

# Canxchange Benchmark Report



July 2021

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# Contents

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03	The New Canxchange Platform
04	Note from the Editors
06	Canxchange Farmers Sentiment Index® (CFSI)
10	Canxchange Benchmark Methodology
11	Market Insight
13	Product Data & Analysis
22	Cannabis Tech of the Quarter
25	CAVAC's Jean-Philippe Perrin's Industry Observations
29	Canxchange Overview
30	Disclaimer

# New Canxchange Platform

Coming Soon - Q3 2021

The screenshot shows the Canxchange platform's user interface. On the left is a dark sidebar with navigation links: CX Dashboard, Published interests, My trades, My interests, My negotiations, and Completed trades. The main area has tabs for DISTILLATES, HEMPS, ISOLATES, OILS, SEEDS, WATER SOLUBLE, and MEDICAL CANNABIS. Under DISTILLATES, there is a table of products with columns for Product, Trading unit, Quantity, Last price, and three buttons: CREATE INTEREST, SELL INTEREST, and BUY INTEREST. To the right is a 'PRICE TREND GRAPH' showing price fluctuations from January to April 2021. Below the graph are sections for NEWS (with links to market updates) and LATEST TRANSACTIONS (listing five entries with Date, Quantity, and Price).



Due  
Diligence



Member  
Network



Payment  
Solution



Lab  
Certification



Logistics  
Support



Account  
Management

# Note from the Editors

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**Jonas Bahceli**

He has given himself the mission to provide the most accurate database for the cannabis wholesale industry in order for Canxchange clients' to have an edge compared with the rest of the industry. His analytical skills and ability to sense market trends makes his opinion highly valuable for the industry.



**Sigfried Legeay**

Sigfried provides the mathematical expertise in order to extract the best possible elements from the current Canxchange data.

## The Cannabis Plant: From a raw material to a global agricultural commodity

Corn, soybeans, coffee, cocoa beans, cotton, sugar, lumber and other agricultural commodities have one common characteristic; they can all be traded on a centralised exchange either physically or through financial products. All these commodities are utilised on a daily basis for different uses but they tend to be used for specific industries (food, textiles, construction etc.). Compared to the crops mentioned above, the cannabis plant is a very versatile agricultural product and anyone operating in the industry has a great understanding of the many uses of the plant. This is a major competitive advantage.

Despite benefiting from these embedded characteristics, the cannabis plant has yet to earn its position to be considered a 'Global Agricultural Commodity'. The opportunity is tremendous but the barriers to entry are also very high and the challenges to overcome are important too. Regulation, access to investment, financial services and standardisation need to become more mainstream in the industry in order to reach this milestone.

So why is cannabis commoditisation that important for our industry? The answer to that question can be summed up in four words; standardisation, risk management, liquidity and opportunity.

Standardisation is a key component as it ensures a like for like product comparison and it also allows market participants to exchange their products under a common scope. In the financial products world, most of the rules are issued by global and local regulators and operate under contracts governed by the International Derivatives and Swap Association bilateral contracts (ISDA). This organisation structure allows any market participant, wherever he or she is located, to transact under the same rules thus benefit from the same level of contractual protection.

# Note from the Editors

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Risk management is important for the daily operations of the different industry's stakeholders. Any business is facing the same dilemma of managing production and inventory. Despite the existence of procurement contracts, these rarely deliver an optimal level of protection and they are usually costly and time consuming to enforce in case of disputes. Still, farmers and producers need to hedge prices, supply and demand risks to operate in an optimal manner. Products such as futures and options exchanged on a central counter-party or forward contracts (bilateral agreements governed under ISDA rules) are essential tools to enhance risk management for our farmers and producers.

'The number of corn future contracts traded for the same period was 451 billion bushels which represents a leverage effect of 11 times'

Liquidity as an element of market growth and protection. Being a commodity is the opportunity to increase the number of market stakeholders and also offer alternatives for protection and distribution. As a commodity, the structure of the cannabis market will change. Not only there will be farmers and producers but new market participants will appear such as investors, speculators, arbitrageurs,...As per a study conducted by the Chicago Mercantile Exchange (CME) for the 2017/18 season, the worldwide production of corn represented 41 billion bushels whereas the number of future contracts traded for the same period was 451 billion bushels which represents a leverage effect of 11 times. As the reader may understand, the liquidity aspect is an opportunity for the market. Not only will the market mechanically grow in value, it will also offer the opportunity to buy or sell products and protection quicker, at a fairer market price from or to a wider number of market participants.

The Opportunity set for additional revenues is also very important. Not only farmers and producers will be able to benefit from extra levels of protection, they will also be able to participate in a whole new market benefiting from the full incentive of using financial products (price divergences, calendar spreads and other arbitrage opportunities).

Commoditisation will also allow the access to important price metrics and analysis that will benefit farmers and producers for their decision-making process. Reading this report, the reader will have the opportunity to discover the Canxchange® Farmers Sentiment Index which is the first of many indicators to be developed by our research team in order for the industry to gauge the current health and prospects of our market.

We hope you find this July '21 issue of our Canxchange Benchmark Report valuable and we sincerely believe that it will contribute to the cannabis plant emerging from a raw material to a global agricultural commodity.

# Canxchange® Farmers Sentiment Index

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## Introducing the Canxchange® Farmers Sentiment Index (CFSI)

Having the right amount of data at the right time is fundamental for any industry and business. To make the right decisions and to have the right steering approach, companies need to gather a sufficient amount of data in order to choose the most appropriate decisions. Like many other industries, the cannabis business is highly interconnected where farmers depend on clients' demand and their customers also depend on the farmer's supply.

This dependency led the Canxchange Data & Research Lab to create indexes and benchmarks in order to gauge the health of our market and get a deeper understanding of the market participant's perception on the industry outlook.

We have recently started our research efforts by introducing Canxchange® Benchmark Prices (CBP) and the Canxchange® Farmers Sentiment Index (CFSI). A number of other indicators will follow and be published in the coming months.

## CFSI Methodology

The Canxchange research team have spent weeks surveying over 100 hemp farms and cooperatives across Europe. The survey has helped us measure 5 fundamental factors to better understand the outlook for the region's cultivation activity:

- **Surfaces planted compared to the previous season**
- **Increase/decrease of production investments**
- **Stock levels**
- **Sales confidence**
- **Cultivation yields**

Each fundamental factor is scored with a different weight depending on their level of importance. Surface planted and production investments are the most important factors where cultivation yields have a lower weight in the index calculation.

