🎙️ Hemp industrial sector in Europe

Welcome to the deep dive. Today we're exploring uh the really fascinating world of industrial hemp. We've got some great material here from the European Industrial Hemp Association, some Polish research, and also insights from Uruguay.

Yeah, exactly. And our mission for you today is to really unpack what industrial hemp is, look at its well, incredible range of uses, and try to understand why it's suddenly getting so much attention globally. We'll connect the dots on its economic side and importantly its environmental significance, too. Okay. So, let's start right there because I think there's often a bit of confusion. When we say industrial hemp, are we just talking about the standard cannabis sativa lin plant?

You've basically got it. It is cannabis sativa lin. But, uh, the really crucial differentiator for industrial hemp is its very very low level of THC. That's tetrahydrokinabonol. So, for instance, the EU's common agricultural policy, it demands really low THC.

Okay?

And then you look at Poland, uh, the limit there is the sum of THC and THCA. That's the acid form that converts to THC and that combined total can't go over.3%

near.3 right

but then um in Uruguay it's different again their limit for industrial hemp is actually less than 1% THC so these specific limits they're really key

that's a vital distinction to make upfront and it really feels like this plant is making a huge comeback for a long time cultivation just sort of vanished didn't it

oh it absolutely did dramatically I mean picture this Europe had around 400,000 hectares cultivated back Back in 1940,

by the year 2000, that had plummeted to just 10,000 hectares.

That's incredible. Why such a drop?

Well, it was largely down to two things. The rise of synthetic fibers taking over markets and let's be honest, the sort of demonization of the whole cannabis plant through public policy. But you're right, it is resurging. By 2022, EU cultivation was back up to about 51,000 hectares. So, a definite upward trend.

Okay, we've touched on its past, its comeback, but where it gets really interesting, I think, is the sheer versatility. This isn't just, you know, one product from one plant. It seems like a genuine multi-purpose powerhouse.

It truly is. People often call it a zerowaste multi-purpose crop. And that's pretty accurate because you can use almost every single part of the plant. Think about food. You've got hemp seeds, flour, protein, oil, all providing a great local healthy plant protein source.

Then there's animal feed, perfect for organic systems, but construction. Now that's being talked about as potentially the biggest market

really construction.

Yeah, it's seen as, and this is a direct quote, the only real carbon sync in building materials. So, it's crucial for decarbonizing buildings, great for insulation, and then of course textiles driving that

sustainable fashion movement, especially now with global supply chains, looking for more local raw materials.

And I know a lot of people are also interested in extracts like CBD. How does that whole area fit in, especially with, you know, all the regulations flying around?

That's a really good question. So, in the EU, extracts like CBD generally fall under the novel food regulation if they weren't consumed significantly before uh May 15th, 1997.

Okay, that specific date matters.

It does. It means they need to go through a pretty rigorous safety authorization process. You've got industry groups like the EIHA's novel food consortium doing a lot of work here, detailed toxicology studies, human trials basically to prove safety and set clear safe consumption levels for everyone.

Right.

And just to add, the EU als Alo brought in specific maximum THC levels for actual food products. That started back in January 2023.

We've covered the products, the versatility.

Yeah.

But the environmental side is just as compelling, maybe even more so. It sounds almost too good. Needs few chemicals, sinks carbon. What are some of the standout environmental pluses you've seen?

They really are profound. It lines up perfectly with big goals like the EU's green deal and that whole push for a green recovery. First off, industrial hemp needs very few, if any, chemicals. Great for organ organic farming.

That's a big one.

Huge. And it produces loads of pollen, which is vital for bees, especially when other flowers aren't around. Why?

But the carbon capture, that's maybe the most striking part. It pulls down between 8.9 and 13.4 tons of CO2 per hectare.

Per hectare. How does that compare to say trees?

Well, get this. A single hectare of hemp can actually sequester as much carbon as a mature forest. It offers this rapid, scalable climate solution right on our farmland. Plus, it's fantastic. IC for soil health, great pioneer crop, good in rotation, reduces water loss, stops erosion, outco competes weeds, and it can even clean up heavy metals from the soil.

That is genuinely remarkable. So, how is this momentum playing out globally? Are policies catching up? Is there much international teamwork happening?

Yeah, supportive policies are absolutely crucial. You're right. We're seeing the EU pushing for clear science-based rules and incentives. Poland's got detailed regulations for registration, even specifying cultivation for things like land remediation.

Interesting.

And in Uruguay, one big factor is the low cultivation cost. Especially helpful for smaller farms. They're also really focused on developing local seed production, less import reliance, you know, and they have cool projects like hemp to fuel, looking at its bofuel potential.

Hemp for fuel. Okay.

Exactly. And collaboration is definitely happening. That Polish institute we mentioned, they've successfully run trials with their hemp varieties down in Argentina and Uruguay, and that's now moving towards commercial scale. So, these kinds of global partnerships are really key to expanding hemp's impact.

Wow, what an incredible deep dive this has been. It's so clear that industrial hemp offers this really powerful mix economic potential and uh serious environmental benefits.

Absolutely. It's just fascinating, isn't it, how a crop that was well misunderstood or demonized for so long is now being looked at as a key solution for decarbonization, for sustainable materials, even for food security.

So, thinking about all this for you, our listener, Given this immense versatility we've talked about in these proven environmental upsides, what really stands out about how embracing hemp globally could genuinely reshape things, not just farming or industry, but maybe our whole approach to living sustainably and tackling climate change in the next decade?