

Why hemp?

CO₂ absorption

On average, 1 ha of hemp cultivation means up to 25 tonnes of CO₂ absorption from the atmosphere per year.

Water efficiency

Hemp produces an extensive taproot system that develops up to two meters deep into the soil surface. Such developed underground structures make the plants more drought-resistant.

Ease of adaptation

Industrial hemp can be grown on land that is unsuitable for growing food crops (low nutrient content, intense sunlight) and thus does not compete with food production.

Without chemicals

It can be grown without the need for harmful pesticides, herbicides and other protective measures, and will remain resistant to diseases and pests.

Short growth cycle

Hemp, depending on the variety and place of cultivation, can reach up to 6 metres in height (Polish variety Białobrzeskie) in less than 150 days. Straw yields per hectare of plantation can reach up to 15-20 tonnes, with cultivation up to three times a year in warmer regions of the world.

Biodegradability

Products made from hemp (without additional hard-to-biodegrade substances), such as biodegradable packaging, decompose quickly in the environment.

Soil remediation

Hemp has the ability to regenerate the soil, protecting it from drying out and erosion, thanks to its dense foliage that provides shade and stops water evaporating from the soil.

Stop deforestation

It is possible to obtain 14m³ of wood substitute from 1 ha of seed hemp cultivation. This is like abandoning the sustainable felling of 2.8 ha of forest in one year. Up to 5m³ of wood is sustainably harvested per ha of forest.

Spectrum of uses

Fuels, construction, paints and varnishes, cosmetics, food, paper, textiles, animal bedding, and many more, that we learn about every day.

Rediscovering hemp for a sustainable future

Re-Hemptation

by **HUSARSKA**

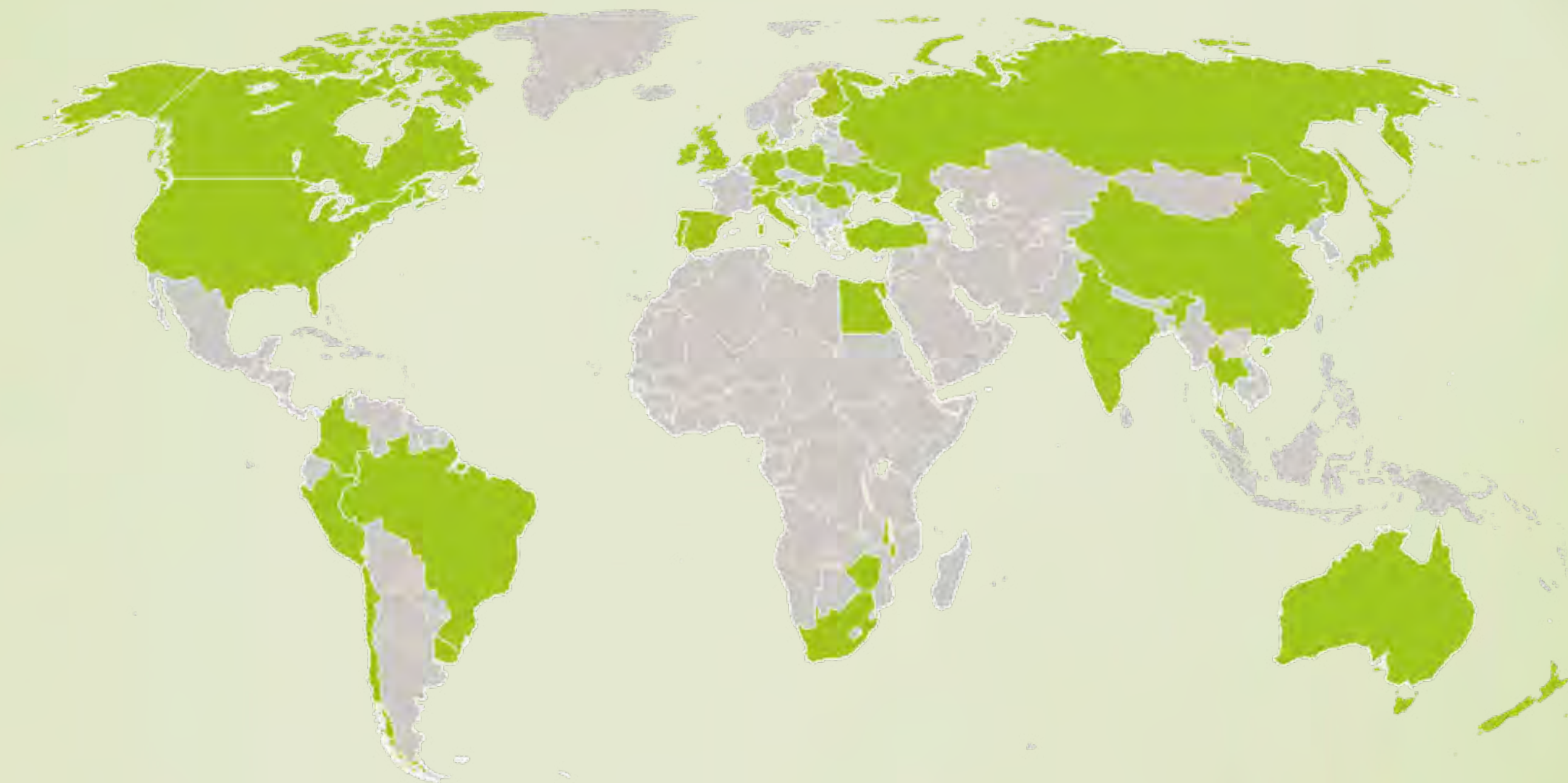
The „Re-Hemptation” curated by Husarska Design Studio, is an enlightening exhibition exploring the multifaceted applications of hemp, flax, and other fibre plants as eco-friendly alternatives to conventional materials like wood. It showcases modern technologies, enabling the use of these plants in furniture production and other sectors such as the food industry. Our exposition proves that this is the ideal raw material for a future based on sustainable development and circularity.

