

**HEMPCRETE**  **YURT**

**Circles for a healthier Planet**

**[hempreteyurt.com](http://hempreteyurt.com)**

**István Nyárády, founder. August 2023**

**Hemcrete photo credit: [greenbuildingcanada.ca](http://greenbuildingcanada.ca)**

# Mission

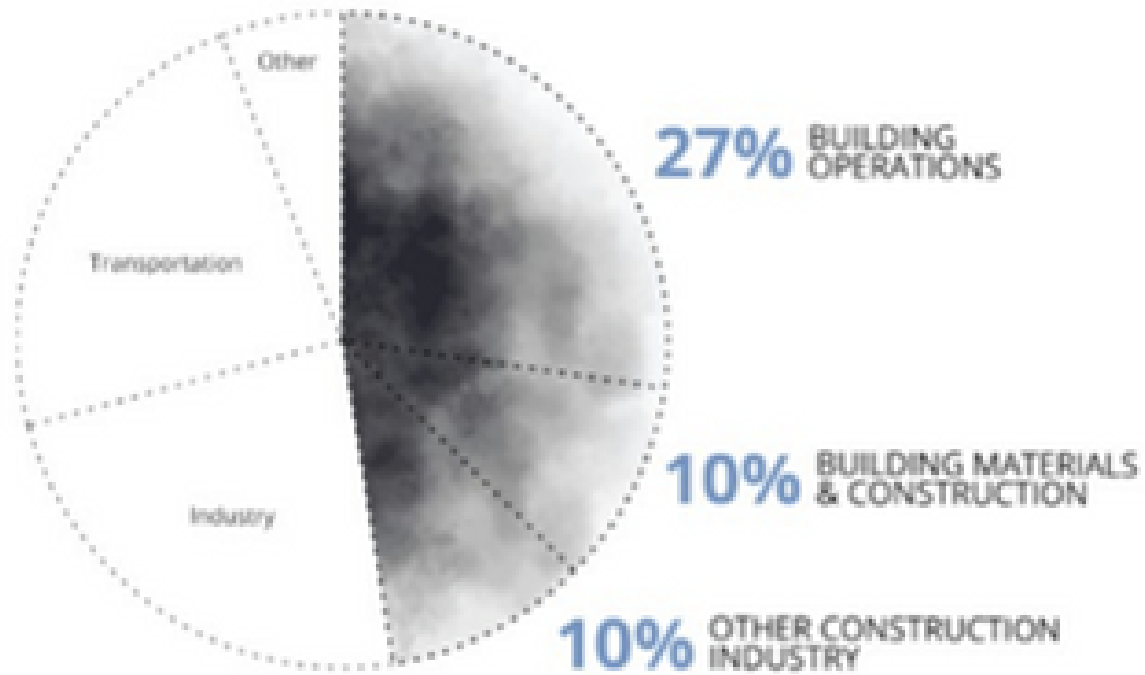
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**Unite to build  
more sustainable  
buildings**