The CFSI is a base 100 index, with low to high extremes ranging from 75 to 125. 100 shows neutral confidence, 125 shows a highly optimistic sentiment and 75 shows a highly pessimistic sentiment. For more guidance, the reader can refer to the diagram on page 07..

# Canxchange® Farmers Sentiment Index

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## Canxchange® Farmers Sentiment Index

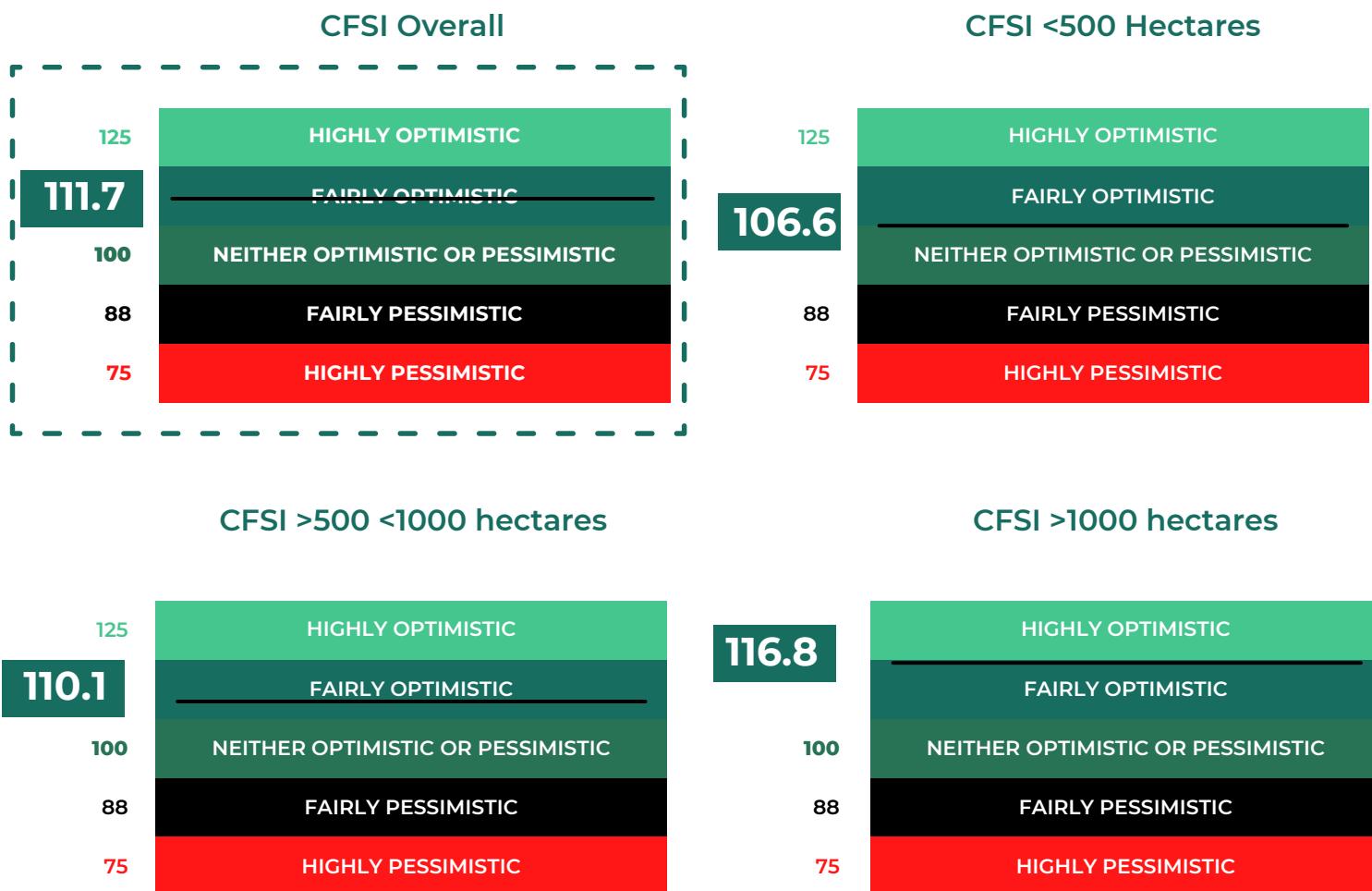


It is important to note that we did not just use the fundamental factors in our calculations. We have also created a derivative approach in order to not only show the overall snapshot of the Farmer's Sentiment but also a segregation by farms/cooperatives size:

- <500 hectares
- >500<1000 hectares
- >1000 hectares

# Canxchange® Farmers Sentiment Index

Canxchange® Farmers Sentiment Index - July 2021



## Comments & Analysis

Overall we can see that the farms surveyed are fairly optimistic. With an index score of 111.7, the anticipation for the industry segment is quite positive for the coming months. According to our analysis, different factors can explain the overall optimistic sentiment. After months of restrictions and economic slowdown due to the COVID-19 pandemic, buyers generally anticipate better economic prospects, higher demand and have better visibility due to the different vaccine rollout programs that have been put in place globally. This has given confidence to the hemp producers to increase the planted surfaces and invest more in their production machinery and materials.

# Canxchange® Farmers Sentiment Index

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Another factor that we have been able to identify is the fact that compared to the previous season, stock levels are fairly low (except for flowers) especially for products such as seeds, stalks and shives.

It is also important to note that the vast majority of hemp producers are expecting to sell more than 80% of their production this year, and stunningly 60% of the participants surveyed have already pre-sold most of their production for the year. During our discussions, we also heard that for some products, negotiations have already begun for the 2022 harvesting campaign.

A particularly interesting fact that we have identified is that the bigger the farm/cooperative, the more optimistic they are. Indeed, there is a 10 index point difference in terms of sentiment between farms <500 hectares and farms >1000 hectares (respectively 106.6 and 116.8). We have not been able to specifically identify the exact reason for this difference in sentiment but we believe it is in line with the following variables:

- Smaller production units still struggle to get access to different distribution networks and consequently hold a higher level of stock
- Production units below 500 hectares have greater difficulty being competitive in terms of prices due to the impossibility of reaching a critical size for optimal economy of scale
- Smaller farms got hit harder by the COVID-19 pandemic as they may have started global lockdowns with fairly low treasury and cash flow levels.

