

Diversified Revenue Potential Through On Farm Pelletised Biomass



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Future Markets: Expanding Domestic Biomass Production in the UK

Biomass is already widely used for low carbon energy generation and is projected to play an important role in meeting UK Net Zero targets. Demand is expected to start rising rapidly across the UK to supply large scale renewable bioenergy for electricity generation and emerging markets such as sustainable aviation fuels. This will require a substantial expansion in domestic biomass production to avoid an increased reliance on foreign imports.

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On Farm Diversification Project: Getting ahead of the field

White Horse Energy have secured funding from the UK's Department for Energy Security and Net Zero, as part of the Biomass Feedstocks Innovation Programme to develop a transportable pelletising technology. This will be deployed at farm level with the capability to process a diverse range of agricultural residues and perennial energy crops into industrial standard pellets. A prototype is currently being built and is due to enter the market in 2025.

In this time of uncertainty in the agricultural industry, White Horse Energy are looking to provide farmers with an environmentally positive way to diversify their income. The current demand for domestic biomass feedstocks significantly outweighs the supply and this gap in the market is only growing. White Horse Energy would like to support farmers in capitalising upon this opportunity. We are working to ensure that this project is developed alongside those looking for diversification opportunities so that we are able to deliver a versatile solution that addresses a wide range of needs.



What Are Biomass Feedstocks?



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Biomass feedstocks are materials which are burnt to produce a sustainable energy source in place of fossil fuels. At present, a large proportion of the biomass feedstocks used in the UK are imported, limiting the overall sustainability. There is an opportunity for UK farmers to provide alternative biomass in the form of agricultural residues (such as straw) and dedicated energy crops for domestic production and supply. This would not only make the process more sustainable, but also generate additional value for farm businesses and land owners.



Pelletising Biomass Feedstocks: Why do it?

The demand for biomass materials is rapidly growing in line with the desire to mitigate climate change and move away from fossil fuels. Raw biomass feedstocks in their natural form present a variety of barriers:

- They are large, bulky and difficult to store and handle
- Transport is expensive in relation to weight and thereby inefficient
- They have a low energy density

To overcome these limitations, the biomass feedstocks undergo a pelletisation process which produces a higher density energy source. Pellets are preferable because:

- They are uniform, compact and durable
- They are easier to store and move, requiring less space
- The biomass material is condensed so transport is cheaper and more efficient

A mobile pelletising unit takes these benefits one step further, allowing for smaller, decentralised processing and aggregation hubs to be deployed across the UK. It opens up the possibility for farms to enter a new market and access diversified and increased revenue potential without interfering with existing operations.



Want to know more?

If you would like more information, to discuss our innovation, or to join us on this exciting journey - please get in touch using the details below: