



Manufacturing biochar from purpose-grown biomass vs. waste biomass

The Welsh Waste Biomass Reality

Wales is an overwhelmingly livestock-based agricultural nation. With only ~93,000 hectares under arable crops. The available agricultural waste biomass pool is insufficient to support a large-scale biochar manufacturing operation.



Welsh forestry residues are similarly constrained — and critically, already heavily contested.

Biomass energy plants, composting operations, anaerobic digestion facilities, and animal bedding markets consume the majority of available material before biochar enters the equation.





Even if every tonne of Welsh waste biomass were converted to biochar, the resulting carbon removal would represent tens of thousands of tonnes, not the millions needed.

Why We Chose a Different Path

This supply reality informed our approach from the outset. Rather than competing for a limited and contested waste stream, we chose to develop purpose-grown biomass systems...





Not plantations, but intelligently designed agroforestry systems capable of sustained, elevated biogenic carbon cycling.

The economic signal matters:

When biochar producers pay for waste, they're incentivising continued waste generation. The upstream land-use system receives no signal to change. The carbon inefficiency persists.

At Clo Carbon Cymru, we've rejected this acquiescence — not because waste utilisation is bad, but because deliberately designed carbon-cycling systems are categorically superior.



This isn't biochar from farming.

It's biochar for agricultural transition.

The technical implications are significant.

The economic implications are
transformative.

The ecological implications are
necessary



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