# Canxchange Benchmark Methodology

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## The Canxchange Data Analysis Approach

The core concept in data analysis is not only to have access to the resulting numerical value, it is also important to understand the reasoning behind the figures, how and why the publisher followed its path in building the data report. Our data analysts spent months observing the market and client transaction behaviours as well as interacting with hundreds of market participants and stakeholders. These observations helped us better understand key market metrics with regards to questions the industry has about demand, supply and price.

### Our Data Analysis Includes

- 01** Canxchange Benchmark Price (CBP)
- 02** Weighted average prices per CBD% for different products
- 03** Geographical breakdown of products provenance
- 04** General trends on price and volume

## An Efficient Way to Calculate Accurate Prices

Canxchange has decided to focus on the market's most sought-after products where a large amount of significant data is available. With the industry growing and business accelerating, our mission is to cover as many products as possible over the coming months whilst keeping an eye on market innovation (new products, new trade units, newcomers). In order to build the Canxchange Benchmark Price (CBP), we retained the following methodology:

- 01** We proceed with a data cleaning and make sure that we isolate non relevant occurrences (outliers database errors).
- 02** Then we standardise the data to make sure each component is comparable and interchangeable. We retained for that stage the methodology of calculating the weighted average 1% price potency of each product.
- 03** As we assume that the price sellers charge will also be subject to the quantity they offer, we also take into account the relative quantity of kg/L for an order, in respect to the total kg/L for that product line.
- 04** The 1% price potency of that specific order is then multiplied by the relative quantity in order to give us the relative price, with respect to the total quantity.
- 05** The sum of the relative price of all orders then gives us the final CBP value.

The Canxchange Benchmark Price (CBP) is one of the tools we provide our customers with in order to share an accurate calculation of the natural price expected by wholesalers.

For each product we also adjust the CBP into different kg/L categories, in order to account for outliers (ex. CBD Whole flower categories: <100kg, 100-1'000kg, >1'000kg)

# Market Insight

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## Insight Provided by George Popov Canxchange Trading and Sales Specialist

Our Sales & Trading teams are on the ground on a daily basis to capture the market pulse and this quarter has been an exciting one for us and our members. The first important highlight is that Canxchange has become global. Since the beginning of June, we have been offering overseas members (outside of Europe) access to our trading infrastructure through an agent model. Not only do we now facilitate cross border transactions; we also get a global view of the market trends and sentiment. Secondly, the market is getting out of its COVID-19 lethargy and the Cannabis sector stakeholders are back with vengeance. This quarter we have also added a number of new products to our analysis including, Shives & Hurds, Water Soluble Isolates, CBN and CBC Isolates.

### CBD Whole Flowers

The market has stayed stable over the last few months with outdoor prices ranging from €200-€500 and indoor prices from €1000-€2000. There are a few exceptions with cheaper prices for one off transactions since a lot of suppliers entered the market and flooded it with additional inventory leading to few suppliers willing to liquidate their stock at very cheap levels. It is anticipated next year to see fewer farmers coming to the table with new products which should lead the prices to slowly creep back up and stabilise at the higher ends of the ranges mentioned above; unless French producers start to flood the market with new inventory.

### CBD Biomass

Prices have remained stable over the last few months with similar market patterns as described for CBD whole flowers. The pandemic has definitely affected demand for final goods meaning that the high level of production of biomass was difficult to absorb by the market. A large number of the smaller farmers won't be returning this year which should allow prices to stabilise in the near future.

### CBD Oil

Prices have remained stable as the consumer market stayed strong despite the pandemic effects. New applications for using CBD oil raw materials such as edibles have come into play which has permitted absorption of the supply. Supply from the US to Europe for CBD Oil remains marginal which has also allowed European prices to keep stable levels. Indeed, for the moment, we do not see CBD Oil market participants using price arbitrage opportunities between the two continents unlike what we see on other products.

# Market Insight

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## CBD, CBN & CBC Isolate

CBD Isolate being the most popular product on the market has attracted significant pressure on price from US suppliers. Prices on isolates coming from the US are coming in at €400-€500/kg which blows European competition out the water as cheapest European produced isolates are closer to the €1000/kg mark. Prices seem to have stabilised in the last couple of months at these 400-500EUR marks. The minor cannabinoid space is gaining more and more traction as CBD has become a very competitive market and experienced CBD players are looking to diversify into minor cannabinoids which are picking up in popularity. CBN and CBC prices remain stable as the supply & demand curve looks stable. Some US products are starting to appear in Europe putting pressure for prices on European producers.

## Seeds

Year on year the prices of seeds have stayed stable despite the increasing demand for seeds in the human and animal food industry. The new harvest season approaches and warehouses are mostly filling any last minute demand which leads to a slight increase in price but this is only temporary and prices are expected to mean revert as soon as the new harvest hits the market. Seeds is one of the markets where if you are expecting big and stable supply, it is always recommended to contract in advance as sourcing large quantities on the market can be very difficult. Talking to the farmers for next season they are going to keep their production levels the same as 2020 in fear of Covid repercussions but many of the bigger players are looking to expand their operations in the near future as they see global demand growing fast. Seeds for cultivation have also remained stable. Concerns were raised as a large number of farmers are expected not to come back to the fields but this has not been reflected in the seed prices thus far.

## Shives & Hurds

A very popular product amongst construction and biodegradable plastics companies. Supply is very hard to find as the popularity of the product in construction has seen exponential growth. The increase in freight costs has made transport of these goods not economically viable from overseas which has put pressure on European suppliers to produce more and allow the prices to slowly start to creep up. An interesting development in the market could be using vacuum packing which would allow to maximise containers capacity and make international trade more economically viable.

## Water Soluble Isolates

Water Soluble Isolates are starting to gain a lot of traction within the market with many drinks players experimenting with various CBD infused drinks. The CBD drinks market in the US has exploded and slowly but steadily the hype is hitting the European market with more and more drinks manufacturers getting involved. Prices have been steady around the €1500-€2000 mark as the product is still new and supply has not flooded the market yet. We expect prices to stay stable as this is a food component so manufacturing and getting drinks manufacturers to use the raw material will be challenging in terms of compliance standards.

# Product Data & Analysis

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- 14 CBD Hemp Biomass
- 15 CBD Oil
- 16 CBD Isolates
- 17 CBG Isolates
- 18 CBN Isolates
- 19 Seeds (Non-cultivation)
- 20 Water Solubles
- 21 Whole Flowers (Outdoor)



# CBD Hemp Biomass

## Product Data & Analysis

Hemp biomass is the whole plant milled into fine material. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1% of Hemp Biomass.

