMER NON-CYCLICAL	-8.66%	-8.86%
BASIC	-21.93%	-18.2%
ENERGY	-13.75%	3.70%
UTILITIES	-8.33%	-0.06%
 ALTERNATIVE HARVEST ETF (MJ)	-37.39%	-45.81%
MULTI-STATE OPERATORS (MSOS)	-36.95%	-47.08%

*Information retrieved from NCV and E*trade.

Germany: The Future of Cannabis Liberalization

By Marc Brandl

July saw entrepreneurs, politicians, cannabis companies, and policy experts from all over the world come together in Berlin to discuss the future of cannabis liberalization in Germany. The German 'stoplight' coalition, elected last year, has pledged to liberalize cannabis laws and create Europe's first major adult recreational cannabis market. With 86 million people and the largest economy in Europe, legalization would create a tidal wave of reform throughout the 27 member states in the EU and beyond. Current projections discussed at the conference believe Germany's adult recreational cannabis market will be a \$5 to 6 billion dollar market by 2030, the same size as today's California market.

Here are some of the key takeaways from the two day conference.

Roadmap to German cannabis liberalization: The coalition government has appointed Drug Commissioner Burkhard Blienart and his office is leading a consultation process with 100s of policy experts, industry stakeholders, and members of the German parliament (Bundesrat and Bundestag) to craft model legislation that is slated to be released in late 2022 or early 2023. Because the governing coalition has a majority of votes in both chambers of the parliament, final passage is more likely than in the US. However, the legislation needs to make its way through a series of committee hearings, debates, and votes before final passage and being enacted into law. Consensus opinion believes the earliest passage would happen would be the 2nd half of 2023 or early 2024 with implementation and the start of sales in late 2024 or early 2025.

Key differences in the US approach and the German approach

In the US cannabis reform has been largely driven by and for voters. Advocacy groups have written ballot initiatives to appeal to voters and overcome the reluctance of legislators to enact policies that are overwhelmingly supported by the population. The reform process in Germany is very different. There isn't overwhelming support to legalize cannabis. Instead, the roadmap to creating the rules and regulations will be aimed toward pleasing and directed by the technocratic elite. Public health officials, members of parliament, and their staff and bureaucrats in consultation with cannabis and other industry leaders will drive this process. The model Germany appears to be looking at most closely is not US state markets but Canada. Expect a German market to resemble Canada's rules and regulations more than California.

One thing that stays the same between crafting and passing cannabis legislation in the US and Germany is prioritizing public health and safety and preventing access to children and teens. Members of the Bundestag from each of the three parties in the governing coalition had a roundtable discussion and these concerns kept being brought up. Another concern for cannabis companies was a real skepticism voiced by these politicians about how much advertising and branding should be allowed. There was also an awareness that in order for cannabis liberalization to be a success that access and price will be a key determinants in the illicit to licit market conversion. Indeed the goal of curtailing the illicit market was mentioned by speaker after speaker as being a key goal of cannabis policy.

Germany: The Future of Cannabis Liberalization

By Marc Brandl

Where is the consumer?

There is very little data on who the German consumer is. What products do they want? Who are they? How and where do they want to consume cannabis? While projections on market size can be derived from statistics on rates of current usage, very little is known beyond this. Policymakers and industry stakeholders at the conference had very little to say about the consumer. Instead, they were focused on tackling a complex supply chain, GMP vs non-GMP compliant cultivation, and other non-consumer facing challenges. Survey and sales data and analysis will be key for companies looking to enter a new market that does not exist yet. There is also a real need and opportunity for consumer education. Dosage and effects, product formats, strains, and terpenes are all lacking or non-existent for the average German cannabis consumer.

Pitfalls within the European Union

When Uruguay and Canada liberalized their cannabis laws much attention and concern was placed on international UN anti-drug Conventions and whether they would face sanctions and other penalties for being in violation. We've seen since that the UN Conventions can be ignored without fear of consequences from the UN. The Schengen Convention within the EU is another matter entirely. Schengen is known primarily for allowing free, borderless travel between member states by EU citizens, but it also has provisions to prevent the supply of recreational cannabis. Unlike international treaties, there are concrete enforcement mechanisms within Schengen that Germany and other EU states need to take seriously and address. In July we saw Germany enter into preliminary discussions with Holland, Luxembourg, and Malta to address this very issue. A change in the Schengen Convention or how it is enforced or interpreted would be a major victory for cannabis liberalization in Europe.

