FRASER AND SUN LTD
Tel; 01463 718257

BIOMASS CALCULATION
POTENTIAL SAVINGS & INCOME
GENERATION FOR NON DOMESTIC PROJECTS
APPROXIMATE
EVERY ONES USAGE CAN BE DIFFERENT

• CLIENT USES £15000.00 OF OIL PER ANNUM TO HEAT FIVE PROPERTIES INCLUDING ONE LARGE BUILDING

• APPLYING NATIONAL AVERAGE COST OF OIL AT 60 PENCE PER LITRE

• IF YOU ARE PAYING MORE FOR YOUR OIL THE FINAL FIGURE REACHED IN THIS EXERCISE WILL RISE

• WE CAN THEREFOR SHOW THAT THE BUILDINGS ARE USING 25000 LITRES OF OIL PER ANNUM
PELLET CONSUMPTION

• EACH LITRE OF OIL CONTAINS JUST OVER 10 KW HRS OF ENERGY SO WE SAY 11 FOR SAKE OF THIS EXERCISE

• USING THE ABOVE INFORMATION WE DERIVE THAT THE BUILDINGS ARE USING 275000 KWHRS OF ENERGY

• EACH TONNE OF PELLETS CONTAINS 4800 KW HRS OF ENERGY SO WE CAN DERIVE THAT THE ANNUAL TONNAGE REQUIRED WOULD BE 57.29 TONNES (ROUND TO 58 TONNES)
COST OF PELLETS

• EACH TONNE OF PELLETS CAN BE PURCHASED FOR £190.00 PER TONNE AVERAGE UK COST OF BULK DELIVERIES

• MEANING ANNUAL SPEND ON PELLETS WOULD BE £11,020.00 REPRESENTING A £4000.00 PER ANNUM FUEL SAVING (PLUS THERE WOULD BE A SUBSTANTIAL FURTHER SAVING BY THE FACT A MORE EFFICIENT APPLIANCE IS BEING USED IN THIS INSTANCE)
RHI PAYMENTS

• RHI CURRENTLY PAYING 8.3 PENCE PER KW HR ON TIER 1 AND 2.1 PENCE ON TIER 2

• FIRST 1314 HOURS PAID AT TIER 1 THERE AFTER 2.1 PRENCE AT TIER 2 / ANNUM

• TO DERIVE TIER 1 PAYMENTS SIMPLY MULTIPLY 1314 HOURS X OUT PUT OF BOILERS, IN THIS INSTANCE 184 KW = 241776 KWHRS AT 8.3 PENCE/KWHR MEANS ANNUAL PAYMENT GENERATED IS £ 20,067.41
TOTAL ANNUAL RHI INCOME AND SAVING

• WE KNOW THE ANNUAL ENERGY REQUIREMENT HAS BEEN 275000 KWHRS OF WHICH WE WILL BE PAID TIER 1 FOR THE FIRST 241776 KWHRS WHICH MEANS THAT THE ADDITIONAL ENERGY USED/REQUIRED OF 33224 KWHRS WILL BE PAID AT TIER 2 2.1P WHICH IS £677.70

• TOTAL RHI ANNUAL PAYMENT £20,765.11 FOR 20 YEARS

• ANNUAL COST OF PELLETS £11000.00
PAYBACK

• COST TO DESIGN SUPPLY AND INSTALL ENTIRE PROJECT £170,000.00 (INCLUDING CONVERSION OF OUT BUILDINGS TO BOILER PLANT ROOMS AND FUEL STORES (DISTRICT HEAT SCHEME, SO QUITE LARGE PROJECT)

• IF YOU ADD THE SAVING EACH YEAR ON RUNNING COST OF AT LEAST £4000.00 TO THE RHI INCOME OF £20,765.11 WE CAN DERIVE THAT THE PROJECT HAS A SEVEN YEAR PAY BACK THEN 13 YEARS FURTHER RHI PAYMENTS CAN BE ENJOYED BY BOILER OWNER