

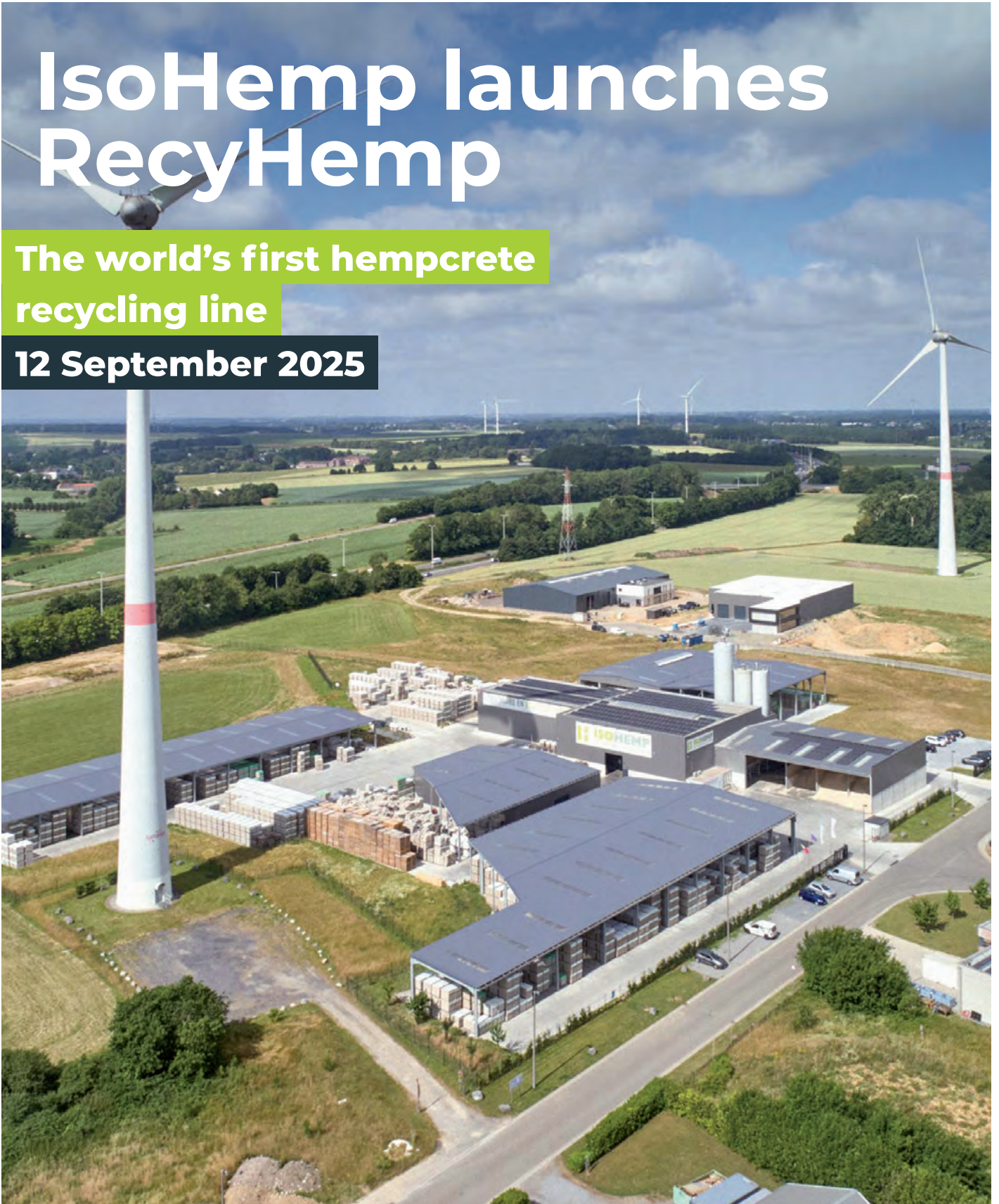
# Press kit.



# IsoHemp launches RecyHemp

The world's first hempcrete recycling line

12 September 2025





# Towards a more sustainable society.



Building today is a huge challenge: designing comfortable, healthy and high-performance buildings while reducing our climate impact and controlling costs. The construction sector generates nearly a third of European waste, or more than 600 million cubic metres each year. In Belgium alone, this represents more than 20 million tonnes.

