

Biden's win brings a "green" market wave and cannabis extraction team attracts the Sixth Wave

"Waves are inspiring not because they rise and fail, but because each time they fall. They never fail to rise again." – Josh Billings

The Democratic "blue" wave failed to materialize during the recent U.S. elections but the "green" cannabis wave continues to build. Five states (Arizona, Mississippi, Montana, New Jersey, and South Dakota) easily passed ballot initiatives for the legalization of either recreational or medical cannabis use.

Currently, the medical use of cannabis is legalized in 35 states and the recreational use of cannabis is legalized in 15 states. Although federally illegal in the U.S., there is speculation that the Biden win is an important first step on the path towards the federal decriminalization of cannabis.

In the U.S., medical and recreational cannabis sales are on pace to exceed US\$15.5 billion by the end of 2020, an increase of approximately 40% over 2019, and grow by 30% in 2021.

To meet the higher demand, technology advancements have manifested in all parts of the supply chain, especially in the extraction and purification process.

Extraction

The three main methods of cannabinoid extraction are (1) ethanol or alcohol extraction; (2) hydrocarbon extraction, using butane or propane; and (3) carbon dioxide (“CO2”) extraction. If higher purity levels are required, a distillation process, often using chromatography technology, can increase purity levels into the high 90%.

As the industry shifts into pharmaceutical-grade production to meet medical and cannabis-infused products, cannabis extract producers continue to search for innovative ways to improve the purity of cannabinoid isolates and control costs.

One of the challenges for cannabis extract producers is that organic material has varying properties from batch-to-batch and a potential processing risk when scaling operations.

Sixth Wave – Cannabis Extraction Using Nanotechnology

Sixth Wave Innovations Inc. (CSE: SIXW | OTCQB: ATURF) is a nanotechnology company focused on the detection and extraction of target substances (e.g. cannabinoid, gold, or Covid-19) at the molecular level using patented technologies.

Led by a team of PhDs and scientists, Sixth Wave’s Affinity™ System uses a proprietary Molecular Imprinted Polymers technology in the process of extracting cannabidiol (“CBD”) and tetrahydrocannabinol (“THC”) from hemp and cannabis.

The extraction process uses porous polymer beads and the polymer is designed to attract a specific molecule. As CBD and THC are both molecules, Sixth Wave created proprietary polymers to specifically target those molecules in the extraction process.

Benefits of Sixth Wave’s Technology

Unlike other batch processes that purify components out of a product in various stages, Sixth Wave’s process can take a wide variety of input materials, run it through the solution,

and the polymer will selectively extract the specific cannabinoids. The resulting cannabinoid isolate can be up to 99.9% pure.

Chromatography, the legacy technology for purifying cannabinoid extractions, is considered to have issues with high capital and operating costs, efficiency, and scalability.

The Affinity™ System was designed to be highly automated and user friendly, requiring minimal training and human intervention. The system uses lower-cost components, minimizes the need for intermediate batch processing, and can be operated continuously, making it a more cost-effective solution.

Dr. Jonathan Gluckman, President and CEO of Sixth Wave, said, “As we know, a major challenge for the cannabinoid purification industry will be the delivery of customization and flexibility, with medicinal and recreational applications demanding exceptional product diversity. The Affinity™ System is highly capable in this regard, with the potential to tailor extraction media to recover any one of the hundreds of cannabinoids available to us.”

Market Size

According to a recent study, the cannabis extraction market is expected to be worth US\$28.5 billion by 2027, growing at 16.6% annually.

The growing legalization of cannabis in various countries and the use of CBD and THC for treating illnesses such as arthritis, anxiety, and nausea are the main factors driving growth.

Sixth Wave is currently working with several customers designing larger processing capabilities. In April, the Company announced an agreement with Green Envy for the purchase of a minimum of three Affinity™ extraction units. It

expects to deliver the first revenue-generating system to Green Envy by the end of this year. Expect more deals to be announced as the Company shifts from development to production.


The Company is well funded as it recently closed a \$1.15 million financing and intends to use the proceeds for the deployment of its Affinity™ cannabis extraction units as well as for other general corporate purposes.

Time to jump on Sixth Wave to ride the resurging cannabis trend.

CANNABIS SECTOR | AFFINITY™

For Cannabis Producers, the Affinity™ unit is designed to capture and extract Cannabinoids to ensure the purest end product. The system replaces antiquated processes including winterization, distillation and chromatography. The highly scalable Baseline unit is designed to produce approximately 20 kg of cannabinoid distillate or full spectrum distillate per day.

Each unit is capable of generating gross revenues to Sixth Wave of up to \$100K/month.



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