



*Nature wins!*



# Project Plan

Hemp based insulation materials

February 2024

**Project Plan:**           **Hemp Based Insulation Materials**

**Version:**               Method document for determining emission reduction and/or recording of CO2 eq.  
SNK-Hennep-002  
dated 4 April 2023

**Type of Project:**       Hemp for Long Term Carbon Storage<sup>1</sup>

**Project Duration:**     10 years

**Location:**             Netherlands

**Applicant:**            HempFlax BV  
Hendrik Westerstraat 20  
9665 AL Oude Pekela  
Netherlands

**Status:**                Final

**Date:**                  7 February 2024

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## **1. Introduction**

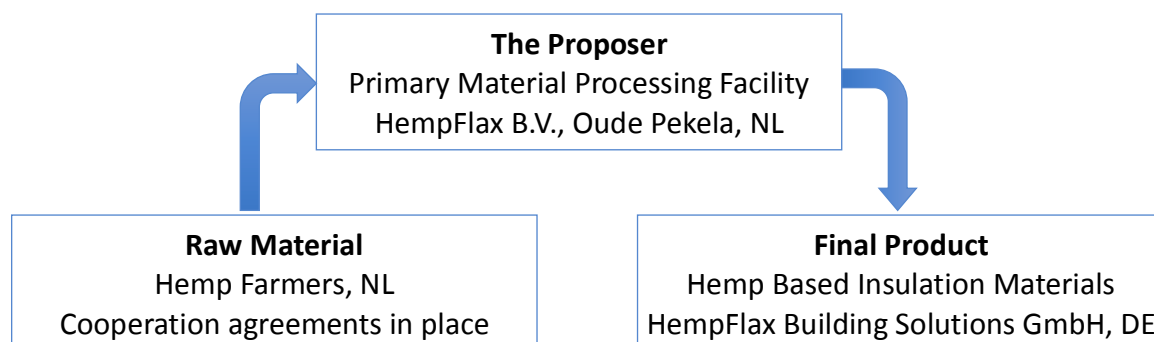
- 1.1. In 1993, Ben Dronkers established HempFlax with a profound mission: to revive an ancient crop to its former glory. Rooted in principles of social responsibility and ethical practices, HempFlax is dedicated to serving mankind and the environment worldwide by providing affordable, modern, natural hemp products for a sustainable future.
- 1.2. Positioned as Europe's premier enterprise in its domain, HempFlax has emerged as a vanguard in the realm of hemp. The hemp plant, a versatile resource, holds immense promise across diverse sectors, offering sustainable solutions whilst capturing and storing carbon long term, that can contribute to shaping a healthier planet for future generations.
- 1.3. In pursuit of our commitment to sustainable farming, processing and manufacturing practices, HempFlax has taken significant strides to ensure that our processing facility stands as a beacon of environmental responsibility. An embodiment of this dedication is the installation of an impressive array of 5,800 solar units atop the facility's roof at our processing facility in Oude Pekela. This addition not only underscores our commitment to renewable energy but also stands as a testament to our overarching goal of achieving to be fossil free by 2025. Harnessing the power of the sun, these solar units collectively generated almost all energy needed to meet the entire facility's operational requirements. This endeavour not only underscores our pledge to eco-conscious operations but also sets an inspiring example within our industry.
- 1.4. Constant innovation drives the development of novel applications for hemp. At HempFlax, we utilise the plant's stems and process them into raw materials suitable for top-tier insulation materials which effectively sequester carbon and store it long term whilst creating products that champion both quality and eco-friendliness. The outcome is a range of end products fostering comfortable, environmentally conscious and healthy living spaces.
- 1.5. Hempflax achieved ISO9001 in 2011 and recertified in 2017 under the updated standard 9001:2015 (\*1). Additionally, we proudly hold ISCC Plus certification since 2016 (\*2). Our hemp insulation products are accompanied by an Environmental Product Declaration (EPD) meticulously adhering to ISO 14025 and EN 1804+A2 standards, with validation by the Eco Platform.

## **2. Project description**

- 2.1. The project plan is prepared and aligned with the methodology published on the SNK website and the additional documentation provided that outlines against which the project plan will be measured. It is HempFlax' aim to attain carbon accreditation through the advance of sustainable biobased construction materials by the HempFlax Group.