At IsoHemp, we have always believed that it is possible to build differently. After increasing our production capacity fivefold thanks to a factory built on a five-hectare site, which was inaugurated in 2021, we are now taking a new step forward with RecyHemp, the world's first hempcrete recycling line. The objective is clear: closing the loop, from field to block, from block to construction site, and from construction site to recycling into new hemp-based products."

Olivier Beghin, CEO of IsoHemp





# IsoHemp at a glance.



## ➤ Founded in 2012

by Olivier Beghin, Jean-Baptiste de Mahieu and Anthony De Mot, IsoHemp has established itself as a leading player in sustainable construction. Based in Fernelmont, the company employs more than 50 people, produces 1.25 million blocks per year, and supplies more than 2,000 construction sites this year.

## ➤ An international ambition

Already active in five countries, IsoHemp generates 50% of its sales internationally. While most of its export activity is concentrated in neighbouring countries, including France, the Netherlands and Germany, where it has sales teams, demand is also coming from Scandinavia, the United States, Canada, Australia and beyond, demonstrating the unique nature of IsoHemp blocks and its proven expertise.

In the long term, the company plans to open new local factories, remaining true to its philosophy of limiting transport to 500–800 km and favouring short supply chains.



## IsoHemp in figures.

### ➤ 2011

#### Birth of the project

Meeting between the founders and a Belgian researcher specialising in hemp. Objective: to create a healthy, high-performance and sustainable material as an alternative to conventional insulation.

### ➤ 2012

#### Creation of IsoHemp

Launch of the first bio-based, 100% natural, insulating and breathable hemp blocks. An innovation that paves the way for a new way of building.

### ➤ 2014 – 2020

#### Development

IsoHemp expands its range to meet growing demand. The company invests in R&D, builds its first pilot plant and diversifies the applications of its hemp blocks.

### ➤ 2021

#### Industrial factory

Opening of a 2-hectare factory, unique in Europe. Capacity increased fivefold: 5 million blocks per year, equivalent to building 1,800 houses. IsoHemp becomes the leader in bio-based blocks.

### ➤ 2022 – 2024

#### Commercial and international expansion

Growth in Belgium, Europe and beyond. Local certifications, recruitment of more than 20 employees, several thousand projects completed.

### ➤ 2025

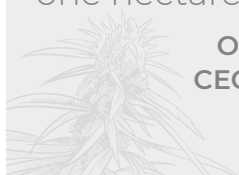
#### Launch of RecyHemp

The world's first hemp concrete recycling line. An investment of €1.25 million in a unique circular project that closes the loop and confirms IsoHemp's zero-carbon ambition.



Each square metre of hemp blocks (36 cm) stores the equivalent of 51.87 kg of CO<sub>2</sub>. One hectare of hemp absorbs up to four times more CO<sub>2</sub> than one hectare of forest.”

Olivier Beghin,  
CEO of IsoHemp



# Hemp blocks.



## > The advantages of hemp blocks

IsoHemp blocks offer five major advantages:



### Thermal regulation

Comfortable in summer and winter, stable indoor temperature



### Water regulation

Humidity level balanced between 50 and 55%



### Fire resistance

Up to 2 hours, depending on thickness



### Sound insulation

Reduction of external and internal noise



### 100% natural solution

Low embodied energy, local materials, carbon storage

## Technical data



### Thermal resistance

from 1 to 5 m<sup>2</sup> K/W



### Thermal conductivity

$\lambda = 0.071$  W/mK



### Fire resistance

from 45 to 240 minutes



### Water vapour resistance

2.8  $\mu$



### Phase shift

from 4 to 24 hours



### Acoustics

Attenuation from 37 to 45 dB



### Compressive strength

0.2 MPa

## Wide range

comes in 8 thicknesses and technical blocks



✓ A recognised and certified material

ATEX  
DE CAS A  
N°3211\_V1



# RecyHemp : close the loop.



## ➤ With RecyHemp,

IsoHemp becomes the first global player to recycle hemp concrete on a large scale. Production waste and construction site scraps are recovered, processed and reintegrated into the manufacture of new products.

This unique project is supported by the Walloon Region with € 460,000 out of a total investment of €1.25 million.