### Prices & Volumes Data

€ per kg:	€2.3
CBP:	€1.09
CBP <5000 kg:	€1.54
CBP >5000 kg:	€1.08

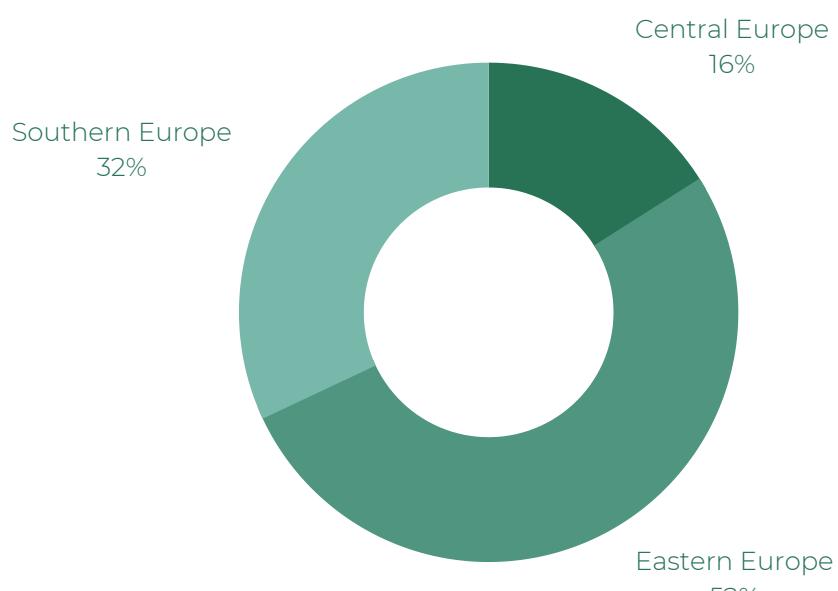
Percentage CBD content:	2.69%
Average sell order mass:	20,377 kg
Lowest sell order mass:	1 kg
Highest sell order mass:	200,000 kg

### Price & Volumes Trends

Prices:	Neutral
Volumes:	Neutral

## Geographical Breakdown

Distribution across Europe



# CBD Oil

## Product Data & Analysis

CBD oil is the first extract from crude oil to create a low THC and high CBD concentration. Oils are used for food products and on their own for human consumption. CBD ranges from 2-35% with THC remaining below 0.2%. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of the 1% potencies of the oils.

### Prices & Volumes Data

€ per L:	€798.94
CBP:	€171.02
CBP <100 L:	€63.25
CBP >100 L:	€174.56

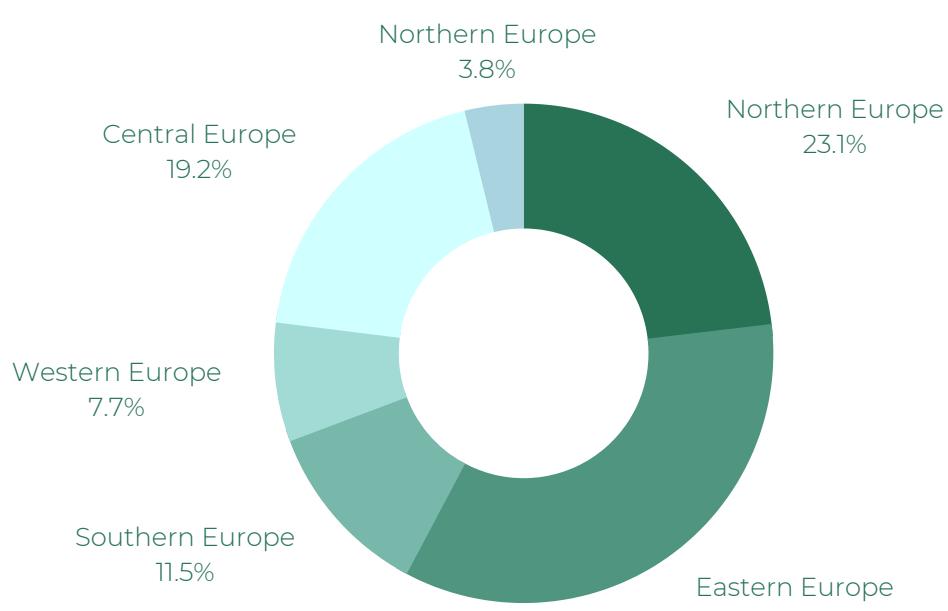
Percentage CBD content:	10.58%
Average sell order mass:	238 L
Lowest sell order mass:	5.5 L
Highest sell order mass:	2,000 L

### Price & Volumes Trends

Prices:	Neutral
Volumes:	Neutral

## Geographical Breakdown

Global Distribution



# CBD Isolates

## Product Data & Analysis

CBD Isolate is a crystal-like powder extract from hemp biomass, used to produce cosmetics and vapes. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1 kg CBD Isolate.

### Prices & Volumes Data

€ per kg:  
CBP:

€938.54  
€9.32

Percentage CBD content: 99.06%  
Average sell order mass: 454 kg  
Lowest sell order mass: 1 kg  
Highest sell order mass: 1,000 kg

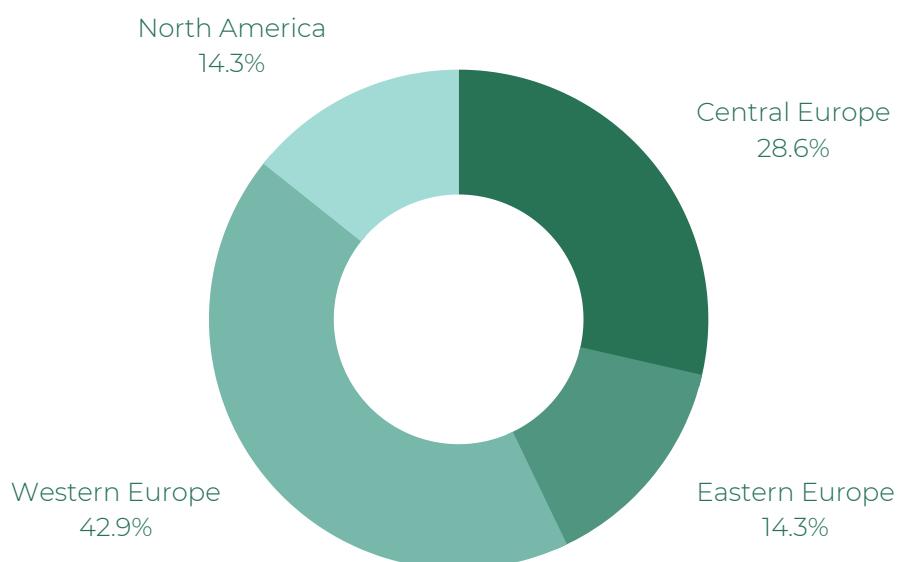
### Price & Volumes Trends

Prices:  
Volumes:

Down  
Neutral

## Geographical Breakdown

### Global Distribution



# CBG Isolates

## Product Data & Analysis

CBG Isolate is a crystal-like powder extract from hemp biomass, used to produce cosmetics and vapes. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1 kg CBG Isolate.