Over the years

Throughout history, industrial hemp has been deeply intertwined with human civilizations, serving as an invaluable source of fibre, sustenance, and healing. The Industrial Revolution thrust hemp into the spotlight, leading to its widespread use in textiles, ropes, and paper. Despite regulatory challenges in the 20th century, hemp is now experiencing a revival, driven by its sustainability and diverse applications.

Reviving hemp heritage

Hemp can be a great driver for sustainable development, not only because of its potential to absorb CO₂ from the atmosphere. Every part of the hemp plant can be exploited in a useful way. Increasing environmental awareness is leading to the search for newer and newer ideas for using hemp waste. These innovations allow hemp, flax and other fibrous plants to be used in the production of furniture, textiles, building materials, rope and even food. The resurgence of industrial hemp is a testament to its sustainability and diverse uses, reviving a heritage that has been part of human history for centuries.



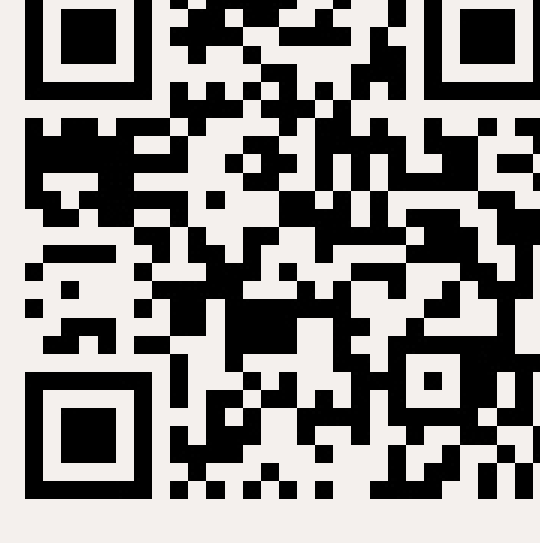
 Countries that allow hemp cultivation | 2019

Cultivation today

Industrial hemp is globally cultivated in over 60 countries, with China, India, the United States, and Canada as the top producers. Hemp is grown mainly for its fibre, which has many uses, and less frequently for its seeds and leaves.

In Europe, hemp production is significant, especially in the European Union, with over 40,000 hectares in 2022. Leading European producers include France, Spain, Poland, Italy, and Romania. Hemp cultivation laws in Europe have relaxed in recent years, sparking increased interest in its production and utilisation.

