

SUBMISSION FROM HIGHLAND WOOD ENERGY

Renewable Heating from Wood Fuel

We are a Highlands based company working exclusively on the installation of automated wood heating systems (wood chip, log and pellet) heating systems. At present we are installing approximately 2-3 wood heating systems per month, either in domestic properties (mainly pellet stove/boilers and log heating systems) or in larger buildings such as leisure centres, offices, estate houses and industrial workshops (mainly wood chip heating systems).

To date we have installed approximately 1.5 MW capacity of wood heating systems.

Our company also provide consultancy services and assistance with the establishment of wood fuel supplies. We have assisted the establishment of a localised wood chip fuel supply in areas such as Skye and Lochalsh, Lochaber, Argyll, Badenoch and Strathspey and Aberdeenshire, as well the distribution of wood pellets to domestic premises.

Personally, I have been involved in the wood heating industry in Scotland since 2000, when localised wood chip fuel supply chains first began to emerge.

At present the wood fuel heating industry in Scotland is developing, though at a faltering pace and in a somewhat disjointed manner. The rate of development has recently been increasing due to a number of factors including oil and gas price hikes, greater awareness of the technology amongst architects, consultants, contractors and the general public, and the greater prevalence of localised wood chip fuel suppliers. A certain amount of grant assistance has also been available from a number of various sources.

A growing number of wood chip heating systems are being installed in a variety of buildings such as leisure centres, office buildings, social housing district heating schemes and care homes across the country.

Simultaneously, local wood chip fuel suppliers are emerging to supply these installations, and consequently, a reliable and low cost source of wood chip fuel is available in many parts of rural Scotland.

The beginnings of a wood pellet supply have also emerged, with companies distributing imported pellets (from Northern Ireland and Scandinavia for example) to primarily domestic customers with pellet boilers and stoves. (Though also for larger buildings where a wood fuel supply is not available or practical).

However, considering the potential for growth, this has been disappointing and due in no small part to the lack of a comprehensive and determined wood heating policy developed by government. The concentration of government policy on electricity (even though electricity represents a far smaller proportion of our energy demand than heating) has meant that despite the fact that wood heating is the most widespread form of renewable energy production in Europe, and despite our widespread timber resource, wood heating has not enjoyed a sufficient support framework in Scotland

The development of the wood fuel industry over last two years has demonstrated several positive points:

1) That wood fuel is extremely competitive in the heat market place

Even before the recent hikes in energy prices, the cost of wood heating has been very favourable against oil and electric heating.

With the recent price rises, wood heating is considerably cheaper than all traditional forms of heating, and significantly, approximately 50% of the cost of oil fired heating at today's prices.

2) That demand has increased substantially

The demand for wood heating has increased greatly over recent months. This is due primarily to the substantial increase in heating costs as aforementioned, but has also been intensified by a range of factors including the spread and consolidation of fuel suppliers, the

general awareness of biomass as a heating option amongst the general public, the carbon neutral aspect of wood heating etc.

3) That awareness of and satisfaction with technology is significantly increased

The successful installation of biomass heating systems has demonstrated the technology and increased awareness amongst the public in those areas.

4) That the viability of the fuel supply chains has been proven

A number of wood chip suppliers have been established in areas of Scotland, and have successfully demonstrated the viability of producing high quality woodchip fuel, and distributing this to local customers in these areas.

The emergence of a wood pellet supply has demonstrated the future potential for this form of fuel.

5) That rural economies benefit from wood heating

The development of the wood fuel industry in certain areas has visibly contributed to the local economies in those areas, with the jobs created in the fuel supply chain, and by adding value to the local wood resource, with a far greater proportion of the 'energy pound' spent retained within the local area. Additionally, having access to a lower cost supply of heating has benefited local energy consumers, both in the public and private sectors.

6) That wood heating helps eliminate fuel poverty

The establishment of wood chip district heating schemes for social housing projects and the installation of domestic pellet and log heating schemes (many with assistance from the SCHRI domestic programme) have shown how wood heating can help alleviate household fuel poverty, especially in rural areas.

From the development that has taken place to date, it is clear that wood heating in Scotland has significant potential which has hereto been largely untapped. The competitiveness of the fuel against alternatives in the heat market place and the economic success of wood heating projects to date demonstrates that a co-ordinated wood heating policy and funding frame-work would deliver unrivalled value for money within the renewable energy sector.

The socio-economic benefits of wood heating (by adding significant value to a low value resource abundant in many parts of the country) are well documented and have been underlined by the slowly emerging industry of localised wood fuel suppliers.

An 'integrated wood heating strategy' would encourage penetration of all sectors of the vast heating market, with locally sourced wood chip fuel (as the lowest cost alternative) exploited for larger single buildings and district heating networks in areas where a local supply is available, and wood pellet fuel targeted towards domestic premises (where pellet heating is better suited than wood chip) and other buildings in areas where a woodchip supply is not accessible.

Public procurement will be a key area in increasing the up take of wood heating, as in most rural and semi rural communities many of the largest buildings with the greatest heat demand are often under local authority ownership. Additionally, much of the housing stock lies within local authority or housing association control.

Greater commitment by local authorities and public agencies to wood heating will be invaluable, providing critical mass for localised wood chip fuel suppliers and enabling them to grow their businesses, as well as demonstrating viability to other heat users.

At present any such commitment is seriously lacking, due in part to little direction or encouragement from government level. The longer this continues, the more opportunities to expand the use of wood heating are being lost.

For example, with many of the Public Private Partnership funded schools building programmes currently underway in Scotland, wood heating is not being entertained as an alternative, and therefore this significant heat market and potential 'pump primer' for the wood heating industry is being lost.

With the culmination of several key studies, the Scottish Executive are currently considering implementing a support programme for bio-energy. With fossil fuel prices currently spiralling, and concern over security of supply growing, there has perhaps never been such a pertinent time to finally recognise Scotland's significant resource of widespread and low grade timber as a valuable, secure and low cost source of energy.

A support frame-work for wood heating will involve capital grants for the installation of wood heating systems (which are generally more costly to install than fossil fuel fired heating systems), awareness raising and possibly support for the renewable heating produced.

A concentration on the most efficient and effective means of generating energy from wood (i.e. producing heat on site from efficient wood fired heating systems) will ensure multiple benefits at a localised level for the country as a whole.