

7 December 2020



*Nature wins!*

### **HempFlax Proud to Contribute to ‘Most Sustainable Chair Ever’**

HempFlax, Europe’s largest independent hemp grower and processor, is delighted to have contributed to the production of a fully recyclable, carbon-negative range of ‘Hemp’ office and home chairs, manufactured by VepaDrentea, a furniture manufacturer based in Drenthe, the Netherlands.

In a world-first, VepaDrentea’s range of ‘Hemp’ chairs were developed by combining HempFlax’s high-quality<sup>1</sup>, natural industrial hemp fibres with a biological resin, both of which are plant-based and fully biodegradable and recyclable. Hemp fibre is the strongest natural fibre in the world and, when pressed into [non-woven fabric mats](#) and combined with binding agents, can be used to produce extremely strong, durable ‘shells’ suitable for a range of industrial applications.

VepaDrentea recognised these qualities and chose HempFlax non-woven fabrics as a raw material to make the seat shell for its ‘Hemp’ chair collection. The hemp is treated with a biological resin, made from plant-based materials including sugar-beet residues, which acts as a binding agent, organically gluing the materials together. The resulting novel biomaterial, which is moulded into a seat shell, has been expertly developed by Plantics, an innovative bio-plastics developer, and is patented worldwide. Plantics and VepaDrentea collaborated intensively for two years to turn this biomaterial into a high-quality seat shell suitable for mass-market use. As a result of hemp’s CO2 sequestering qualities, the VepaDrentea ‘Hemp’ chair production process absorbs more CO2 than is emitted, making the range of chairs carbon negative.

The VepaDrentea ‘Hemp’ collection includes chairs and bar stools with various frames made of PEFC-certified<sup>2</sup> wood or recyclable steel. In addition, the chairs are designed in such a way that the various parts are easy to separate, and materials can be reused endlessly, fostering a truly circular bioeconomy.

#### **Janwillem de Kam, VepaDrentea’s Managing Director, commented:**

“We had been looking for years for a biomaterial in which both the raw material and the binder are biological and recyclable. Only then could we really develop a sustainable product. We are incredibly proud that we have achieved this after two years of research and that we are the first in the world to do so. An innovation that contributes in a very special way to our mission to combat raw material scarcity, climate change and CO2 emissions.”

The individual components of the chair are designed in such a way that they can easily be separated and reused after use. De Kam adds: “Although they are completely biodegradable in nature, we prefer not to break them down. That is a waste and unnecessary. The shell is shredded and then pressed again. The same quality, repeated over and over again. We are the only company in the world where this is possible without having to add new raw materials.”

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<sup>1</sup> HempFlax’s hemp fibres have been awarded the International Sustainability and Carbon Certification (ISCC) PLUS certificate from DEKRA, one of the world’s leading expert organizations. The certification applies to hemp fibres processed at the Company’s Dutch facilities, which remain the only natural hemp fibres globally to be recognised under the scheme.

<sup>2</sup> [Programme for the Endorsement of Forest Certification](#)

**Dr. Wridzer Bakker, CEO of Plantics, commented:**

“Existing binding agents are toxic and non-biodegradable, which means that the residues remain in the environment for an infinite amount of time. To prevent damage to the environment, we have developed a 100% biological thermosetting resin that binds the hemp fibres together. The resin is made from pure plant-based materials - including sugar beet residues - and is recyclable. In the future, we hope to replace all materials which contain harmful resins with our eco-friendly variant.”

**Mark Reinders, CEO of HempFlax, commented:**

“With consumer demand for eco-friendly products growing by the day, and offices and hospitality venues across world set to reopen in 2021, now is the ideal time to be bringing a carbon negative range of chairs to the market. Combining hemp fibres with an organic glue made from only natural materials provides an effective replacement for pollutive synthetic materials and has the potential to revolutionise many industries seeking to reduce their carbon footprint. As hemp-friendly policies gain traction at the EU and UN, and European companies continue to collaborate to develop sustainable consumer products, I am very confident in the carbon-negative hemp industry’s place at the heart of the planet’s burgeoning circular bioeconomy.”

More information on the ‘Hemp’ chair collection’s manufacturing process (including a look inside the HempFlax factory) can be found at the following link:

[https://www.youtube.com/watch?v=QjhEQJS5IM&feature=youtu.be&ab\\_channel=VepaDrentea](https://www.youtube.com/watch?v=QjhEQJS5IM&feature=youtu.be&ab_channel=VepaDrentea)

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**About HempFlax**

HempFlax is Europe’s largest independent grower and processor of industrial hemp. The company has operations across Europe, with over 2,400 hectares of hemp expected to be harvested in 2020. Processing the whole hemp plant enables HempFlax to maximise revenues across their six business lines:

- Nutraceuticals (CBD)
- Hemp based plastic replacement
- Construction
- Animal Care
- Horticulture
- Genetics and Cultivation

By leveraging a 25-year history from seed to shelf, HempFlax intends to be the market leader in the fast-growing hemp industry. For further information, please visit <https://www.hempflax.com/>

**About Hemp**

Water usage	Hemp requires a fraction of the water other crops need to grow
Carbon Sequestration	Hemp absorbs and stores CO2 from the atmosphere; Industrial hemp grown on land the

	size of a rugby field absorbs around 8.5 metric tonnes of CO2, more than any other crop.
Soil Enrichment	Hemp is an extremely effective phytoremediative plant; it is able to remove toxins and even radioactive materials from the ground, stabilising and enriching the soil. Hemp was grown on the Chernobyl nuclear site.
No Pesticides or Chemicals	Hemp does not need any pesticides, herbicides or chemicals to grow. It is naturally organic and releases nutrients into the soil. Further, its very low THC content acts as a natural deterrent to pests and diseases.
Applications	Hemp is a waste-free crop; it is exceptionally versatile, and the entire plant can be used over 10,000 applications including CBD oil, paper, clothing and of course insulation