

# Sheridan & Hood

175 Ravenhill Avenue,  
Belfast, BT6 8LE  
Tel. (028) 90732233  
Fax. (028) 90739333  
Email [sales@sheridan-hood.com](mailto:sales@sheridan-hood.com)  
Reg No. NI 12649

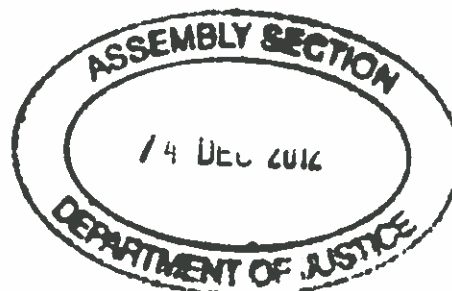
**CAG-01015**

**SPECIALISTS IN** *Attachment 1*  
Design & Build  
Electrical & Mechanical  
Heavy Engineering  
Renewables  
Warm Air Oil & Gas  
Boilers  
Office, Bank & Shop Fitting



27<sup>th</sup> November 2012

Mr D Ford  
Department of Justice  
Block B  
Castle Buildings  
Belfast BT4 3SG



Reference:- design weakness and cost overspend on Desertcreat training facility

Dear Mr Ford

Our company was asked to provide cost proposals for a tender submission on the above biomass energy centre. Regrettably, upon reading the documentation we could not comply with the specification as we use solely quality assured fuel sources being wood pellet whereas the consulting engineers had selected wood chip, a non quality assured product.

Quality assurance aside, because we could not meet the tender criteria laid down we had to decline to price the works. Upon our review of the energy proposals, within the documents in our opinion, severe weaknesses in the overall design compelled to explain our concerns. The weaknesses cause a needless and considerable capital expenditure as well as major running costs, the latter in our proposal could be turned into a profit rather than cost.

The biomass boilers selected in tender are 1Mw each therefore they fall outside of present scope for RHI support (we accept that future review of the RHI may encompass larger thresholds for biomass but there is no guarantee of that being raised). The running costs in respect of wood chip used for approximately 3000hrs per annum would be around £199,337.00 + VAT. We estimate the entire energy centre costs + extensive underground heating distribution pipe work but less the energy building itself, will be in excess of £1,500,000.00

Our proposal compliments the RHI (renewable heat incentive) scheme as well as encompassing major energy saving proposals using a quality assured fuel source being wood pellet and is based upon sound and proven engineering. Our proposal is to manufacture 99kw heating plants for ten of the twelve number buildings to be heated via the energy centre currently proposed. According to the engineering data we have received, 99kw will meet the largest proportion of demands for the ten buildings. The 99 models will be small in physical size and fit inside 3 car parking spaces, be of modern clad construction (review [www.bsholdingsltd.com/ppr.html](http://www.bsholdingsltd.com/ppr.html)) and therefore not be unsightly to be located adjacent to each building requiring heat. They being small in footprint should not prove insurmountable for planning adjustment and are fully acceptable to building control. The remaining two buildings will require larger heating plants but again similar arrangements can be made. These larger units will again meet the RHI incentive arrangements.

To keep a straight forward basis for calculation we have only dealt with the 99 models herein;

Directors: Stewart Hood Chairman, Brian Hood Managing, Lorna Hood  
Staff: Colin Boyd, Robert Brown, Jody Carroll, Edward Allan, Deborah Templeton  
Accounts: Tina Campbell & Sharon Hood Financial Controller

Factoring in the running costs for the RHI systems based again on 3000 running hours we see a fuel cost increase over wood chip of £14,409.00 bringing our total fuel bill to £130,494.00 for the year. The RHI income of £175,230.00 makes an overall profit for the scheme each year of £44,740.00\*. The twenty year term for the RHI should yield an income of approximately £894,800.00 in the RHI lifetime. The present system proposed by the consultants (again only dealing with 990kw of heating load) will cost £116,084.00 per annum to run with no means for recovery. This over a 20 year term would see your department spending £2,321,000.00 on heating when it is possible to have made a profit\* of £894,000.00, by using a different heat strategy that reflects a commercial world's thinking but retains the department's ability to maintain carbon emissions..

#### Facts pertaining to our proposal

Ten 99 units will receive maximum RHI funding of 5.9ppkwh  
 Two larger units will receive RHI funding of 1.5ppkwh  
 Improved security of heating having multiple modular boiler arrangements in each package plant rather than two boilers as originally designed.  
 Improved warranties on our proposed biomass boilers (8 years normal extendable to 10 years)  
 Wood pellet is a quality assured fuel, wood chip is not.  
 Oil or gas backup/top up has been taken into our proposals  
 No underground heating pipe work is therefore needed saving circa £200,000.00 + civil works in construction.  
 No underground heating pipe work means large savings in energy each year which would have been lost over the length of heating pipe work buried in the ground in the consultants scheme.  
 No large biomass boilers or oil boiler at a cost of £800,000.00 including chimneys  
 If the consultants scheme energy centre costs circa £1,500,000.00 our scheme, can save in excess of £500,000.00 on that capital amount by using our technological advances.

We urge your department to speak with us for a greater understanding of how we see delivery of heat to this project to make these savings to the public purse.

\*subject to reductions which would be future system design dependant

Yours faithfully  
 For SHERIDAN & HOOD LTD

  
 .....  
 Brian S Hood

Cc Mr S Wilson finance minister  
 Mr D Kinahan  
 Mr P McGlone  
 Mr R Hussey