# Climate & energy crisis

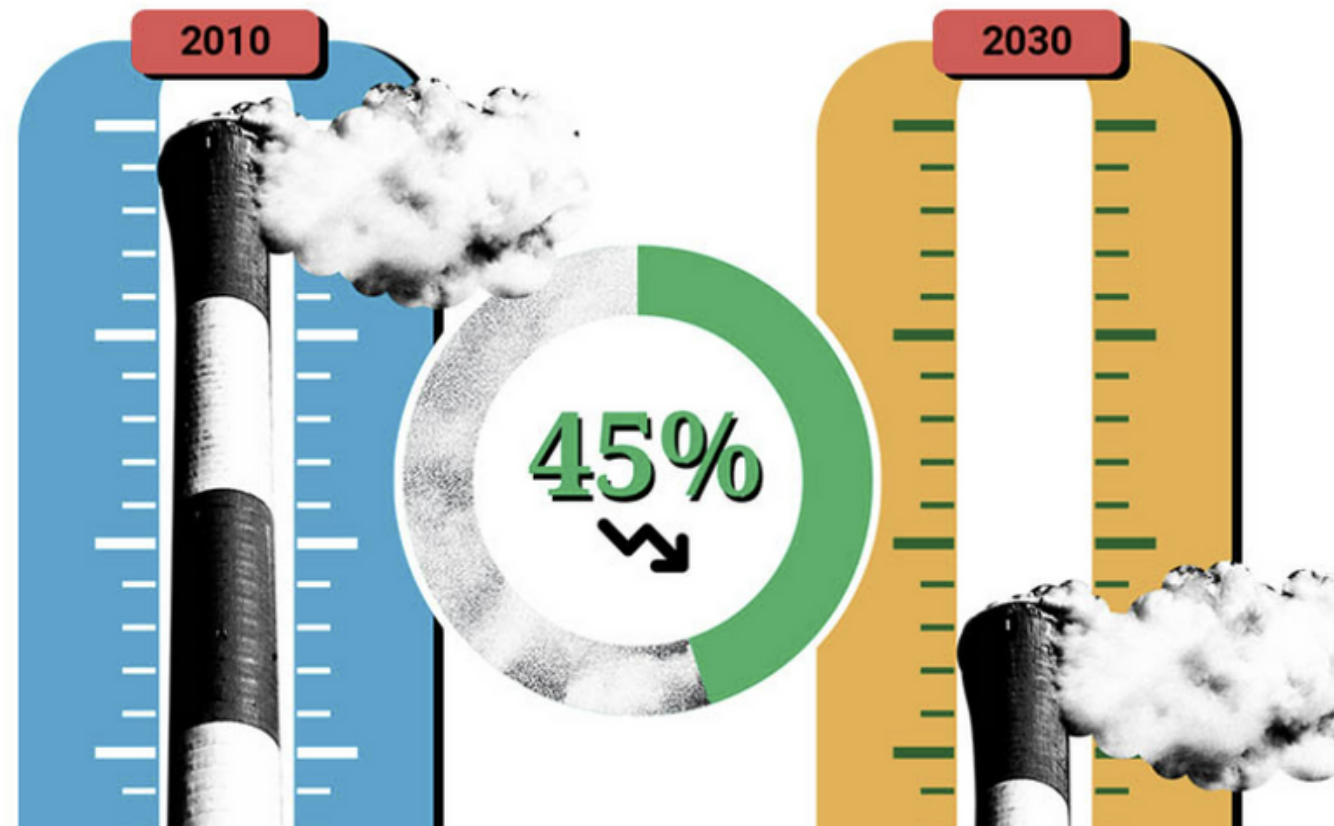
## Built environment CO2 emissions



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Data Sources: Global ABC Global Status Report 2021



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## 2030 emission target (Paris agreement)

To keep warming to 1.5 degrees, **countries must cut emissions by 45% compared to 2010 levels.**

Data sources:  
UN Global ABC - 2021  
U.S. Energy Information Adminis  
UN - The road to NetZero

# Why IMMEDIATE action?

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## Record floods ravage Slovenia, large parts of Europe under water

Monday, August 7, 2023 ★ Favorite



### Record rainfall

The floods were caused by torrential rains on Friday, which caused rivers to swell swiftly and burst into houses

Slovenia has faced "the biggest natural disaster" in its history after devastating floods caused damage estimated at 500 million euros (\$550m), killed two people and destroyed roads, bridges and houses.

Speaking after a meeting of the country's National Security Council on Saturday, Prime Minister of Slovenia Robert Golob said, that luckily, the earlier night was easier than the one before.

He also added that two-thirds of the small Alpine territory had been affected.

**UN Facts About  
Climate Emergency:  
<http://bit.ly/UN-FACE>**



# What will be our legacy?

Industrial hemp captures **more CO2 than adult trees.**

**Hempcrete stores CO2 in walls.**

Carbon negative, excellent insulating, fire resistant, humidity balancing, mold and pest deterring

**UN: climate emergency**

Symbols - like circles - drive change.  
Collaboration multiplies impact.