### Prices & Volumes Data

€ per kg:  
CBP:

€3548.63  
€35.04

Percentage CBD content: 98.39%  
Average sell order mass: 218 kg  
Lowest sell order mass: 1 kg  
Highest sell order mass: 999 kg

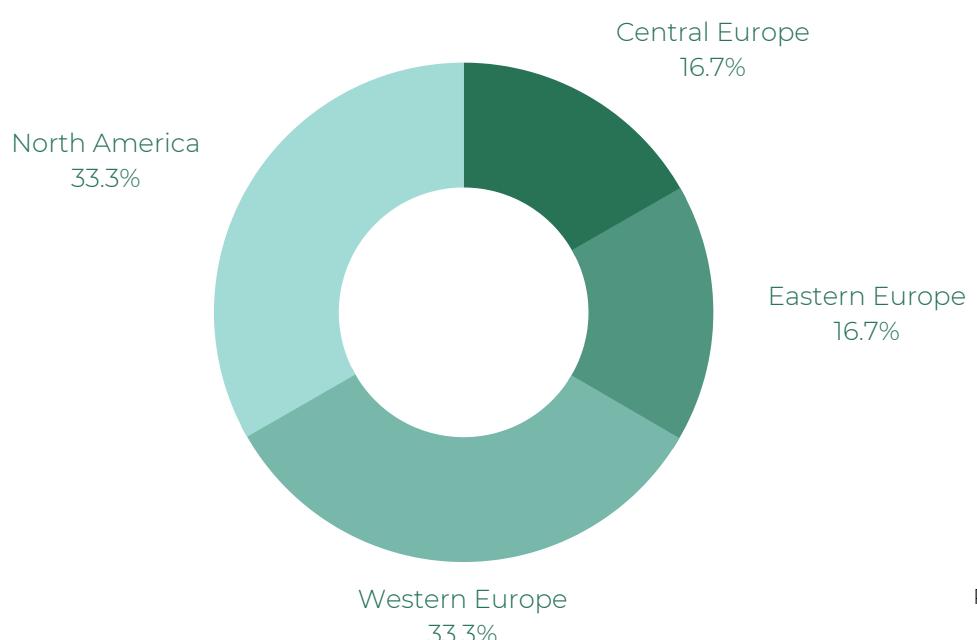
### Price & Volumes Trends

Prices:  
Volumes:

Down  
Up

## Geographical Breakdown

### Global Distribution



# CBN Isolates

## Product Data & Analysis

CBN Isolate is a crystal-like powder extract from hemp biomass, used to produce cosmetics and vapes. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1 kg CBN Isolate.

### Prices & Volumes Data

€ per kg:  
CBP:

€7976.12  
€78.94

Percentage CBD content:  
Average sell order mass:  
Lowest sell order mass:  
Highest sell order mass:

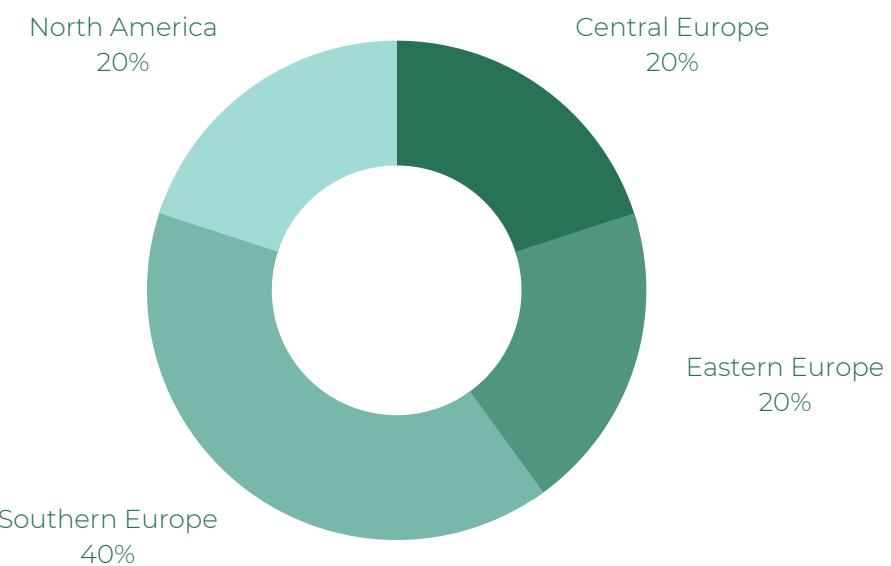
### Price & Volumes Trends

Prices:  
Volumes:

Down  
Up

## Geographical Breakdown

### Global Distribution



# Seeds (Non-cultivation)

## Product Data & Analysis

Hemp seeds (food) can be used for nutritional purposes, so they are edible and used to make milk, oil, protein powder and so on. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1% kg of hemp seeds (nutritional).