A project under the Wallonia recovery plan



## ➤ A controlled industrial process

The RecyHemp line can process up to 15,000 m<sup>3</sup> of hemp concrete per year.

Three types of inputs feed this circular flow:

- **Internal waste** from line stoppages, non-conforming products or R&D tests. As their quality is thoroughly checked, they are fed directly into the RecyHemp process.
- **Construction site waste**, which represents a few per cent of the volumes delivered. This includes cuts, surplus or damaged blocks.
- **Deconstruction waste**, which will complete this loop in the longer term.

Once collected, the materials are received in big bags or on stabilised pallets. Each batch undergoes quality control to verify that it is free of contamination. After validation, the blocks are integrated into the same flow as the internal waste and are crushed.

The shredded material is then screened. Any pieces that are too large are sent back to the shredder. The fine particles can be reused in the production of new blocks or used for other specific applications.



The recycled aggregate is thus ready to be reintegrated into our manufacturing processes, whether in the production of hemp blocks or HL-Mix blocks, and in the future, in other applications.

Two end products incorporate recycled materials:

- **HL-Mix**, an insulating, dust-free and dry aggregate, packaged in 45-litre bags or 1-cubic-metre big bags.
- **IsoHemp blocks**: up to 5% of recycled bulk granules are directly reintroduced into the production of IsoHemp blocks, with no loss of performance.

“ Our goal has always been to work in a closed loop. Today, this is possible. It is one more step towards sustainable construction, where alternative materials finally compete with conventional solutions.”

**Anthony De Mot,**  
Operations Director  
at IsoHemp



# Production process.



## ➤ A simple, local and eco-designed production process

IsoHemp has transformed a traditional process – the manufacture of hemp concrete – into a unique industrial process, designed with eco-design and respect for the environment in mind.

The production of blocks follows four specific stages:

### Mixing

Measuring out the hemp, lime, water and recycled aggregate.

### Shaping

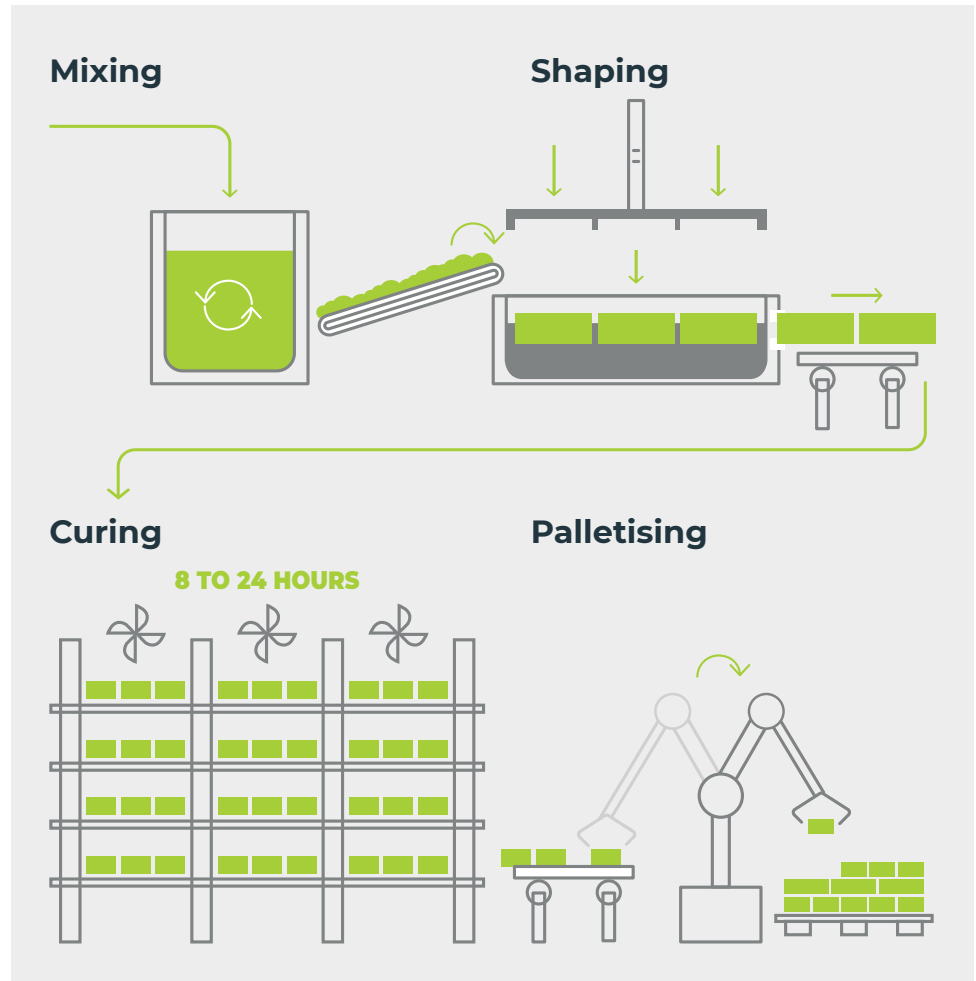
Moulding into blocks using a specially designed press.