The journey has just begun

The entire legal EU cannabis market is less than 1% of the legal global market. The conference featured a diverse mixture of voices from within and outside the cannabis industry. A sense of optimism was the currency that ran throughout the attendees. The very real possibility of a multi-billion dollar annual market in less than ten years with thousands of plant-touching and ancillary companies with millions of legal consumers is an opportunity worth following closely.

The Dosing Project

Part II – A Paradigm Shift

Cannabis is a historical commodity, yet there are unanswered questions about how to use it beneficially. Traditional clinical study approaches lack relevance. Normally, there would be expert guidance. But, because its long history of use was interrupted by an extended interval of prohibition, there is little guidance. The CESC, a Cannabis research organization, finds solutions using a paradigm shift.

Cannabis has been consumed for centuries as botanical medicine, social lubricant, and industrial resource. Everyday use of Cannabis spans from the expectation of general wellness to relief from disease symptoms. In retrospect, there is an abundance of information through current and historical use that can be sourced for the benefit of the industry.

Historians note that the Arab-Muslim world introduced the ritual of hash (a form of processed Cannabis Flower) consumption to the Christian world in the 18th century. By the 19th century, the existence of hash consumption lounges was well documented in Europe. As a medicine, hash was administered for everything from the plague to mental illness. European pharmacists and physicians formulated tinctures, lozenges, and even medicinal cigarettes containing hash. Although many treatments failed, some were successful, and lessons were learned from trial-and-error experimentation.

Much of that knowledge did not endure, and 20th-century Cannabis use expanded in clandestine fashion. Today, widespread consumption occurs in the absence of informative clinical information.

Terrance Alan, owner of Flore, one of San Francisco's newest Cannabis dispensaries, agrees to do it differently. "Our community knows what works for them," says Mr. Alan. "Our job is to pair science with community wisdom to offer the best Cannabis products."

Flore has teamed with the CESC to source data from its community. The CESC's Dosing Project uses an observational study design incorporating artificial intelligence (machine learning) to determine safe and effective Cannabis product dosages. "We designed a study that listens to your observations of using Cannabis products and makes your experience part of our research," explains Dr. John Abrams, co-founder of the CESC.

The CESC works with partners like Flore dispensary and with licensed Cannabis analytical labs like Veda Scientific, to move the science of Cannabis forward. Community involvement is key to Cannabis research. Using observational data analysis, the CESC has uncovered clues to the "Sativa" vs "Indica" dilemma. It has discovered something users have known all along; Cannabis has a very particular set of aromas based on terpenes, esters, and sulfur-containing compounds. The CESC is leveling up with the discovery that those smells may impact the effects felt by you when using cannabis. Cool right!? Applying new and ongoing developments in data science is a scientific paradigm shift that offers a promising future for Cannabis products.

The CESC seeks community support for its ongoing investigations.

[DONATE](#)

For more information visit the CESC at www.thecesc.org.

Observational Study

In contrast to interventional studies, observational studies provide general assessments of the study product. Participants are not assigned an intervention by the investigator. They are observed in a naturalistic setting. Observational studies can provide critical descriptive data and information on long-term safety and efficacy. Cross-Sectional or longitudinal observational studies are useful in situations of ethical or logistic concerns. Moreover, by using large datasets, sophisticated crossover designs, such as incorporating repeat responses from the same subject, are feasible

HOT IN THE NEWS

August 2022

- 1 Cannabis-infused soda released at Sacramento dispensaries**
- 2 Mike Tyson's cannabis comes to Maryland dispensaries**
- 3 Most Cannabis Markets Experience Annual Declines in Sales in May**
- 4 US House Democrats demand Senate pass its own marijuana banking bill**
- 5 Cannabis: EU nations could follow Germany in legalizing drug**
- 6 Biden Says He's 'Working On' Fulfilling Marijuana Campaign Pledge To Free Prisoners**
- 7 Cannabis Consumer Boom Continues: BDSA's Consumer Insights Shows Consumer Penetration Over 50% Across Adult-Use Markets - BDSA**
- 8 New York Marijuana Regulators Approve Rules To Start Accepting Retailer Applications From People Harmed By Drug War**



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