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Report Name: Market Trends and Regulations for Industrial Hemp in the European Union

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Report Highlights:

Hemp demand and production is growing worldwide. This report reviews the regulatory framework and major consumption trends for hemp in the European Union.

General Information

Hemp usage in Europe has a long history. Hemp has been a traditional food source in Europe for thousands of years. All parts of the plant were consumed in European countries since the Middle Age: hemp seeds, leaves, flowers, and extracts. Hemp has also been used in ancient medicines and as a source of fiber for rope making or textiles. Following the prohibition of cannabis and the development of new synthetic fibers in the 20th century, fossil-based alternatives replaced hemp in industrial applications.

Today, the European Union (EU) is evaluating opportunities to expand hemp usage, partly because of the need to reduce the use of fossil fuels and carbon intensive products. In that regard, the European Commission sees hemp cultivation in the Union as a contributor to European Green Deal objectives. Presented in December 2019, the overarching objective of the EU Green Deal is for the EU to become the first climate neutral continent by 2050.

Hemp cultivation offers a range of environmental benefits, including carbon storage, erosion prevention, increased biodiversity, low to no pesticide requirement, and breaking disease cycles in crop rotation. According to the European Commission, hemp has a high carbon sequestration rate, where roughly one hectare of hemp can sequester 9-15 tons of CO2. This is equal to the amount of carbon a young forest can sequester, but only takes five months to cultivate. The hemp plant's dense leaves create natural soil cover, which can reduce water loss and protect against soil erosion. In terms of biodiversity benefits, the hemp plant's flowering cycle creates large amounts of pollen, which supports the pollination of other crops. Pesticide usage can be reduced because of its low susceptibility to pests. Lastly, hemp's shading capacity and fast growth rate reduces weed growth, so hemp can help break disease cycles in crop rotation.

Due to the environmental benefits of hemp and its versatility in industrial and food uses, hemp production has been increasing in the European Union.

Hemp Production in the EU

Hemp production is growing in the European Union. According to the European Commission, 34,960 hectares of land were dedicated to hemp cultivation in the EU in 2019. This accounts for a 75 percent increase from the 19,970 hectares that were cultivated in 2015. While hemp acreage has increased, it only represents 0.02 percent of cultivated lands in the European Union.

Figure 1 EU Land Area Used for Hemp Cultivation



Source: Eurostat and European Commission

As seen on the graphic below, France leads EU Member States with the largest agricultural area dedicated to growing hemp at nearly 18,000 hectares (approximately 44,5000 acres). It is followed by Italy, the Netherlands, and Estonia.

Figure 2

Surfaces for hemp cultivation by Member States



Source: European Industrial Hemp Association (EIHA) - Data from 2018

CAP Support

The <u>Common Agricultural Policy</u> (CAP) was launched in 1962 as a partnership between agriculture and society, and between the European Union and its farmers. It is managed and funded at the European level and follows a common policy for all EU Member States. The CAP seeks to:

- Support farmers and improve agricultural productivity
- Ensure continuity and a stable supply of food
- Safeguard European Union farmers and ensure they make a reasonable living
- Help tackle climate change and ensure the sustainable management of natural resources
- Incentivize environmentally sustainable farming across the EU
- Support rural economic development through the promotion of jobs in farming, agri-food industries, and associated sectors

Under the Common Agricultural Policy, the EU provides support to farmers who grow hemp. The cultivation of industrial hemp is eligible for area-based direct payments under the CAP. Additionally, in France, Romania, and Poland, <u>voluntary coupled support</u> is implemented for hemp. This means that there is a link between the receipt of income support payments and the production of hemp.

To be eligible for direct payments for industrial hemp, farmers must meet specific standards. First, only certified seeds of varieties listed under the <u>EU common catalogue of agricultural plan species</u> can be cultivated and/or used in the European Union. There are currently 75 varieties of hemp that are approved for use in the EU.

In December 2021, the European Union adopted its new CAP for the period 2023-2027, which will enter into force on January 1, 2023. The new CAP recognizes the possibility for farmers to receive direct payments for hemp varieties registered in the EU Catalogue that have a maximum level of tetrahydrocannabinol (THC) content below of 0.3 percent. Until January 1, 2023, the variety of hemp being cultivated must have a THC level below 0.2 percent. The THC level threshold only applies if farmers want to receive direct payments, therefore it is possible to plant hemp with THC levels over the EU limit if it is authorized by national regulations.