### Curing

Natural hardening from 8 to 24 hours, without baking or heating.

### Palletisation

Automated preparation for shipment to the distribution network after 6 to 10 weeks of natural drying in the open air.



## ➤ This simple, local process relies on:

- **photovoltaic electricity**, representing up to 60% of energy needs,
- **short supply chains** from local sources,
- **zero-waste production**, where everything is recycled,
- and **no wastewater discharge**.

**The result:** a reliable, natural and sustainable product from a responsible industry that combines innovation, performance and respect for the planet.

# The syst'HEMP.

Your hemp block solutions



## BUILD

### › Syst'HEMP Pro.

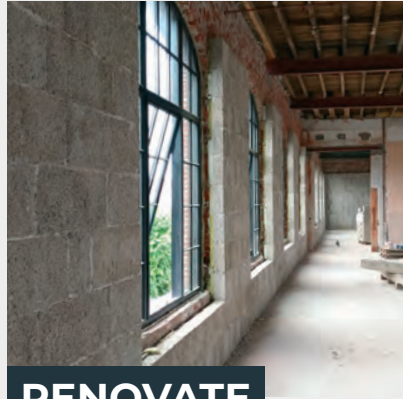
Biosourced monolithic wall combining structure and insulation.

### › Syst'HEMP Wood.

Inertia and summer comfort for timber constructions.

### › Syst'HEMP Building.

Low-carbon envelope for large-scale buildings.



## RENOVATE

### › Syst'HEMP Reno.

Breathable interior insulation.

### › Syst'HEMP Façade.

Durable external insulation.



## PARTITION

### & OTHER APPLICATIONS

### › Syst'HEMP Partition.

Internal, industrial and fireproof partitions.

### › Syst'HEMP Specific.

Tailor-made solutions for technical projects, floors, heritage buildings, etc.





# Projects.



## Wanze (Belgium)

Construction of a paramedical centre (medical practice and veterinary centre) on the Domaine de Naxhelet. This project demonstrates the versatility of IsoHemp blocks, which are suitable for buildings open to the public for specific uses.



## Domaine de Nieuwenhoven (Belgium)

Renovation of the historic provincial estate, which has been converted into a nature education centre. The visitor centre (556 m<sup>2</sup>) was designed without concrete, using bio-based materials (CLT wood and hemp blocks) for exemplary ecological integration.

## Petites Écuries de Versailles (France)

Renovation of a listed 17th-century monument that has been converted into an architecture school and restoration centre. Hemp blocks (20 cm thick) were installed as interior lining, combined with a layer of HL-Mix, providing thermal and hygrometric insulation while respecting the historic architecture.







# We've come full circle.



For us, RecyHemp represents a natural step in our commitment to more sustainable construction. This project demonstrates that innovation, sustainability, and local roots can coexist to make hemp a truly future-proof material. Thanks to this recycling line, we are moving toward a closed-loop system, which limits waste and further reduces our carbon footprint.

Our goal is simple: to offer comfortable, healthy and high-performance buildings using a natural, locally sourced material that stores CO<sub>2</sub>, regulates humidity and ensures lasting thermal comfort. We are demonstrating that it is possible to build differently and respond to the challenges facing the sector today.”

**Anthony De Mot, Chief Operating Officer of IsoHemp**