2.2. The HempFlax Group is at the forefront of taking important steps in transforming the high carbon emitting construction industry through the creation of locally grown, bio-based construction materials derived from hemp. This project plan is prepared to secure carbon recovery certificates, validating the group's commitment to sustainability, innovation, and CO<sub>2</sub> reduction. By encompassing every aspect of the value chain, from cultivation to end-use manufacturing, HempFlax Group aims to attain carbon accreditation not only for its final long cycle products but also receive validation for the additionality of emission reductions.

2.3. The value chain:



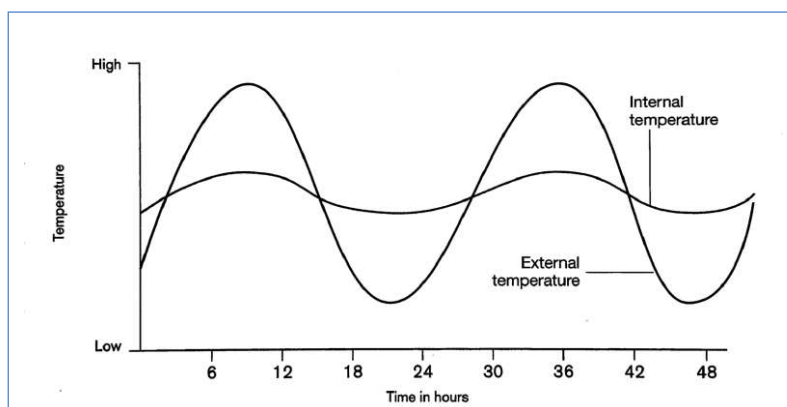
2.4. **Raw Materials - Local cultivation:** In the Netherlands, all cultivation operations are outsourced to local farmers. As of 2023, a total of 20 farmers have been actively engaged in the cultivation of hemp for HempFlax. We confirm that each of these farmers has entered into a formal supply agreement with us. A sample of the cooperation agreement is provided in the separate conformity assessment document ("CAD") in Annex 1 that has been prepared in support of the project plan, along with a signed statement from our Managing Director, confirming the accuracy and correctness of this information.

2.5. Our commitment to minimizing our environmental footprint is steadfast. To achieve this, we actively seek to partner with farmers in proximity to our processing facility in Oude Pekela. In 2022, 79% of our hemp cultivation occurred within a 50-kilometer radius and a significant 100% within 70km of our processing facility. (CAD Annex 2)

2.6. **The Proposer - Primary material processing facility:** Our Oude Pekela processing facility stands as a beacon of innovation where we employ cutting-edge proprietary technology to transform raw hemp straw into refined hemp fibres, the building blocks of our high-quality bio-based insulation materials.

2.7. What sets our facility apart is its remarkable sustainability. To be precise, the energy needs of our facility are almost entirely met by the electricity generated from the 5,800 solar panels installed on our roof, spanning an area of 19,000 m<sup>2</sup>. The small balance purchased in is mostly green energy and the almost minimal amount of grey energy is offset by purchased certificates of origin. We are proud to state that 100% of the energy required for our processes is sustainably sourced (CAD Annex 3).

- 2.8. **Final Product - Long-cycle product manufacture** The refined hemp fibers are transported to HempFlax Building Solutions GmbH, located in Nordlingen, Germany. This progressive manufacturing facility consistently delivers bio-based insulation materials of the utmost quality. These materials are used for their exceptional insulation performance and sustainability.
- 2.9. Our hemp based insulation is versatile, serving as a valuable next generation, environmentally friendly products for insulating floors, walls, and roofs with equal effectiveness. It embodies our commitment to environmentally friendly construction solutions, meeting modern, eco-conscious building practices.
- 2.10. Hemp based insulation materials qualify as long-cycle solutions, designed to store carbon for a minimum of 75 years, more likely for the entire lifespan of a building structure. The hemp based insulation materials serve as a sustainable substitute for synthetic and mineral insulation materials, which cause significantly higher CO<sub>2</sub> emissions during manufacturing. Simultaneously, our insulation materials offer at least double the heat storage capacity, providing enhanced thermal comfort and protection against excessive heat during the summer months.
- 2.11. Hemp based insulation not only mitigates carbon emissions during production but also contributes to more efficient and sustainable building practices, creating healthier and more eco-friendly living spaces for the long term.
- 2.12. The two charts provided in Annex 5 in the CAD offer a visible comparison of the superiority of bio-based hemp insulation material on multiple fronts. Not only does it emit significantly less CO<sub>2</sub> during the production process, but it also demands substantially lower primary energy for production whilst providing excellent heat storage capacity. In environmental and sustainability terms, hemp outperforms conventional insulation materials by a remarkable margin.
- 2.13. Carbon emissions are a concern at every stage of production, and HempFlax is committed to minimizing these emissions wherever possible. Our long-cycle hemp insulation products make a significant and positive impact in CO<sub>2</sub> emission reduction in three key areas.
- 2.14. **Production emissions:** Hemp insulation materials emit significantly less CO<sub>2</sub> during its manufacturing process compared to traditional insulation materials. This translates to a lower carbon footprint right from the start.
- 2.15. **Primary energy demand:** In comparison to traditional widely used insulation materials, such as rockwool, glasswool and EPS, the substantially lower primary energy demand of hemp insulation reflects its efficiency and sustainability. By requiring considerably less energy in production, it contributes to overall energy conservation and emission reduction.
- 2.16. **Heat Storage:** Hemp provides both good insulation and thermal mass resulting in steady internal temperature and thus reducing the costs of heating and cooling, thus further curbing carbon emissions associated with buildings energy consumption.