Regulatory Framework

<u>Hemp</u>

According to <u>Article 189 of EU Regulation 1308/2013</u>, all imports of hemp are subject to an import license requirement. In addition, until January 1, 2023:

- raw true hemp falling within CN code¹ 530210 must have a THC content not exceeding 0.2 percent;
- hemp seeds for sowing must be accompanied by proof that the THC content of the variety concerned does not exceed 0.2 percent;
- hemp seeds not used for sowing may be imported only under the authorization of the EU Member States, and authorized importers must submit proof that the seeds have been placed in a condition that excludes use for sowing;

Please note that EU Member States may also apply more restrictive rules. U.S. producers seeking to export to the EU must comply with the same EU rules and requirements regarding seed production, certification, labeling, and packaging as seed harvested in the EU. The marketing of propagating material of hemp is not protected by EU legislation. For more information about national legislation, please contact the FAS Office in the relevant Member State. The full list of contact details is available here: https://fas-europe.org/countries/

<u>Delegated Regulation 2016/1237</u> requires that the release for free circulation of hemp products with CN codes: 12079920, 53021000, 12079991 shall be subject to an import license in accordance with the model set out in Annex I to <u>Implementing Regulation (EU) 2016/1239</u> ('import license AGRIM' format)." It is the responsibility of the importer, not of the exporter, to obtain the import license AGRIM from the competent authorities in the EU Member States.

In terms of hemp seeds and varieties, Directive 2002/53/EC outlines the rules for including agricultural plant species in the EU common catalogue. <u>Council Directive 2002/57/EC</u> covers seeds of oil and fiber plants for agricultural production. Only seeds officially certified or certified under official supervision as pre-basic seeds, basic seeds, certified seeds or commercial seeds may be marketed. Hemp seed harvested in third countries and intended for agricultural production can only be imported in the EU on the basis of EU equivalence.

Hemp Seeds

<u>Regulation 1881/2006</u> sets maximum levels for certain contaminants in foodstuffs including the regards maximum levels of delta-9-tetrahydrocannabinol (Δ^9 -THC) in hemp seeds and products derived from hemp seeds.

Table 1: Maximum THC level in hemp seed and hemp seed products

'Foodstuffs (¹)		Maximum level (mg/kg)
8.6.	Delta-9-tetrahydrocannabinol (Δ^9 - THC) equivalents(*)	
8.6.1.	Hemp seeds	3.0

¹ The CN code is 8 digits long. The CN code is defined at the European level. It is composed of the six digits of the HS code, to which are added two additional digits.

8.6.2.	Ground hemp seeds, (partially) defatted hemp seed and	3.0
	other hemp seed derived products (**) with the exception	
	of the products referred to in 8.6.3.	
8.6.3.	Hemp seed oil	7.5

(*) the maximum level refers to the sum of delta-9-tetrahydrocannabinol (Δ^9 -THC) and delta-9-tetrahydrocannabinolic acid (Δ^9 -THCA), expressed as Δ^9 -THC. A factor of 0.877 is applied to the level of Δ^9 -THCA and the maximum level refers to the sum of Δ^9 -THC + 0.877 x Δ^9 -THCA.

(**) hemp seed derived products are products derived exclusively from hemp seeds.

Extracts of hemp plant and novel foods

In January 2019, the European Commission decided to classify extracts of the hemp plant *Cannabis sativa L*. and derived products containing cannabinoids as "novel foods".² The hemp plant contains a number of cannabinoids and the most common ones are as follows: delta-9-tetrahydrocannabinol (Δ 9-THC), delta-9-tetrahydrocannabinolic acid A (Δ 9-THCA-A), delta-9-tetrahydrocannabinolic acid B (Δ 9-THCA-B), delta-8 tetrahydrocannabinol (Δ 8-THC), cannabidiol (CBD), cannabidiolic acid (CBDA), cannabigerol (CBG), cannabinol (CBN), cannabichromene (CBC), and delta-9-tetrahydrocannabivarin (Δ 9-THCV). This classification applies to both the extracts themselves and any products to which they are added as an ingredient. This also applies to extracts of other plants containing cannabinoids. Synthetically obtained cannabinoids are also considered to be novel.

