COM-109472 To: Willy Patton[Willy.Patton@moypark.com]; Tom McKeown[Tom.McKeown@moypark.com] From: David Mark Mon 12/1/2014 8:34:11 AM Sent: Importance: Normal Subject: RE: hot water heating MAIL_RECEIVED: Mon 12/1/2014 8:34:11 AM to see the BHSL On Farm Litter Combustion Plant.docx Willy & Additional information from my report of the visit to in May 14 (attached) & (The was to see the litter burning unit - however the main learning's centred on & indirect hot water heating which is like for like with our installations in NI &&GB) & Firstly data from them indicating efficiency savings down to indirect heating based on analysis of the 9 crops before and 9 crops after heating system fitted: & (FCR sub 1.60 consistently – like for like improvement 0.056, 1.25 days and EBEF 17 points) This saving indicated a £0.02 saving per Kilo live weight produced. & Attached to that report I summarised my view on ways we may be able to reflect the savings from indirect heating into the costings. & The original justification was for a 15% energy saving however this has not been achieved due to all growers using wood to heat the system and therefore being driven to maximise pellet burned to gain more RHI - therefore we have to look at it differently over the original justification. & & Fuel Cost How do we get this data across the estate for the 2015 review and going forward - it gives certain challenges with growers

How do we get this data across the estate for the 2015 review and going forward – it gives certain challenges with growers looking to maximise fuel usage to enhance performance with no restriction on fuel cost due to RHI yield – therefore the traditional fuel usage calculation (formerly gas) will not be appropriate – perhaps a move to calculated heat requirement based on the current kWh in the gas allowance with an efficiency factor for the improvement in Hot Water Heating (15%) averaged across the group with the cost per kWh worked out on Chip cost and Gas Cost pro rata for estate usage.

&

&

COW - 1094/3
David
&
From: Willy Patton Sent: 30 November 2014 13:08 To: Tom McKeown; Barney Kay; Bill Bright; Angela Cully; David Mark Cc: Ian Dowsland; Alison Allen Subject: RE: hot water heating
&
Tom/Bill
&
&
The gas saving is based on a 15% saving (conversion to Kw Hours gas/pellet comparison) with 50% of the growers having converted, for claw back to retrieve this money the growers will have to have had a reasonable period on this system.
&
David/Tom - is the assumption reference the percentages and period reasonable
&
&
Thanks
&
&
Willy
&
&
& &
&
From: Tom McKeown Sent: 30 November 2014 12:11 To: Barney Kay Cc: Ian Dowsland; Alison Allen; Willy Patton Subject: hot water heating
&
Speaking to Bill Bright on Friday evening about returns on hot water heating systems.
&

He wants to be sure that the energy savings quotes of .217p/kg stand up.

&

Needs an answer by 10am. Can you review and contact him please.

&

Tom