We - literally - build our future and ultimately Earth: our biggest circle!

**Industrial hemp is the building material of our future!**

# European Green Deal (excerpts)

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Move towards **Net-Zero Energy Buildings**

**Circular economy** in building construction and renovation

**Monitoring and Reporting** progress

# Who's interest?



**EU:** new buildings zero-emission from 2030

**Governments:** Net-Zero delivery. Widest impact base!

**Farmers:** support farming and processing

**Builders:** embrace and support change

**House owners:**

- building environmental footprint certificates
- carbon cash-credits!

# United commitments

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1. **Crowdfunding (and building) the Hempcreteyurt prototype**
2. Submitting a winning concept to **XPRIZE Carbon Removal** (largest global CO2) competition. A **globally relevant option** to unite and build more sustainable buildings
3. Promoting our mission, including industrial hemp building workshops
4. Establishing industrial hemp pilot **farms and scalable processing machinery** to provide locally sourced, carbon-negative circular building materials (ongoing collaboration with <https://tokeportal.com/kenderhaz/>)
5. Developing **building environmental footprint certificates** (Hempcreteyurt must provide for the XPRIZE competition), similar to existing energy certificates
6. Facilitating the **rapid replication of natural building ecosystems** worldwide, collectively capable of sequestering **Gigatons of CO2** within building walls
7. Recognizing carbon-negative farming and buildings through carbon cash-credits
8. Assisting governments and bodies in achieving NetZero building targets by 2030



# **200k EUR crowdfunding**

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**FundRazr**

**[fundrazr.com/hempcreteyurt](https://fundrazr.com/hempcreteyurt)**

**From Little Seeds, Mighty Homes Grow!**

**Unite to build more sustainable buildings.**

**Seed the Change: Build Healthier with Industrial Hemp!**

# Thank you!



\*Both my granddads lost their first wife and a baby.  
Committed to building our loving family home.

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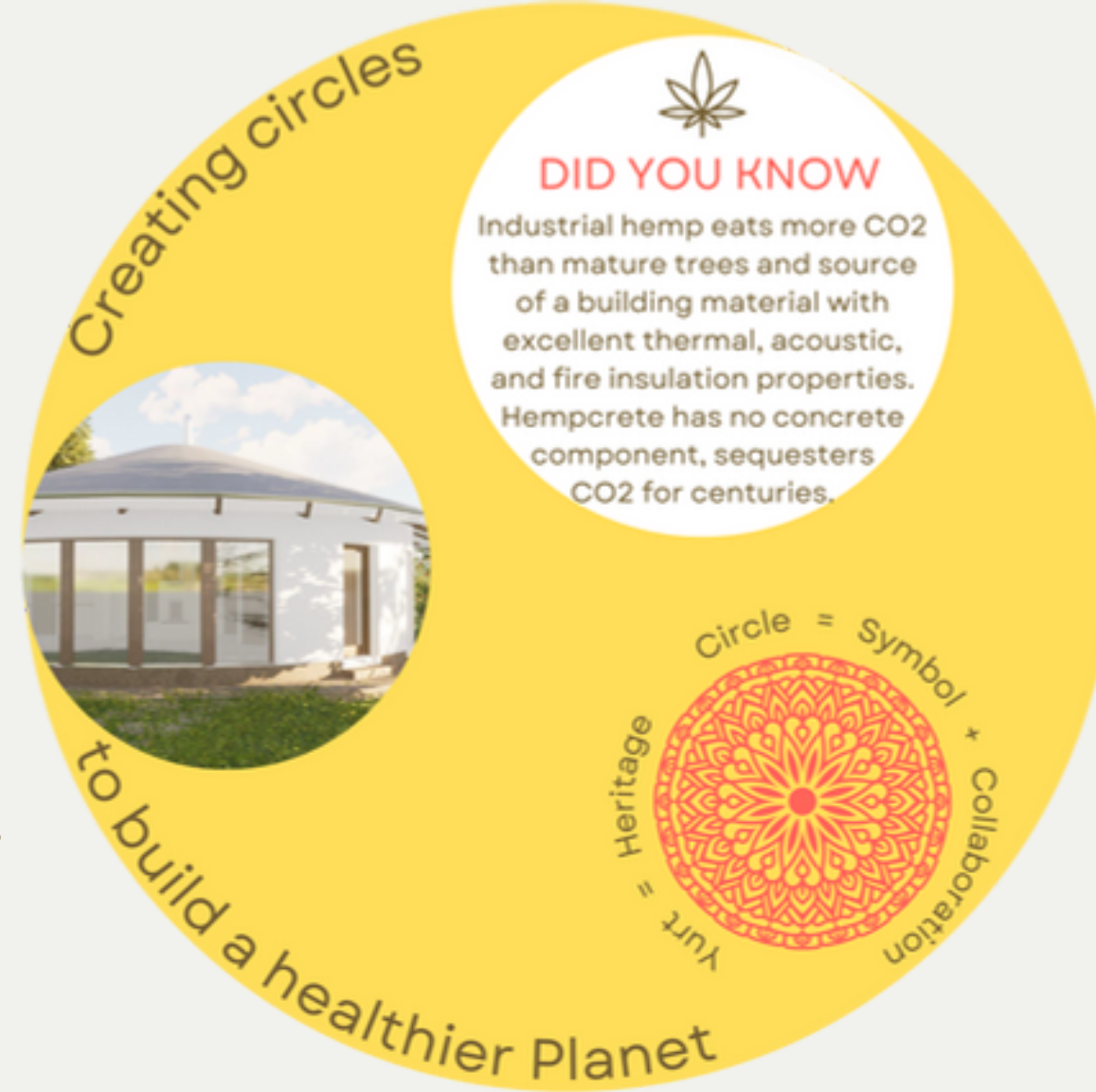
[hempcreteyurt.com](https://www.hempcreteyurt.com)