Source: *The Hempcrete Book* by William Stanwix & Alex Sparrow

- 2.17. In summary, our long-cycle hemp insulation materials are at the forefront of environmentally responsible building practices, making a significant and positive impact by reducing CO<sub>2</sub> emissions across multiple critical dimensions and providing natural materials for healthy living spaces in all three key areas.
- 2.18. Our objective is to cultivate over 60% of the hemp/raw material within a 50-kilometer radius of our processing facility, thereby reducing transportation distances. In 2022, we exceeded our target and achieved an impressive 77% cultivation within this 50-kilometer aerial radius. A detailed chart of trailer movements is provided in CAD, Annex 2.
- 2.19. The processing plant in Oude Pekela covers almost its entire operational energy needs through its 5,800 installed solar panels on the roof (CAD Annex 3).
- 2.20. The production of our hemp insulation material consumes significantly less primary energy and emits considerably less CO<sub>2</sub> during the manufacturing process compared to traditional insulation materials. Additionally, the resulting product boasts a superior heat storage capacity, as indicated in the chart (CAD Annex 5).
- 2.21. While HempFlax Group excels also in producing short-cycle products like automotive composites and animal bedding, it's important to note that these items are entirely excluded from this project plan, as they do not qualify.

### 3. **Additionality of emission reductions**

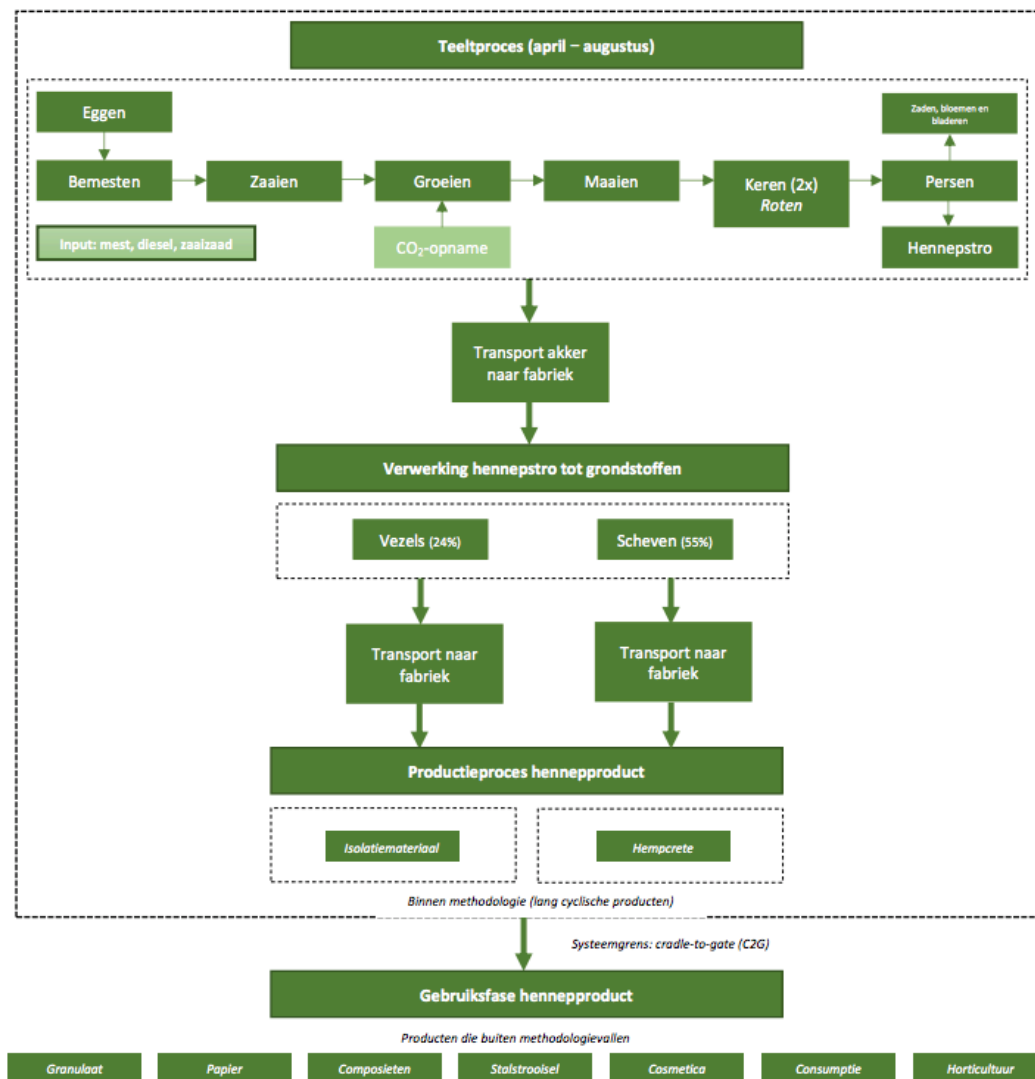
- 3.1. Currently the use of bio-based products is not part of climate policy in the Netherlands. Therefore application of assessment of our products is voluntary.
- 3.2. On 28 August 2023, it was an honour to welcome the Agricultural Minister Piet Adema and people from the Ministry of Housing and the Ministry of Infrastructure, all interested in learning more about hemp. HempFlax were visited as part of their fact-finding mission. The Netherlands are leaders in seeking novel ways to achieve net zero and have recently dedicated 200 million euro budget from the Dutch climate fund to stimulate bio-based building materials and construction.