### Prices & Volumes Data

€ per kg:  
€1.81  
€ per kg <10,000 kg:  
€3.78  
€ per kg >10,000 kg:  
€2.33

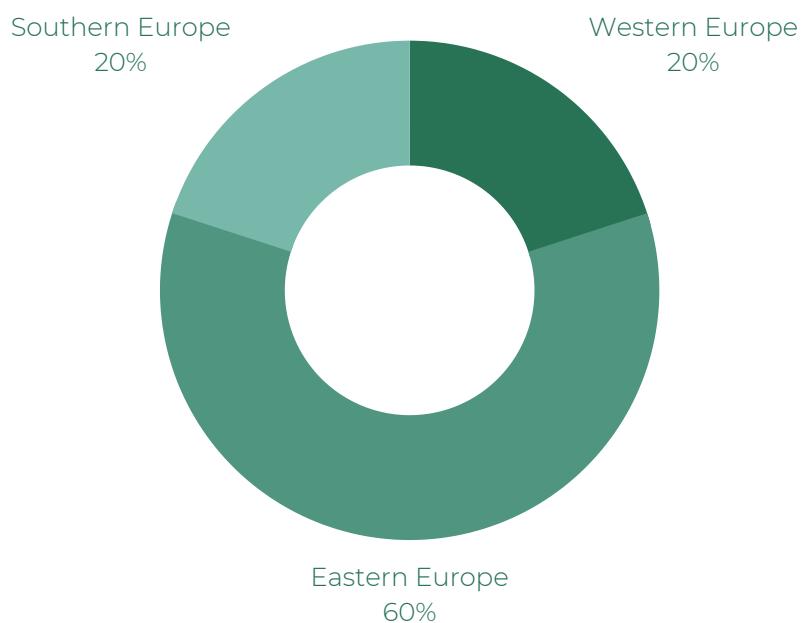
Average sell order mass:  
37,445 kg  
Lowest sell order mass:  
2,650 kg  
Highest sell order mass:  
100,000 kg

### Price & Volumes Trends

Prices:  
Up  
Volumes:  
Down

## Geographical Breakdown

Distribution across Europe



# Water Solubles

## Product Data & Analysis

Water soluble isolates are technology refined isolates that are easily dissolvable in liquids in order to be a good additive to drinks. Purity varies from 5-99.5%. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of the 1% potencies of water solubles .

### Prices & Volumes Data

€ per kg:  
CBP:

€2067.30  
€2.03

Percentage CBD content:  
Average sell order mass:  
Lowest sell order mass:  
Highest sell order mass:

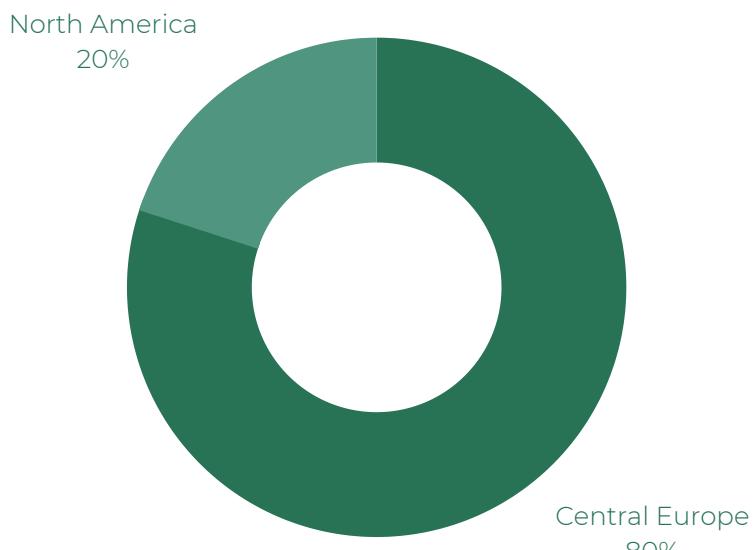
### Price & Volumes Trends

Prices:  
Volumes:

Neutral  
Up

## Geographical Breakdown

### Global Distribution



# Whole Flowers (Outdoor)

## Product Data & Analysis

The whole flower is the remaining material (stalks & leaves) after the flowers and/or seeds have been harvested from the plant. Canxchange publishes the Canxchange Benchmark Price (CBP) expressed as the weighted average of 1% of CBD Whole Flowers.

### Prices & Volumes Data

€ per kg:	€560.43
CBP:	€65.65
CBP <100 kg:	€139.35
CBP 100-1000 kg:	€106.17
CBP >1000 kg:	€52.58

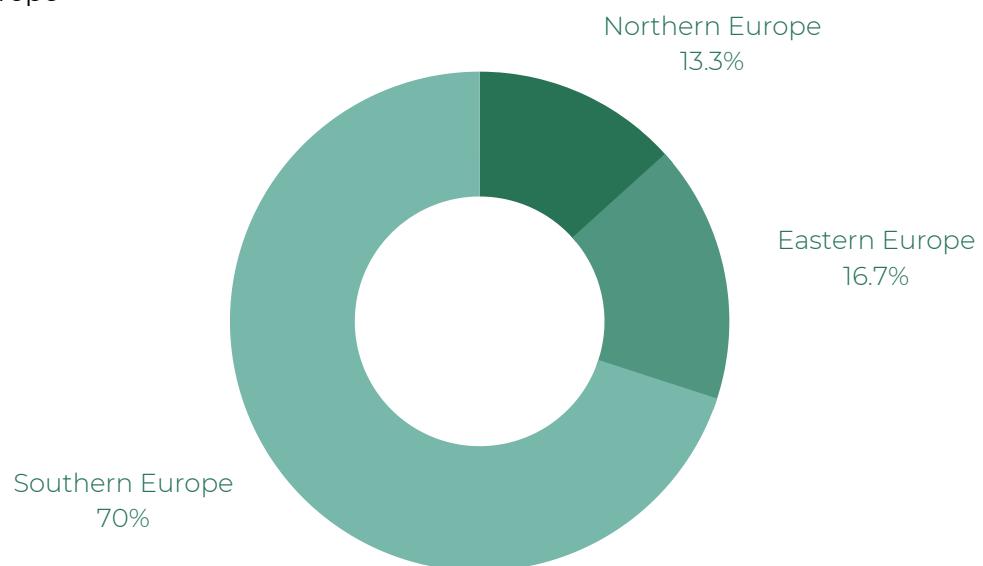
Percentage CBD content:	6.94%
Average sell order mass:	865 kg
Lowest sell order mass:	2 kg
Highest sell order mass:	15,000 kg

### Price & Volumes Trends

Prices:	Neutral
Volumes:	Neutral

## Geographical Breakdown

Distribution across Europe



# Cannabis Tech of the Quarter

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## Cannavigia

Cannavigia is Europe's pioneer compliance software for businesses to trace, secure and simplify transactions along the entire cannabis supply network. Based in Switzerland, operating in Europe. [cannavigia.com](http://cannavigia.com)



## The Importance of Compliance & Traceability

The cannabis industry has seen huge positive progress in terms of regulation and legalisation in recent years, however the sector still faces strict rules and regulations to ensure companies are compliant and operate good production practices.