Read more here:



Re-Hemptation Info

Over 50,000 uses of hemp



Seeds

- Protein (isolates, concentrates)
- Functional foods and beverages
- Cooking oils
- Flour
- Animal feeds and supplements
- Varnishes and lubricants
- Oil paints
- Fuels
- Soaps and shower gels
- Shampoos and conditioners
- Creams and lotions



Stem

- Animal bedding and absorbent
- Yarns, ropes and cords
- Nets and tarps
- Technical fibre bundles
- Carpets
- Concrete
- Bricks
- Building insulations
- Building boards
- Acoustic curtains
- Reinforced composites
- Tow fibre and sealants
- Automotive composites
- Clutch and brake linings
- Wood
- Paper
- Fuels
- Bioplastic



Leaves & Flowers

- Food
- Dietary supplements
- Flavouring substances
- Medicines
- Medical patches
- Cosmetics
- Detergents and fluids
- Animal bedding
- Mulch and mushroom compost



Roots

- Healing properties for:
- Inflammation and pain
 - Fever
 - Migraine
 - Abrasions
 - Dysentery
 - Acne and edema



Biodesign for a green office

Net positive solutions

VANK biodesign is about:

- utilising renewable resources and minimising the use of synthetic materials,
- products with a much lower carbon footprint than other office furniture.

VANK_BIO material made of hemp and flax emphasises the irregularity and imperfection of nature.

The surface's uniqueness comes from the biocomposite inherent properties and creates a new value.

VANK_PANEL_BIO



VANK_CUBE



**Green
Product
Award**
Winner
2022

Eco-friendly workspace

VANK_CUBE is a modular box system that allows you to build an eco-friendly workplace anywhere.

The building blocks allow the space to be freely shaped, and the furniture can be configured and reconfigured indefinitely.

