



Hemp carbon storage & environmental footprint

Civil Dialogue Group

Hemp, flax and cotton

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Why hemp is a perfect carbon crop ?

Multipurpose and industrial



- Construction materials
- Textile and non woven
- Paper, packaging, composites
- Biochar
- Mulch and animal bedding
- ...



- Food and food supplements
- Feed materials
- Cosmetic ingredients
- Natural chemicals

Oleaginous, fibre, aromatic, medicinal crop

Good agronomical practices



- Low water input
- No PPP products
- Little fertilization
- Beneficial for soil
- Pollen source



Builds up carbon fast...



- 4 months growth
- **9 to 15 tons CO₂** per hectare



... and stores it in manuf. goods



- (Long-term) carbon storage in substitution and recyclable (/compostable) products



Carbon storage study



EIHA commissioned a **meta-analysis** to assess the carbon storage of hemp based materials vs. wood based ones.

Objective: get a net and gross calculation of how much carbon is stored that is easily understandable

Expected release *Winter 2022*.





Fibre/shivs products
=
Harvested wood products
=
Carbon storage products



Link is *missing* between
agriculture (+ carbon farming) and
manufacturing industry!

Green PP, ecodesign, certification :
ambitious requirements needed

Hemp in construction policies



Ensuring that the **methodology** for assessing the **sustainability and performance** of construction products *does not penalise* hemp-based materials.

Elements to be taken into account: carbon storage, performance indicators (not only heat conductivity, a.k.a. **lambda value**), end-of-life, ...

Sustainability assessment



A solid **methodology** is fundamental.

It should allow consumers to **compare products** in the same product function and steer sustainable purchasing behaviour.

Final objectives: creating a greener market and financing the transition of the industry



PEF is not enough...

It should include further elements notably: *microplastics* unintentional release and *carbon storage*.

Private schemes (e.g. Higg) are partial and might distort competition.

What hemp needs



A serious and science based reflection on how to assess *sustainability and performance* and communicate it to consumers (and business partners).

A solid methodology to calculate *carbon storage* in biomass and products as the very basis of carbon certification scheme.



thank you!