

# Agenda

Introduction

09:00 Jakob Nielsen

Research

09:15 Paulien Strandberg

**Agriculture & Refining** 

09:30 Olivier Robert

**Certified Lime** 

09:45 Daniel Daviller

**Hempcrete construction** 

10:00 Christophe Lubert

**Engineer & Architects** 

10:15 Quentin Pichon

10:30 Laurent Mouly

**Construction machines** 

10:45 Hugo Grelet - <u>Euromair</u>

**Swedish construction** 

11:00 Jonas Nilsson - JN LinkedIn

Q&A

11:15 Jakob Nielsen

Each speaker has:

15 minutes

Moderator

**Lund University** 

La Chanvrière

**BCB-Tradical** 

LB Eco Habitat

LM Ingénieur

CAN-ia Architectes

10 min presentation 5 min questions

### **Event Partners**















**Sustainable Business Hub** is a triple helix cluster for sustainability and cleantech. The members are cleantech companies, regional and local authorities, utilities, universities, and research institutes.

**LFM30**, Local Roadmap Malmö 2030, is an initiative signed by 120 companies. Within 10 years the construction and civil engineering sector in Malmö is aiming to become climate neutral.

**RISE** Research Institutes of Sweden AB, is a Swedish state-owned research institute, collaborating together with universities, industry and the public sector to drive international competitive sustainable development and growth. RISE employs more than 2800 researchers.

**Ideon Open** is Ideon Science Park's initiative for open innovation. They provide the neutral platform for collaborating with corporate clients, external consultancy firms and other agents towards a common goal.

**House of Hemp** is the BCB-Tradical representative in Sweden. Selling, building, promoting and educating about certified hempcrete on the Swedish market.

**Northern Connections** is a partnership in between 22 clusters, cities, regions and knowledge institutions, and they work together to create innovation connections between enterprises and clusters in the energy sector.

**Enterprise Europe Networks** helps Small and Medium-sized Enterprises (SMEs) innovate and grow internationally.

# **Exchange of knowledge**

### France - Sweden

France is the world leader in hempcrete. It began in 1987 with the renovation of a timber-framed house and is today an industry ready to deliver for the 2024 Olympics in Paris.

Sweden is one of the leading countries in wood construction and cross-laminated wood; also known for its engineering and design, it is a natural partner to the hempcrete industry.

This is planed to be the first of several meetings in between the French hempcrete industry and Swedish building industry. Leading to new partnerships and an increase in knowledge of bio-based construction in both countries.



### 3 meetings for 2020

- 1. WEBINAR 19th of May
  Held in Zoom
  Introduction to hempcrete and
  presentation of the main players in
  France to the swedish market
- Conference in Malmö in September (depending on Covid19)
   Wood industry + Hemp industry
- Conference in Paris late 2020 (depending on Covid19)
   Swedish bio-based companies go to Paris.



### **Audience**

Builders, Architects, Researchers, Municipalities, Building Engineers.

### Goal

The goal with the first Webinar is to increase the knowledge of hempcrete and to learn about France as a leader in bio-based buildings.

The longer term goal is to start a cross border cooperation to increase bio-based buildings, with the ultimate goal of lowering the CO2 from the construction industry.







### BIO-BASED MATERIAL\*

Hemp + Lime + Water





Meets The Most Stringent Requirements For Low-Energy Buildings



### HYGROTHERMAL BEHAVIOUR

Breathability,
Mold Resistant,
Stores Excess moisture



Fire, Water & Pest Resistant expected to last 100's of years





### SELF-INSULATION SYSTEM

Insulating Wall, Screed, Roof, Lining and Render surface heat regulation of interior walls

### AIR QUALITY

Breathability,
Non Toxic,
Natural Humidity Regulator



### Petrochemically Based

40% of green house gas emissions are produced by the building industry

1.5 million of barrels of oil per day are used by the construction industry

170 million tons of building related waste were generated in 2003

233% more frequent smoke signatures caused synhetic furniture and construction materials