We spoke with the CEO of Cannavigia, Luc Richner, who heads the pioneering compliance software, to get his thoughts on the importance of compliance and traceability in the cannabis industry.



**CEO of Cannavigia, Luc Richner**

**Canxchange:** Unsafe products are detrimental to any industry but particularly in those that are pushing the boundaries of medical research. Why is traceability so important in the cannabis industry?

Luc Richner: Traceability is standard in most industries (if not all) but specifically in those with links to medical research. With new products being introduced into the medical space, it is crucial that they are fully controlled and traced in terms of what goes in them, who is doing what when, what chemical additives and fertilisers are being used etc. In the medical space this process is called the Vigilance System hence where the name Cannavigia came from. The system tracks everything that happens with any active ingredient in the medical sector. Traceability is so important for the cannabis industry because it is moving from a formally unregulated, illegal good to a consumer good.

**Canxchange:** How will traceability improve cannabis production practices?

Luc Richner: If you want to sell your fruit or vegetables in a supermarket, you have a basic level of traceability that you need to show. No big company will buy from you unless you have the right documentation to prove where your products came from and how they are sourced. The cannabis industry needs to follow standard agricultural production practices like the GlobalG.A.P. standard for food safety or the GACP standard for medical compliance. It's about time these practices are implemented in the cannabis industry – be it hemp or cannabis products.

# Cannabis Tech of the Quarter

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Canxchange: In order for traceability to work efficiently and accurately, what systems need to be put in place?

Luc Richner: In general, it is important for people to understand that individuals can do everything with an excel spread sheet if they have the time, knowhow, and focus to do everything meticulously. However, I would argue that most people in the cannabis industry do not have these skills given it's such a new industry with a lot of unknowns. A system like ours has been made with a coherent compliance framework and has been shaped to fit the specifications of the cannabis industry. There are a handful of other companies offering a similar service but in Europe we are the leading software that is in line with the key EU regulations.

Canxchange: Do you think traceability is key element that will help attract industrial buyers who operate outside of the cannabis space? If yes, why do you think traceability makes the sector more attractive?

Luc Richner: Just to reiterate what I mentioned previously, it is absolutely fundamental to have a clear and straightforward level of traceability on cannabis products. No big corporation (industrial, consumer etc.) will allow products into their supply chain that do not have a certain level of compliance. It is clear to us from our communication with big buyers, who are keen to get into the cannabis space, that they need to be one hundred percentage sure that everything is being done compliantly in order for them to consider any products. Traceability will no doubt be crucial for any big company entering the industry with confidence. They easiest way for these companies to achieve this level of assurance is to link to a software that does a full compliance audit. This step is a fundamental in creating a sustainable, ecological and economical industry.

Canxchange: The regulations are constantly changing in the cannabis industry - how would you best advise your peers to stay compliant when doing business?

Luc Richner: Since there is still no harmonised system in terms of regulation and it is constantly changing and evolving this can be a challenge. Each country has their own regulations but this is slowly changing and particularly in Europe we are heading more towards a unified system. Globally, it is a huge challenge for businesses to stay on top of all the different guidelines that need to be applied. If you work with a software or compliance specialist that keeps up to date and on top of all of the relevant compliance elements needed, it will help your business stay in line with the key factors without taking any missteps. This saves companies a lot of time, resource and energy.

# Cannabis Tech of the Quarter

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Canxchange: What role does documentation play in terms of the compliance element of your business?

Luc Richner: Documentation is absolutely key to compliance and it is important to understand the level of detail required in these reports. Because of the number of particulars and various documents required, we believe it is so important to partner with a compliance software to support and ease the process. We are already seeing huge changes with cannabis transactions and the documentation required - compliance is becoming more and more prevalent in the industry and sellers are being forced to provide all of the relevant production standards/details with a lot of their clients. The days of people just buying biomass without any documentation is becoming less and less, hence the market and driving price competition in the market.

Canxchange: Logistics have long remained a challenge in our industry and what practices need be put in place to better assist and support this difficulty?

Luc Richner: Logistics come with a similar set of rules and documentation needed to be properly compliant. You will only be able to ship across borders if you have all of the proper documentation from your production line. This includes who is buying your product, where the money is coming from etc. In terms of KYC, Canxchange is on top of their game having implemented a strict due diligence procedure which is so important for the cannabis industry. This in addition to what we (Cannavigia) are doing will give you a comprehensive set of documents that should allow for many different regions across the world to receive your product. I can only suggest doing work with companies like ourselves and Canxchange to be able to reach new markets and expand your business vigilantly.

# CAVAC's Jean-Philippe Perrin's Industry Observations

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## CAVAC Group

- French company
- +€1 billion turnover in 2020
- 1,650 employees
- 10,000 farmers and 4,800 farms
- 844 tonnes of plant production over +12,000 hectares
- <https://www.coop-cavac.fr/>



## CAVAC Biomatériaux

CAVAC Biomatériaux was created in 2008 to provide the technical and industrial outlets that the CAVAC cooperative needs to optimise the agricultural production of its members. CAVAC Biomaterials is at the forefront of R&D in the development of materials based on plant materials. (Hemp concrete, Mulching, Packaging, Textiles etc.). As an example, the french company is one of the renown leaders of bio-based insulation materials in France. CAVAC distributes its products globally.

## Introduction

Jean-Philippe Perrin is responsible for the technical materials market within CAVAC Biomatériaux, a subsidiary of the CAVAC Cooperative and one of the European leaders in the transformation of plant fibres. After a rather eclectic career within various industries ranging from IT to waste treatment and industrial tourism, Jean-Philippe Perrin has now been involved for several years in the commercial development and technical products made from hemp and linen.

Interest in industrial hemp and its uses is growing with many companies positioning themselves in this segment in order to find alternatives to their conventional production materials. This phenomenon is due to the societal changes that we impose on ourselves (use of more durable materials, improvements in working condition etc.) but also because of the various regulations put in place in Europe and in the rest of the world, particularly concerning the use of polymer-based materials (plastic). The Canxchange Research & Data team met Jean-Philippe Perrin, to learn a little more about this trend, but also about the prospects for the post-COVID 19 hemp industry. as well as a foretaste of the state of the crops in progress for 2021.

