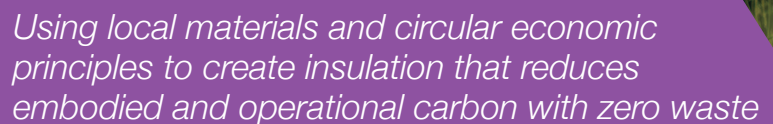


Local Materials Case study
IndiNature insulation



Using local materials and circular economic principles to create insulation that reduces embodied and operational carbon with zero waste

Product: **Carbon capturing insulation for all building types**

The natural solution to sustainable insulation

IndiNature's net carbon-capturing insulation products are made from UK crops

Edinburgh-based firm IndiNature is currently securing investment that will allow it to set up its first insulation factory in the Scottish Borders in 2021.



“ We use local and renewable industrial crops to allow a net storage of carbon in a circular product with no waste, to help developers construct healthy, ecological buildings. ”

Scott Simpson, CEO, IndiNature

THE BACKGROUND

Edinburgh-based firm IndiNature is currently securing investment to set up its first insulation factory in the Scottish Borders in 2021.

One of the crops the company uses is industrial hemp — historically grown in the UK to make rigging, anchor ropes and sails for the British Navy. The crops are used to manufacture flexible insulation batts and semi-rigid thermal and acoustic insulation boards.

USING LOCAL MATERIALS TO SOLVE A GLOBAL PROBLEM

IndiNature, supplied by several UK farms, manufactures insulation products using as little as 10% of the energy needed to create conventional insulations, which helps allow the net capture of carbon the final product.

A full carbon life cycle assessment of IndiTherm's insulation batt, for example, shows that manufacturing will, over a period of 30 years, save as much carbon as planting more than five million trees.

In addition to the carbon benefit, the company is creating new skilled workers as well as reviving cash crops for farmers.

Industrial hemp is a hardy, resilient crop, which can be grown on a wide variety of soil types – the crop supply chain is growing very fast globally to support future expansion of the business.

“ IndiNature is helping the UK reach its net zero targets by 2050 by reducing both operational carbon with insulation as well as embodied carbon in materials. ”

Scott Simpson, CEO, IndiNature



“ Natural fibre insulation products like ours have many performance benefits over conventional insulation, including vapour breathability, ideal for historic retrofits, and thermal mass, which keeps buildings warm in winter and cool in summer. ”

Scott Simpson, CEO, IndiNature

LOCAL MATERIALS DELIVER WORLD-CLASS PERFORMANCE

IndiNature's products, as well as offering sustainable, plastic-free and carbon-storing insulation, create a healthy operational environment.

They reduce heat loss in the same way as standard insulation products. Unlike standard insulations, however, they have thermal mass with the ability to reduce overheating risks in summer – an increasing problem with climate change.

The products are vapour breathable, ensuring that excess moisture is safely transported out of buildings to regulate healthy air quality, reduce damp and mould risks and ensure building structures stay dry and healthy and last longer. That's why they're preferred materials for historic retrofits.

Because they're entirely made from natural materials, they don't release volatile organic compounds into living or working environments, which makes them safer to

work and live with. They're soft to the touch and have no petrochemical or glass dusts that can be damaging to installers' health.



IndiNature's products are soft to the touch and safe to use

LOCAL MATERIALS BRING COMMUNITY BENEFITS

IndiNature's insulation materials weren't designed solely with the environment in mind. It was equally important to the company that they would also help contribute to the communities in which they are made and used.

Locally-grown source materials, together with local manufacturing processes, make sure the insulation is not only high performing and widely available, it's also cost competitive compared to imported natural fibre products. That's a saving builders can pass on to purchasers.

Using local materials creates and supports local jobs and skills development in growing, distributing and processing the raw materials, as well as in manufacturing the final product.

So as well as offering the agricultural sector a much-needed new revenue stream, it has the potential to bring significant economic regeneration to areas that really need it.

At the same time, buildings created with IndiNature materials offer lower running costs, thanks to the reduced heating and cooling needs.

That helps manage the risk of fuel poverty for residents and keeps running costs to a minimum for commercial occupants, as well as significantly lessening environmental impact.

“We believe truly sustainable buildings do much more than lower operational carbon,” said Scott Simpson, CEO of IndiNature. “They should also consider environmental impacts, embodied carbon, adaptation and health.”



“ IndiNature's vision is to start a natural industrial revolution, creating positive impacts on the climate, on communities and on the environment. Our mission is to develop and manufacture the world's best sustainable construction insulation on an industrial scale. ”

Scott Simpson, CEO, IndiNature

INDINATURE AT A GLANCE

- Made from **100% natural** materials
- **NO** plastics
- **NO** waste
- **10% of the energy** needed for traditional materials
- **4.4 tonnes less carbon** in average house build
- **10,500 tonnes carbon captured** in factory each year
- **Best Circular Economy Initiative**
Scottish Resources Awards
- **Climate Launchpad Award**
First place
- Named one of Europe's **top six cleantech startups**
- **www.indinature.co**

This case study was prepared by Construction Scotland Innovation Centre on behalf of the Scottish Construction Leadership Forum – **March 2021.**

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