

CONSTRUCTING EXCELLENCE IN WALES

Hemp in construction Note - V.1 Emerging Insight

CEWales insight, written in response to interest regarding the growth of industrial hemp, associated processing facilities and use in the built environment. Links and references to available data have been shared within this document.

1. Current Position

UK Wide

Incoming changes to industrial hemp licensing will support regulated farmers to grow hemp and encourage investment in the industry, while continuing to protect the public from drug misuse. These changes are planned to come into effect for the 2025 growing season. [1]

Defra has said the number of hemp licences has grown from six in 2013 to 136 hemp licences in 2023. A first-time licence costs £580 for three growing seasons. Repeat growers currently pay £326 for a licence, less than £109 per year. [2]

The HEMP-30 project, led by researchers at the University of York and Biorenewables Development Centre (BDC), aims to increase the amount of industrial hemp 100-fold in the UK from 800 hectares to 80,000 hectares establishing industrial hemp as a major UK crop. The first development phase of the project has been awarded £200,000 from the UK government's Biomass Feedstocks Innovation Programme, funded through the Department for Business, Energy & Industrial Strategy's (BEIS) £1bn Net Zero Innovation Portfolio. The BEIS programme aims to accelerate the commercialisation of innovative clean energy technologies and processes. [3]

Funding secured in 2021 for UK's first natural insulation factory for IndiNature. IndiNature has developed a natural fibre insulation system called IndiBreathe using hemp grown in the UK, that can be fitted both in new and retrofit building projects. [4]

Wales

Research on the potential of growing hemp seed and fibre on Welsh farms for industrial purposes is underway at Aberystwyth University. With Welsh Government funding, trial plots of 8 different varieties of hemp are being planted by researchers at Aberystwyth University's Institute of Biological, Environmental and Rural Sciences (IBERS). [5]

Small scale support through funded projects, to companies such as <u>Hempcrete Cymru Wales</u> to turn old Industrial plot in Hermon into a community owned space for creative projects. [6]

2. Benefits of Hemp and Use in construction

Hempcrete is mostly used for small projects such as private housing. Breaking into the mainstream is a bigger challenge though. According to Woolley, who has been talking to Carmarthenshire council in Wales about using hempcrete for building 600 rural homes, the odds are stacked against hempcrete because the Welsh government is backing the Active Building Centre in Swansea <u>https://abc-rp.com/</u>



which has received £36m of government funding to test and prove materials and technologies to deliver zero carbon housing. [7]

Hempcrete is at the forefront of innovation in construction and offers endless benefits to both the environment and the homeowner. Its ability to store and release heat limits fluctuations in temperature, radically reducing energy and therefore cutting costs. Its breathability means the walls release internal moisture, virtually eliminating mould growth and providing better air quality for the inhabitants. Wellspring Homes is not stopping at just building with hemp though. They are currently growing it too. Bryn Môr will be the first of their developments to use hemp grown in Wales in its hempcrete walls, demonstrating a circular economy in motion. [8]

According to <u>a European Commission report, external</u>, the carbon sequestering properties of hemp are remarkable.

Family run farm based in Wales. Promoting regenerative agriculture since 2021. Formerly a dairy enterprise, we now farm 130 acres sustainably through the growing of industrial hemp and production of biochar.[9]

3. Areas for Improvement

Challenges

- Perceptions
- Licensing & Regulations
- Lack of awareness on material use and benefits
- Limited processing facilities

Opportunities

- <u>Big opportunities for hemp in Wales' emerging cannabis industries Nathaniel Loxley & British</u> <u>Hemp Association – UKCSC</u>
- Upcoming UK Gov licensing changes

Relevant Publications

- 1. <u>Hemp licensing changes will help grow UK economy GOV.UK (www.gov.uk)</u>
- 2.NFU welcomes changes to hemp licensing rules NFUonline

3. <u>Roadmap plan to boost UK industrial hemp production and processing - News and events, University of York</u>

4. <u>Funding secured for UK's first natural insulation factory for IndiNature | Scottish National Investment</u> <u>Bank (thebank.scot)</u>

5.<u>Hemp growing trial for potential use in Welsh agriculture - Aberystwyth University</u> & <u>Research partnership to expand benefits of hemp - Herald.Wales</u> & <u>Aberystwyth University | industrial hemp research (carboncopy.eco)</u>

6. <u>Projects — Hempcrete Cymru</u>

7.<u>https://www.building.co.uk/focus/hempcrete-a-natural-solution-in-the-quest-for-better-materials/5115430.article</u>



8.Innovative homes built with Welsh hemp redefine sustainable living - Wales Online https://2050-materials.com/blog/hemp-a-game-changer-for-the-building-industry/ https://www.barbourproductsearch.info/pros-and-cons-of-hempcrete-blog000568.html https://www.ukhempcrete.com/hempcrete-construction-costs-affordability/ Hemp makes a comeback in the construction industry - BBC News

9. <u>Home | Bio Carbon Wales | Regenerative Agriculture | Hemp | Purchase Biochar made in Wales |</u> <u>United Kingdom</u>

10.Mapping the Future of Hemp Architecture and Construction Materials: Revolutionizing the Industry ArchDaily

Further information about supply could be sourced through here - <u>https://www.robert-price.co.uk/sustainable-energy-centre/</u>

About us — Hempcrete Cymru