- 3.3. Over the three-year period from 2021 to 2023, the Netherlands grew an average of 1,787 hectares of hemp. The breakdown for these years is as follows: 1,700 hectares in 2021, 1,684 hectares in 2022, and 1,977 hectares in 2023. This reflects an approximate 15% decrease from the previous three-year period spanning 2017 to 2019, which had an average of 2,091 hectares dedicated to hemp cultivation. As it stands, hemp currently occupies a mere 0.3% of the available agricultural land, which amounts to a total of 533,780 hectares.
- 3.4. In light of evolving environmental legislation that is increasingly limiting available land for livestock, we are strategically positioned to encourage farmers to transition to hemp cultivation. It has been challenging to find sufficient farmers who want to grow hemp instead of more financially lucrative crops. The additional income generated from coveted carbon accreditation will be shared with the farmers, ensuring they receive a higher price for cultivating hemp. This will enable us to incentivize and attract more farmers to engage in extensive hemp cultivation.
- 3.5. **Prevented carbon emission** – hemp insulation is replacing synthetic or mineral based insulation materials that are generally produced with a high carbon dioxide emission during the manufacturing process (CAD Annex 5). By using hemp based insulation materials instead of synthetic or mineral based insulation material these high CO<sub>2</sub> emissions are avoided.

#### **4. Determination of the project boundary**

- 4.1. Accurate delineation of the project boundary is a pivotal step in ensuring precise value determination. In this regard, HempFlax collaborated closely with Green Inclusive Natural Products BV, the architects behind the 'Hemp for Long-Term Carbon Storage' methodology. It is worth noting that Figure 1 shown in the SNK methodology owes its creation to the data and insights provided by HempFlax, who played a substantial role as a primary contributor of information.
- 4.2. In light of this, we can unequivocally affirm that Figure 1 of the SNK methodology faithfully mirrors HempFlax's operational methodology throughout the entire lifecycle of hemp cultivation, processing, and insulation material production. Our operations adhere to the three distinct process steps outlined in the chart.