# CAVAC's Jean-Philippe Perrin's Industry Observations

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## Jean-Philippe Perrin & Canxchange

Canxchange: All European countries are currently relaxing the rules and restrictions related to COVID-19, what do you think is the current situation of the hemp industry in Europe? And what repercussions has Covid had on crops in general?

J-P Perrin: The hemp industry as a whole is doing well in France and Europe. Regarding industrial hemp, there was a temporary weakness in the 2nd quarter of 2020 during which the market players had little visibility but the market recovered very quickly and even exceeded its pre COVID 19 levels. It is important to note that certain sectors using industrial hemp, such as the automobile industry and composite materials, have been the most impacted and are recovering less quickly. On the other hand, we are seeing a significant increase in new prospects coming from different industries who are interested in industrial hemp as production materials.

Canxchange: We are now entering the planting season, what is your outlook for the 2021 harvest season?

J-P Perrin: The outlook for the 2021 harvest is very optimistic. We anticipate quality biomass with fairly high yields per hectare between 6 and 7 tonnes. However, it is important to note that up to the time of harvest, there may be a risk linked in particular to climatic hazards which can significantly degrade the quality of the biomass. But, for now, we remain confident.

Canxchange: The mix of CAVAC customers is quite large and covers very broad industrial sectors, what is the confidence of your customers for the months to come?

J-P Perrin: The confidence index is high, the order books are full, we are seeing new entrants in the market with new technical approaches.

Canxchange: With which customer segment do you see a particular increase in demand for hemp products? And which industry do you think will dominate sales for the coming season?

J-P Perrin: The stationery industry is showing significant signs of interest in industrial hemp as well as companies specialising in the manufacture of growing media. The hemp cellulose-based food packaging industry is also becoming very active. Textile companies also have a very strong interest in hemp and we are seeing strong demand emerge, but quality requirements are also very important. The CBD market remains a "driver" for the hemp industry for the moment and this should continue for the quarters to come, but we are not positioned in this market within the CAVAC.

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Canxchange: We have heard and read that more industrial companies are ready to use hemp in their manufacturing process, how could the hemp industry cope with this surge in demand?

J-P Perrin: There is a strong interest from industrial companies to use hemp in their manufacturing process. This is due to the tendency of actors to turn to renewable, biodegradable materials with a low carbon footprint (Co2) and also to virtuous production methods. The price of materials is still a difficult subject for these companies to understand because even if the raw materials are biobased, their price often entails additional production costs compared to the use of more conventional materials. In order to meet the additional demand, we, producers of raw materials and materials, will have to be very transparent with our industrial customers about production capacities. Hemp remains an agricultural product and its production is punctuated by a natural process. We are able to increase production capacities and cultivable areas, but manufacturers must understand that we must respect natural rhythms. All of this indeed takes a long time.

Canxchange: Regulations are evolving in favour of the industry in different territories in Europe and in the world and in particular in France. Do you see any other positive news coming over the next few years that will benefit the industry?

J-P Perrin: CBD and the fact that regulations are increasingly opening up to these products in France, Europe and the rest of the world are creating a significant boost in communication, particularly which benefits industrial hemp. Although we are not in the CBD segment, we recognise the positive contribution this trend has made to our materials. In terms of positive news for the industry, including current and upcoming packaging regulations, replacing plastic with bio-based materials is obviously good news. Also, the constraints of companies at the level of the management of carbon emissions can only benefit us. We must also take into account the opportunities created by the increasingly virtuous behaviour of consumers but also by the activism of Non-Governmental Organisations (NGOs).

Canxchange: Besides France, what other European market do you see leading the way in terms of hemp production?

J-P Perrin: The European growth of industrial hemp appears to be in the East. Indeed, Romania, Poland and Lithuania are areas with strong growth in terms of production. It should also be noted that for historical reasons, Russia has a very high potential in terms of hemp production. When Russia rises, this is going to be a real game changer.

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Canxchange: We understand that the industry is always facing great challenges, but we also see more and more opportunities. Based on your vast experience in the industry, what are the main challenges the industry is currently facing, but also the main areas of opportunity?

J-P Perrin: In my opinion, the major challenge for the industry is qualitative. Indeed, industrial hemp players must pivot from the agricultural world to a more technical and technological environment, and this will require the intensification of Research and Development (R&D). We are witnessing more and more a professionalisation of the sector and we observe a better knowledge of the potentialities of the material (hemp). In terms of opportunities, textiles remain one of the most promising sectors either for clothing or interior textile applications (sheets, blankets, armchair and sofa covers, etc.) made from hemp.

Canxchange: What do you think of the need to develop more certifications, labels and traceability tools for the industry?

J-P Perrin: Certifications and labels are important for our industry but they must remain guarantees of quality without becoming burdens. These are great tools as long as they remain in the service of businesses. On the other hand, product traceability is a key issue for our customers but also for end consumers.

Canxchange: ESG (Environmental, Social and Governance Criteria) is now a very important subject for many industries. For those who may not be familiar with our industry, how do you think hemp can help meet ESG goals and help companies be more sustainable?

J-P Perrin: A concrete example of the contribution of hemp to achieving the ESG objectives of companies can be seen in the CAVAC. We are a company with a negative carbon footprint. It is a fairly male-based industry but one that tends towards parity by attracting more and more women, and the business structure in the form of a cooperative is a good way to achieve CSR objectives.

Canxchange: What advances in technology in general do you see playing an important role in terms of the growth and credibility of our industry? Can you name any companies that you think add value with their innovative technology (s)?

J-P Perrin: Plot analysis technologies such as the production of satellite images indeed seem very interesting to me. Also, as explained previously, all the tools related to traceability will become key in a short time. The probes implanted in the fields in order to optimise the crop irrigation needs also seem very interesting to me as well as the tools to increase yields with the least possible environmental impact. The disruptive solutions for R&D in the manufacture of new hemp-based materials are also attracting our attention. Finally, technologies related to information and market data analysis such as those developed by Canxchange will open up new horizons for the industry.

# About Canxchange

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## Overview

Canxchange has developed the first transcontinental trading & wholesale data analysis for physical hemp. They connect industry professionals and help them transact in a transparent, fast and secure way. Canxchange is headquartered in London, England.

[www.canxchange.eu](http://www.canxchange.eu)

## Participate in our Reports

Your insight and feedback (as a customer or market participant) is incredibly valuable for our research efforts. Please do not hesitate to contact us at [research@canxchange.eu](mailto:research@canxchange.eu) to participate in one of our benchmarks, request additional information or suggest research & analysis ideas.

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