In the EU, the classification of a food as "novel" triggers the application of the <u>Novel Foods</u> <u>Regulation.</u>³ The Regulation requires a pre-market authorization for novel foods. Applications for authorization must be submitted to the European Commission via an <u>e-submission system</u>. The Commission may request the European Food Safety Authority (EFSA) to carry out a risk assessment. Authorizations are generic and not linked to a specific applicant. The novel food approval process generally takes between nine months and a year. However, EFSA has the right to ask for additional information and the procedure can take more time if necessary.

Several companies have started the authorization process for cannabidiol (CBD) as a novel food ingredient.⁴ These are still currently under consideration with EFSA.

Hemp Market in the EU

The European market for hemp is estimated to grow over the next decade. As mentioned above, there is interest from European companies to use less carbon intensive raw materials to contribute to the

² See EU Novel Food Catalogue's entry for "Cannabinoids":

https://ec.europa.eu/food/safety/novel_food/catalogue/search/public/index.cfm#

³ For more information about the Novel Food Regulation, please see GAIN Report '<u>New EU Novel Food Regulation</u> <u>Applicable as of January 1, 2018</u>'

⁴ https://ec.europa.eu/food/safety/novel_food/authorisations/summary-applications-and-notifications_en

European Green Deal. EU consumers are also increasingly interested in including "super-foods" such as hemp seed into their diets.

Food and feed

Figure 3: Use of Hemp Flowers and Leave



Source: European Hemp Association

All parts of the hemp plant have economic uses. Hemp flowers and leaves are used in products such as tea, essential oils, medical applications, food supplements, and other applications.

Furthermore, there is an important market in the EU for hemp seeds, which contain high levels of protein and considerable amounts of fibers, vitamins, omega 3, and minerals. As a result, de-hulled hemp seeds serve as a food for human consumption, while whole hemp seeds are used as feed for animals. In 2021, the EU imported \$13.5 million USD of hemp seeds into the internal market, with China, Canada, and the United Kingdom as the top 3 exporters. Hemp in pet food is also a growing market as pet ownership in the European Union is increasing. Hemp is primarily used for pet snacks and dry food.

Cosmetics

Cosmetics that include CBD oil are an increasing trend. Their use has expanded to skin care products such as oils, lotions, creams, facial serums, and balms. The use of CBD in cosmetics is regulated in the EU by the European Cosmetics Regulation 1223/2209.

Construction Materials

Hemp usage in construction materials can reduce greenhouse gas emissions from the sector. In the EU, the construction sector is responsible for 40 percent of energy consumption.

There are three main hemp-based products used in construction: lime hemp concrete (LHC), hemp wool, and fiber-board insulation. Hemp concrete can carbon sequester as the amount of carbon stored in the material is higher than the emissions generated during its production, and it continues to store carbon during the building's life. With the revision of the Energy Performance of Buildings Directive (EPBD), the Commission aims to achieve a zero-emission and fully decarbonized building stock by 2050. This may lead to increased demand for hemp concrete and other hemp-based construction products. The market for hemp concrete in the European Union is expected to double in the next decade.

<u>Textiles</u>

The use of hemp for textiles is one of the oldest applications of the plant. The global textile industry is increasingly using hemp fibers, which are very similar to linen. However, because of the relatively high raw material prices, lack of fiber supply, and scarcity of manufacturing facilities, production of hemp fiber for textiles is still limited in the EU.

Regulatory Framework in the United States

In the United States, the <u>Agriculture Improvement Act of 2018</u>, also known as the 2018 Farm Bill, authorized the production of hemp, and removed hemp and hemp seeds from the Drug Enforcement Administration's (DEA) schedule of Controlled Substances. It also created a new hemp program under the U.S. Department of Agriculture (USDA).

Conclusion

Hemp's versatility and potential usage in products ranging from food to construction materials is leading to a surge in market demand for the plant. The European Commission continues to set standards for its production, processing, and trade. Hemp cultivation is projected to continue growing and can help the EU achieve its Green Deal objectives.

Attachments:

No Attachments.