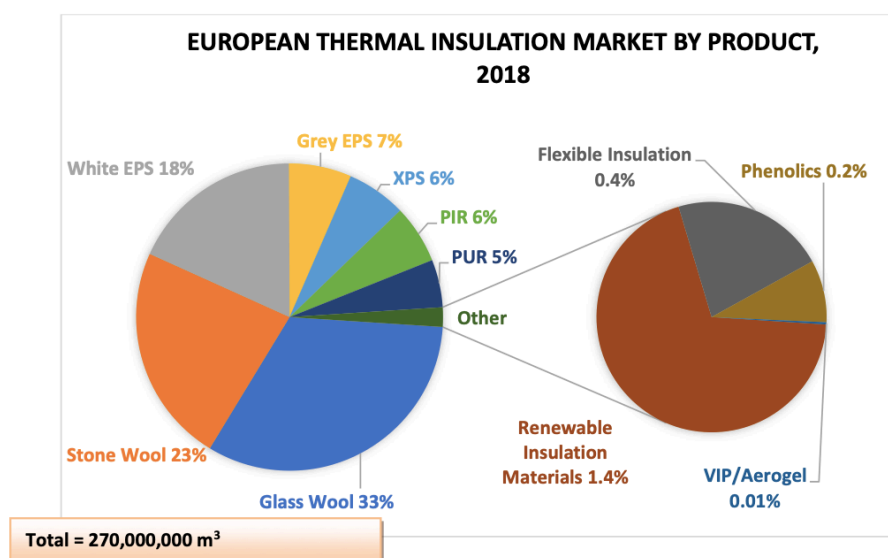


Figuur 1: Schematische weergave teelt- en productieproces en systeemgrens

- 4.3. For our project submission, we have selected the **default option**, which establishes the baseline value for the cultivation process using standard data available from public sources. It's important to note that research conducted by CLM in 2020 has substantiated the fact that hemp cultivation emits fewer greenhouse gases compared to the cultivation of other crops. Notably, when farmers transition from growing traditional crops to hemp, they contribute positively to reducing emissions. However, it's essential to acknowledge that this positive effect has not been factored into our current calculations.
- 4.4. In our commitment to transparency and environmental responsibility, HempFlax commissioned an Environmental Product Declaration (EPD) in accordance with ISO 14025 and EN 15804+A2 standards. This EPD (see CAD Annex 5) covers emissions across various phases, including installation and end-of-life considerations. However, for the specific purpose of our submission to SNK, based on the SNK guidelines provided, we have omitted the product installation and end-of-life phases from our calculations. Instead, we have balanced these emissions against the baseline associated with the conventional product that our hemp insulation materials are intended to replace.

## Comparing the production of conventional insulation materials

- 4.5. In the Netherlands, the prevailing choice for insulation materials leans towards glass and rock wool, primarily due to their commendable fireproof properties. Additionally, white and grey Expanded Polystyrene (EPS) find significant utilization, with white EPS being the more prominent variant.
- 4.6. As highlighted in the European market report for [thermal insulation materials](https://wgp4.com/wp-content/uploads/2019/10/ial-dati-mercato-europa-Thermal-Insulation-Press-Release-2019.pdf) (<https://wgp4.com/wp-content/uploads/2019/10/ial-dati-mercato-europa-Thermal-Insulation-Press-Release-2019.pdf>), insulation materials derived from renewable sources accounted for a mere 1.4% of the EU market share in 2018. However, this percentage is on the rise, thanks to the growing popularity of using sustainable environmentally friendly products in the construction industry. This shift reflects a broader trend of heightened awareness and preference for sustainable building materials and practices across the European market.



Source: *The European market for Thermal Insulation Products* (AIPE Informa source)

- 4.7. For the comparative assessment, we have positioned hemp based insulation materials against the prevalent choices of stone/rock and glass wool. Within Appendix 2 of the SNK Methodology Hemp for long-term carbon storage, the calculated average climate impact for rock wool tallies up to 7.7 kg CO<sub>2</sub> per square meter. In contrast, glass wool presents a slightly more favourable average of 4.5 kg CO<sub>2</sub> per square meter. It's worth noting that glass wool is designed to endure the entire lifespan of a building. Rockwool, while it can persist for up to a century, is susceptible to settling and compacting over time.
- 4.8. In contrast, hemp based insulation materials stand out as a resilient and long-lasting product capable of serving the building's entire lifecycle. Remarkably, hemp based insulation has been discovered in structures in Italy that are over two centuries old. Furthermore, hemp based insulation materials possess innate repellent qualities, effectively deterring mould, pests, insects and water/humidity.

