

# Wood Pellet Heating for the Mushroom Farming Sector

<b>Client</b>	CMP
<b>Mushroom Farm Size</b>	13 tunnel
<b>Biomass Solution</b>	200kW EcoCabin
<b>Boiler Manufacturer</b>	WES
<b>Date Installed</b>	August 2012

**Clune Mushrooms** is a Co-operative Mushroom Producer (CMP) member which supplies mushrooms to the UK retail multiples each week. Clune Mushrooms has decided to install a 200kW EcoCabin Pellet boiler solution. Clune Mushrooms annual oil bill was €60,000 for 2011.

During 2012 Clune Mushrooms evaluated various energy efficiency options i.e. Air Source Heat Pump (ASHP), Wood Chip and Wood Pellet Heating. In particular, the farm trialled an EcoCabin with a 100kW E-COMPACT Wood Pellet Boiler on seven tunnels. It also trialled an ASHP on one tunnel.

The results were monitored over a 4 month period (August to November). The running cost of the Pellet Boiler System over the 4 month period averaged €0.053/kWh (£0.042/kWh)

The ASHP during the same period had an average running cost of €0.047/kWh (£0.038/kWh). However the ASHP Co-Efficient of Performance (COP) varied wildly from 1.1 to 9.09 depending on the weather (which was un-seasonally mild for much of the trial period). As we approached November the COP was dropping considerably as temperatures dropped below 5°C. The ASHP had to be supplemented by the old oil boiler which had a running cost of €0.14/kWh (£0.11/kWh).

Clune Mushrooms concluded that wood pellet offered the cheapest most consistent running costs and has now installed a 200kW EcoCabin to heat his entire farm of 13 mushroom tunnels. The owner fully expects to halve his heating costs during 2014 by switching to wood pellet. There are no Government incentives like the RHI in the Irish Republic.



Truck bound for UK Multiple Retailers



E-COMPACT 100 in EcoCabin



# Mushroom Farming

## CASE STUDY

## Agri-Business

<b>Client</b>	Clunedarby Mushroom Farm
<b>Mushroom Farm Size</b>	9 tunnel
<b>Biomass Solution</b>	125kW EcoCabin
<b>Boiler Manufacturer</b>	WES
<b>Installer</b>	Michael Ryan (Martin)
<b>Date Installed</b>	December 2012

Clunedarby Mushroom Farm has a 9 tunnel mushroom farm and spent €56,000 on oil in 2012. He has recently installed a 125kW EcoCabin from WES and already has seen his costs reduce by 60%. The farmer installed a 22 tonne Silo and currently buys pellets at €190 (£152) per tonne. The EcoCabin is a pre-packaged plant room incorporating a 125kW E-COMPACT Pellet Boiler, 3000L of Buffer Storage, Plate Heat Exchanger and Pumps. The EcoCabin was delivered to site and the farmer's installer connected the existing heating system to the EcoCabin. There was no disruption to the heat supply to the farm.

January 2014

To all at Wood Energy Solutions,

I am happy to report that after 12 months of operation my 125kW EcoCabin has realised savings of over 60%. I spent €56,000 on oil in 2012 and in 2013 I spent only €18,500 on wood pellets. This has made an enormous difference to my business.

Many thanks for your support and your excellent technical support team.

Yours Sincerely,

David & Eileen Fryday  
Clunedarby Mushroom Farm



EcoCabin c/w 22 tonne fuel store



125kW E-COMPACT inside EcoCabin



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