### **Hemp Based**

 $110\,kg\,{\rm of}\,{\rm CO2}\,{\rm are}\,{\rm sequestred}\,{\rm in}\,{\rm one}$  cubic meter of hempcrete

50-80% energy conservation for heating + cooling hemp structure

One hectare of industrial hemp can absorb

22 tonnes of CO2

O fertilizers or insectizides are required by hemp

0% on-site waste

100% non-combustible with a 4 hours fire rating

Sourced from <u>Parsons Healthy Materials Lab</u>

# France to mandate all new public buildings be 50% timber or other natural materials by 2022.

In addition to wood, the mandate can be fulfilled by bio-based materials made from matter derived from living organisms such as hemp and straw. The mandate will apply to buildings constructed for the 2024 Paris Olympics complex.





# The Olympic Village will be a model of sustainable development, including:

100% bio-based materials

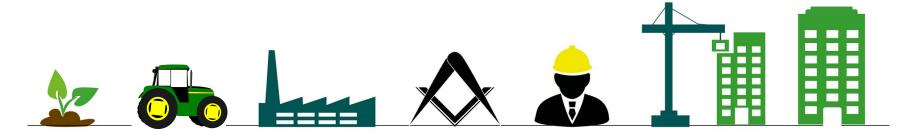
100% green energy during the Games

100% of the Olympic family and spectators using clean transportation

Over 26 hectares of biodiversity created on the Olympic sites in Seine-Saint-Denis thanks to the Games



## Stages in hempcrete production















### Introduction

09:00



**Jakob Nielsen Business Developer**Moderator of the Webinar and will introduce the various partners.

### Research

09:15



Paulien Strandberg, Tekn. Dr. Avd Byggnadsmaterial LTH Overview of hempcrete insulation with a focus on heat and moisture properties.

**Lund University** 



09:30



Olivier Robert, Sales manager, La Chanvrière (largest hemp refinery in Europe) Showing the economic viability of growing hemp & certified hemp building materials.

La Chanvrière





### Certified Lime

09:45



Daniel Daviller, General Manager, BCB - Tradical

Overview on hempcrete markets worldwide with a focus on certified lime for hempcrete. Tradical's reference projects.

**BCB-Tradical** 





### Hempcrete Construction

10:00



Christophe Lubert, Founder, LB Eco Habitat

Prefabricated hempcrete panels for a faster construction process & renovation of cultural heritage buildings.

LB Eco Habitat



LB ÉCO HABITAT

### **Engineer & Architects**

10:15



### Quentin Pichon, Partner & founder, CAN-ia Ingenieurs, Architects

Overview on the environmental policy EPD & hempcrete properties illustrated with CAN-ia's most compelling construction projects

**CAN-ia Architectes** 





10:30



Laurent Mouly, Founder, LM Ingénieur

Overview of multi-storey houses with hempcrete as an insulation in Paris. The fourth is now under construction, a nine floor building in Boulogne-Billancourt.

LM Ingénieur



LM Ingénieur

### Construction Machine

10:45



Hugo Grelet, Export Manager for Northern Europe, Euromair Euromair manufacturers spray machines for

hempcrete, ranging from 1,5 m3/h to 6 m3/h.

**Euromair** 





### **Swedish Construction**

11:00



Jonas Nilsson, Entrepreneur, Landskrona

Jonas is building Sweden's first hempcrete house with certified materials. The house will be 50 m2 and have several exciting solutions

JN LinkedIn



11:15

Time for questions, final thoughts from the moderator and presentation of the next meeting in september in Malmö.

# Hempcrete + Wood Bio-based buildings Malmö, September 2020

The next step will be a physical meeting in between the french hempcrete industry and the swedish wood industry.



Presentations will be made available after the webinar.

Any question you might have can be asked during the webinar or can be sent in advance to:

peter.holmdahl@houseofhemp.se

We hope you will join us on the 19th of May!