- 4.9. The SNK Methodology has identified rock wool, glass wool, and EPS as the most frequently used insulation materials, sharing a substantial market share of approximately 33% each. Employing the data furnished by SNK, we examine the properties of these three commonly used insulation materials in comparison to HempFlax hemp based insulation materials, utilizing primary data and information sourced from our Environmental Product Declaration (EPD) and published sources. This evaluation provides valuable insights into the environmental and performance advantages of hemp-based insulation.
- 4.10. We confirm that we have considered all aspects in the entire hemp chain, from cultivation to final product. For cultivation we have used the option default value of - 1.10 kg CO<sub>2</sub> eq. per kg of raw materials as defined in Section 7 of the SNK Method Document. Primary data was used for calculating emissions for transport from field to the processing facility in Oude Pekela where the raw material is processed, the onward transport to the final product manufacturing facility in Noerdlingen, Germany and the manufacturing process into hemp insulation materials. Appropriate proportionality was applied to reflect the hemp content in the end product. A more detailed explanation is provided in the CAD and the corresponding calculations are provided in Annex VI.
- 4.11. Whilst all hemp is grown and harvested in the Netherlands, the manufacturing facility is in Germany. Almost all product is sold in Germany and we have applied the same rules as SNK has established for emission reductions in the Netherlands.

## **5. Establishing the Baseline**

- 5.1. After careful consideration, we believe that the Netherlands and Germany are comparable. Therefore, we confirm that we have used the SNK baseline value of 10.3 kg CO<sub>2</sub> eq./m<sup>2</sup> to assess the climate impact of the average emissions.

## **6. Determination of Project Emissions in Hemp Products**

- 6.1 We confirm that we have followed the instructions as set out in Appendix 5 -7 to calculate the carbon footprint of the hemp insulation material. Detailed calculations are provided in Annex VI of the CAD with further explanations in the main document.

## **7. Determination of Emission Reduction**

- 7.1. The carbon and emission calculations have been prepared by the same company that HempFlax has previously commissioned to prepare the life cycle assessment for our EPD.

- 7.2. We confirm that for the calculations ISO14040, ISO14044 and ISO14067 standards have been used, supplemented with SNK default data for the cultivation and climate impact of comparative insulation materials and primary data for transport and processing.
- 7.3. We confirm that we have chosen option default and performed the calculation in accordance with the formulas and conditions mentioned in Section 7.1 and Appendices 4 through to 7 of the SNK Method Document.

## **8. Plan for monitoring project progress and emission reduction**

- 8.1. Monitoring the outcomes of this project stands as an integral and pivotal component of our overall initiative. Our choice of the default option for calculating emissions related to HempFlax hemp based insulation materials is grounded in figures that are publicly accessible and considered standard for this type of assessment as well as primary data, meeting the calculation demands as outlined in the appendices of the SNK methodology.
- 8.2. It is important to recognize that the default option figures are likely conservative, potentially overestimating CO<sub>2</sub> emissions, and not fully accounting for the additional environmental benefits inherent to hemp and its bio-based products. Positive contributors include our Oude Pekela processing facility, where the energy generated by the 5,800 solar panels covering 19,000m<sup>2</sup> on the roof almost meets the entire energy requirements for the raw materials production.
- 8.3. Fuel efficiency is another aspect we are actively addressing within our company. We've not only transitioned to electric forklifts but are also collaborating with our haulage partners. We are also working with our contract farmers to explore ways to reduce emissions, promote biodiversity and increase soil health through farming methods.
- 8.4. Our commitment to emission reduction extends to our strategic aim of cultivating raw materials as close as possible to our processing facility, thereby minimizing transport-related emissions. The additional revenue generated post-accreditation and the sale of carbon recovery certificates will serve as an incentive for more farmers to engage in hemp cultivation. This financial attractiveness is expected to prompt farmers to transition from less environmentally beneficial crops to hemp, at the same time enhancing soil health through crop rotation practices.
- 8.5. Hemp, a valuable preceding crop in rotations, offers several ecological advantages. Hemp's deep root system positively influences soil structure and reduces the presence of nematodes and fungi. Following hemp cultivation, the soil is left in optimal condition, owing to its exceptional weed suppression capabilities. A study by Bócsa and Karus in 1998 reported wheat yields that were 10–20 percent higher after hemp cultivation.