[kenderbetonjurta.hu](https://www.kenderbetonjurta.hu)

# Appx. 1 - EU, Government

The Paris Agreement was adopted on December 12, 2015, at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris, France.

**The EU and 194 states, totalling over 98% of anthropogenic emissions, have ratified or acceded to the agreement.**



**Our proposal:**

**Extend building energy certificates with environmental footprint (CO<sub>2</sub> life cycle assessments, LCA):**

- material production
- building
- operation
- end of life

**Carbon cash-credits for CO<sub>2</sub> negative buildings!**

# Appx. 2 - Farmers

Climate change impacts yields: heat, drought, severe rain and wind

Soil overuse

Plowpan - excessive plowing results in the formation of a compacted layer between soil horizons.

Sustainability

Creating circles

**DID YOU KNOW**  
Industrial hemp eats more CO<sub>2</sub> than mature trees and source of a building material with excellent thermal, acoustic, and fire insulation properties. Hempcrete has no concrete component, sequesters CO<sub>2</sub> for centuries.

Circle = Symbol \* Collaboration  
Yurt = Heritage

to build a healthier Planet



## Industrial hemp:

Regenerative farming helps improve soil health, sequester carbon, and promote sustainable agriculture

Fast growing option to diversify single crop reliance

Generally requires less water and fewer pesticides.

Market demand for regenerative materials

Source of **construction materials**, textiles, food products, cosmetics...

# Appx. 3 - Owners, builders



High building and operational costs

High energy dependence

Environmental footprint currently focused on energy consumption, less on material production and material+building footprint, including end-of-life

**3+M homes/year (EU+US+AU)**

**Hemp building 25% less (HU)**

**CO2 footprint\*: a 100 sqm hemp building saves 500 trees yearly equivalent.**

## Hemp buildings:

Healthy, energy efficient

Higher valued, reflected in building LCA and CO2 footprint (to be introduced)

Simple to build and cheap to produce compared to many traditional building materials

**10% target for new hemp homes by 2027 will have an impact of -6Mt\* CO2/year!**

\* - pending audit