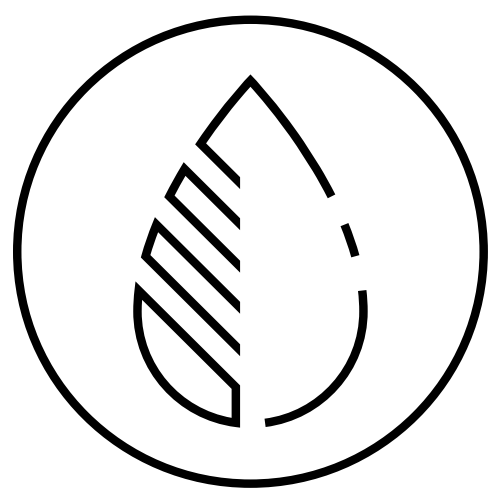
Design: Anna Vonhausen



**GERMAN
INNO
VATION
AWARD '23
SPECIAL**



vank.design



THE
TRUE
GREEN

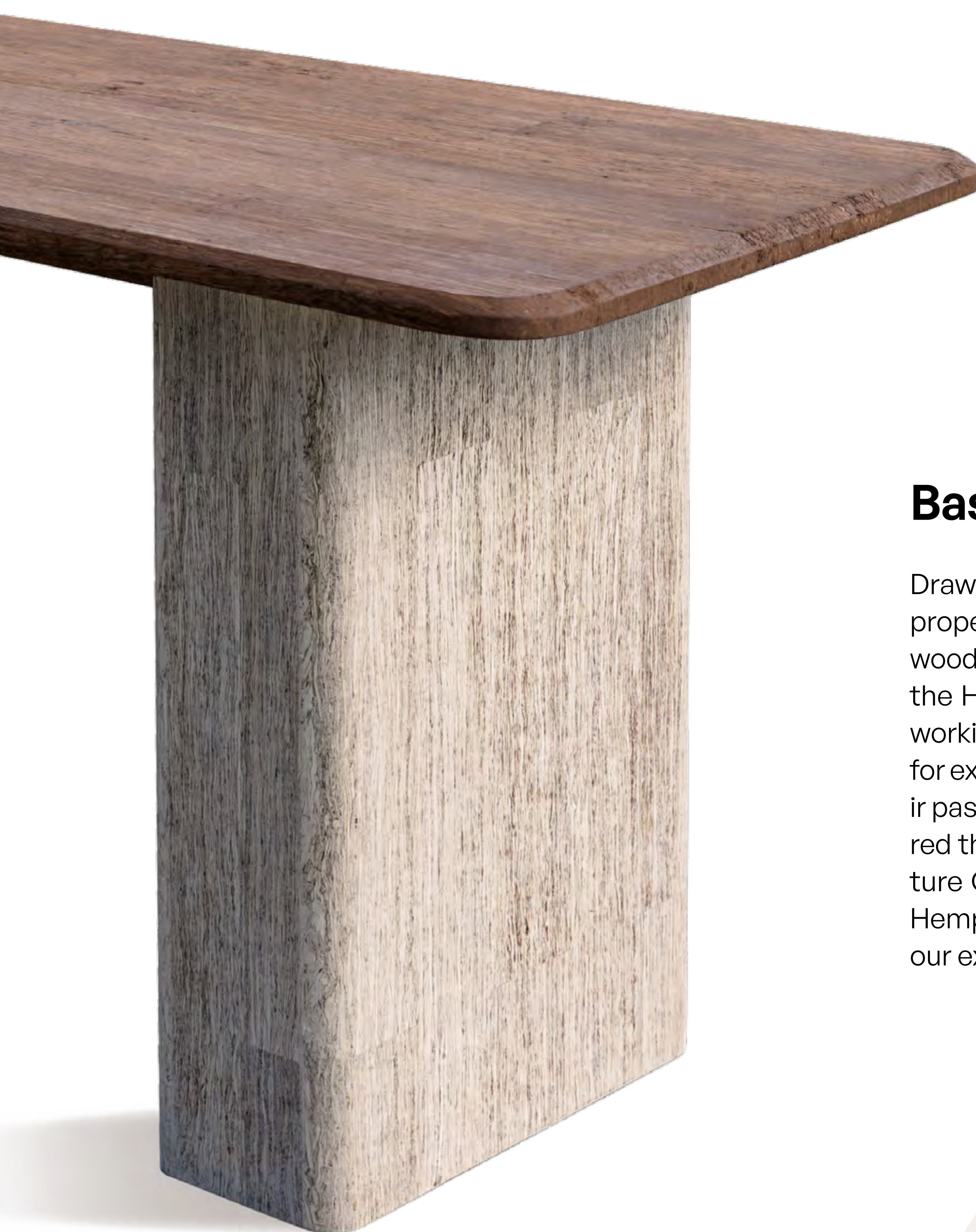
PART OF
GREEN
LANES

How can we substitute wood?

The True Green creates innovative products with wood-like properties and appearance by harnessing the potential of fibrous annual plants. The company implements practical solutions for the wood industry in response to global climate change related to excessive CO₂ emissions.

Wood alternative

The innovation of The True Green lies in the development of Wood Alternative Based On Annual Plants, a revolutionary material from unprocessed hemp stalks, resembling exotic wood. It is environmentally friendly due to absorbing up to 25 tons of CO₂ per hectare annually, preserving forests and promoting biodiversity. It is characterized by its versatility and allows for the production of multiple resources in a single cycle.



Based on annual plants

Drawing inspiration from the remarkable properties of The True Green, an innovative wood alternative sourced from annual plants, the Husarska designers found themselves working with a material that not only allowed for exceptional creativity but also fueled their passion for eco-friendly design. This inspired them to craft the exquisite Hemp Furniture Collection, which includes HempDen, HempSquare and HempStool, presented in our exhibition.



thetruegreen.world

Sustainable protein source

Hempeat is a hemp-based food brand created in 2022 by Green Lanes Foods. Hempeat products are already on the menus of more than 150 restaurants in Poland. Their products are in line with current global nutritional and environmental trends, providing consumers with tasty and nutritious meat substitutes.

Responsibility

Caring for animals and the environment are some of the main reasons why we are reducing our meat consumption or giving it up altogether. Here Hempeat has the added advantage of hemp, which requires no pesticides, herbicides, fertilisers or genetic modification, does not cause deforestation and absorbs more CO₂ than soya.

Huge potential

It's a delicious plant-based food created from hemp seed – one of the most nutritious and organic plants in the world. This plant has the potential to become the most ecologically sustainable source of dietary protein.



The taste

Hempeat was created to mimic the taste and texture of meat. As a result, it blends in perfectly with typical meat dishes. Its juiciness and ability to take on different flavours makes it an excellent imitator of various types of meat while providing just as much protein.

Full of value

Hemp protein is easily digestible, hypoallergenic and rich in essential amino acids. Hemp oil, on the other hand, is an excellent source of omega-3 and omega-6 fatty acids. Hempeat is based on hemp seeds, which are rich in both high protein and beneficial fats.



Meat alternative,
made from hemp



hempeat.pl