- 8.6 Furthermore, a study conducted by the European Environmental Agency (EEA) in 2007 on the ecological effects of different crops underscored hemp's outstanding ecological credentials. In the evaluation, crops were rated on a scale from A to C, with A indicating the best and C the worst performance on various parameters. Table 3, shown below, presents the results for hemp and flax, contextualized alongside a selection of other crops. In essence, hemp and flax demonstrated superior performance compared to most other major crops, reinforcing their ecological value.

	Nutrient depletion	Pesticides	Erosion	Soil compaction	Water consumption	Biodiversity	Agro-biodiversity
Permanent pasture	A	A	A	A	A	A	A
Short rotation coppice (poplar, willow)	A	A	A	A	B	A/B	A
Winter grains	A	A	A	A	A	B	B
Linseed	A	B	A/B	A	A	A/B	A
Hemp	A	A	A/B	A	B	B	A
Alfalfa	B	A	A	A/B	A/B	A/B	A
Grass	B	B	B	A/B	A	B/C	A
Switchgrass	?	?	A	A	A	B	A
Mustard	A/B	B	A/B	A	B	B	A
Sorghum	A	B/C	A	A	A/C	B	B
Wheat	A	B	A	A	B	B/C	C
Sunflower	A/B	B	B/C	A	B	A/B	B
Rapeseed	B/C	C	B	A	0	B/C	A/B
Sugarbeet	B/C	B	C	C	A/C	B	B
Maize	C	C	C	B	A/B	C	B/C
Potato	B/C	B	C	C	C	B/C	C

Table 1: Environmental effects of hemp, linseed and different major crops

Source: Adapted from EEA 2007; A = Lowest impact on environment, B = Medium impact, C = Worst impact on environment, 0 = not applicable, ? = insufficient database

Source: EEA (European Environment Agency) 2007: *Estimating the environmentally compatible bioenergy potential from agriculture*, Technical Report No. 12/2007

- 8.7 In recent years, bee colonies have experienced a dramatic decline for a variety of reasons. It so happens that the hemp plant flowers in a period of floral scarcity in late summer and early autumn. Whilst hemp flowers do not produce nectar, the large amounts of pollen produced is a vital nutritional source for bees during period of floral scarcity and acts as their primary source of protein and fats (Source: Cornell University Entomology Proveda Lab).
- 8.8 We are committed to not only achieving emission reductions but also maximising the positive environmental impacts of our hemp-based products throughout their lifecycle.

## 9. Evidence to be provided in the verification process

- 9.1 We have set out the entire audit trail, from field to final product and provided all the required evidence for the verification process in the separate conformity assessment document (CAD).

## **10. Issuance of certificates, reassessment of baseline and additionality**

- 10.1. The SNK Rulebook provides clear guidelines on when the claim of additionality for emission reductions is justified. Currently, there is no established policy in the Netherlands regarding hemp-based insulation materials or any other bio-based alternatives. HempFlax asserts additionality by highlighting that the technology employed is not widely accepted as common practice at the time of the project plan submission.
- 10.2. According to AIPE, renewable insulation materials comprised only 1.4% of all EU insulation material sales in 2018. Our estimation indicates that hemp-based insulation materials hold a market share of less than 2% in the Netherlands and Europe as of 2022.
- 10.3. The threshold for claiming additionality is set at 20% of market share, aligning with the Kyoto Protocol's criteria for projects under the Clean Development Mechanism and Joint Implementation (Track II). This criterion, maintained by SNK, considers that once a market share of over 20% has been achieved, carbon certificates are no longer necessary to ensure the economic viability of the measure. Consequently, HempFlax's hemp-based insulation material qualifies for claiming additionality.
- 10.4. To assess the climate impact of emission reductions, we have employed a baseline value of 10.3 kg CO<sub>2</sub> eq/m<sup>2</sup>, derived from the market share of materials, comparing hemp-based insulation with conventional alternatives.
- 10.5. Furthermore, we commit to periodic reviews of both additionality and the CO<sub>2</sub> footprint, consistent with the guidelines outlined by the National Carbon Market Foundation. These assessments will be conducted every three years, ensuring ongoing compliance and transparency in our environmental impact evaluation.

