How Industrial-Scale Extraction Will Make CBD Accessible to Everyone Who Needs It

A Kentucky company is working on a process to convert 25 tons of hemp biomass per day into high-quality oil with uses for all the byproducts.

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People are getting excited about cannabidiol (CBD), and I am thrilled to see demand grow well beyond the core of true believers who have been touting its benefits for years. But the price of high-quality CBD is still too high for many who need it, and that is in large part a function of supply.

So I was intrigued when I heard about the Draconis Extraction Technology (DET) patented commercial-scale ethanol extraction process.

Paul Baskis is the brains behind this technology. A scientist and designer with expertise in carbon transformation and soil science, he brings more than 30 years of process development, wastewater treatment and compound isolation experience to the problem of how to make broad-spectrum, winterized, de-waxed, solvent-free CBD, and make it at a scale that puts it within reach of more consumers.

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“I design large systems,” Paul told me when I called him at his office in Kentucky, where DET is getting ready to build their first industrial-scale extraction facility. “It’s what I do.” This extractor will handle a minimum of 25 tons of biomass per day, which exceeds by several times the maximum capacity for commercial CO2 extraction.

The vision driving this quest for industrial-scale extraction is all about people who need CBD.

“A lot of ex-military people are dealing with ongoing health problems,” said Tommie Baskis, DET director and CEO. Draconis offers licensees turnkey service that includes security and risk assessment and employs a large number of veterans in those roles.

“I’m thinking of them when I say you have to start with a really good crude that is affordable for the people who have PTSD, pain, neurological issues and so on. You have parents trying to help a sick child, people dealing with addiction; I want everyone to be able to afford CBD and right now very few people can. In order for it to be affordable, you have to extract it on an industrial scale.”

Right now the average price for broad-spectrum CBD is about $350 per 1000 milligrams. We know that people are using it for support with an array of health problems, from PTSD and anxiety to insomnia and chronic pain, but many sufferers simply can’t afford it. Let’s say you’ve found that your most effective dose is 5 mg per pound of body weight per day, and you weigh 180 pounds. That $350 bottle of CBD is going to last you only 11 days.

However, Paul’s tech would push extraction costs down and lower the price by boosting the supply of CBD extract dramatically without sacrificing quality.

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“I worked on the design to create a very clean crude,” he said. “It’s so pure that you can use it in a vape pen without leaving any residue. It has a good taste. From there, if you’re doing CO2 extraction, you can easily purify it into isolates, and you get 10 to 20 times more isolate out that if you started with raw hemp.”

One of the fascinating things about Paul’s design is that instead of removing and disposing of “waste,” it purifies out waxes and oils for sale as products in their own right. The waxes can be used in cosmetics, for example. Even the pulp comes out dry, de-waxed and ready to be used for paper, fabric or bioplastics.

If there is no buyer for the pulp, Paul’s design can work with an optional system add-on that produces fuel to run the extractor and, as a final by-product, a carbon-based fertilizer that keeps fixed carbon in the soil, and enhances microbial growth and soil structure.

Max Le Pera, Vice President of Draconis, places these features in the context of the company’s environmental ethic. “Sustainability and circular economy are becoming increasingly important aspects of global business,” Le Pera noted. “The Draconis extraction technology and re-purposing of biomass residual are in direct alignment with these principles.”

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DET is just one example of the coming green tech explosion sparked by the legalization of hemp in December of 2018. This and other innovations are going to make it possible for more farmers to grow, process and profit off their hemp crops; for employment and population growth to rebound in rural communities, and for more people to gain better health. To find out about new developments in industrial hemp and events near you, follow The Hemp Biz Conference on Facebook. I’ll see you there.

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