(1\*) ISO9001 in 2011 and recertified in 2017 under the updated standard 9001:2015

(2\*) ISCC Plus certification since 2016



# Certificate

for the quality management system according to  
**NEN-EN-ISO 9001:2015**



The certification body TÜV NORD Nederland hereby confirms that the certification took place in accordance with its certification regulations for the organisation

**HempFlax B.V.**  
**Hendrik Westerstraat 20-22**  
**9665 AL Oude Pekela**  
**The Netherlands**

**HempFlax Europe Srl**  
**DJ704A 548**  
**517536**  
**Romania**

The management system and the application thereof complies with the requirements of the standard.  
The certification is subject to annual evaluation by TÜV NORD Nederland.  
A list of entities / sites in the appendix is part of this certificate.

Field of application

**The cultivation of industrial hemp as well as cultivation consultancy  
purchasing, processing and sales of related industrial hemp products.**

Registration number 20128-5.2

Start date certificate	27-07-2023
Certificate valid until	26-07-2026
Date of first certificate	26-07-2011
Previous certificate valid until	26-07-2023
Date audit	22-06-2023 / 23-06-2023

Mr. E.W.A.C. Franken  
Managing Director

**TÜV NORD Nederland B.V.**  
Ekkersrijt 4401, 5692 DL Son en Breugel  
The Netherlands



TUVNORD



# ISCC PLUS Certificate

Certificate Number: ISCC-PLUS-Cert-NL220-2194373005

DEKRA Certification B.V.  
Meander 1051, NL-6825 MJ Arnhem

certifies that

**HempFlax B.V.**  
Hendrik Westerstraat 20, 9665 AL Oude Pekela, The Netherlands

complies with the requirements of the certification system

**ISCC PLUS**  
(International Sustainability and Carbon Certification)

This certificate is valid from 06.08.2023 to 05.08.2024.

The site of the system user is certified as:

First Gathering Point  
Trader with Storage  
Crushing Plant

The scope of the certificate includes the following chain of custody options:

Mass Balance

Arnhem, 06.08.2023

Place and date of issue

Meander 1051, 6825 MJ Arnhem

Stamp, Signature of issuing party





**Annex to the certificate:  
Sustainable materials handled by the certified site**

(This annex is applicable for all scopes except of Trader, Trader with storage, Warehouse, Logistic centres, MTBE and ETBE)

This annex is only valid in connection with the certificate:

**ISCC-PLUS-Cert-NL220-2194373005 issued on 06.08.2023**

Input material	Output material	Add-ons (voluntary) <sup>1)</sup>	ISCC waste process applied <sup>2)</sup>	SAI/ FSA <sup>3)</sup>	FEFAC <sup>4)</sup>
Straw (Hemp)	Hemp Fibre	None	No	n.a.	n.a.
<sup>1)</sup> ISCC PLUS add-ons (voluntary application, see <a href="http://www.iscc-system.org">www.iscc-system.org</a> for further information): <ul style="list-style-type: none"> <li>• 202-03: SAI Gold</li> <li>• 205-01: GHG emission requirements</li> <li>• 205-02: Consumables</li> <li>• 205-03: Non GMO for food and feed</li> <li>• 205-04: Non GMO for technical markets</li> </ul>					
<sup>2)</sup> Yes: The raw material meets the ISCC definition of waste or residue, i.e. it was not intentionally produced and not intentionally modified, or contaminated, or discarded, to meet the definition of waste or residue The voluntary information about PIR (post-industrial recycling) or PCR (post-consumer recycling) material can be stated in brackets. No: The raw material complies with the ISCC Principles 1 – 6 for the cultivation of sustainable biomass					
<sup>3)</sup> Farm Sustainability Assessment (FSA) was developed by the Sustainable Agriculture Initiative (SAI) SAI Silver Compliance: ISCC Compliant material can be claimed as "Equivalent to FSA 2.1 Silver" SAI Gold Compliance: ISCC Compliant material incl. add-on SAI Gold can be claimed as "Equivalent to FSA 2.1 Gold"					
<sup>4)</sup> FEFAC: European Feed Manufacturers' Federation. ISCC compliant materials can be claimed as "in line with FEFAC soy sourcing guidelines 2015"					

The issuing Certification Body is responsible for the accuracy of this document.  
Version / Date: 1 (no adjustments) / 06.08.2023