

Biomass for Business

Can Local Woodfuel Meet Growing Demand?

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In Partnership with;
Aberdeenshire Council
Scottish Enterprise

Log -



Wood Chip -



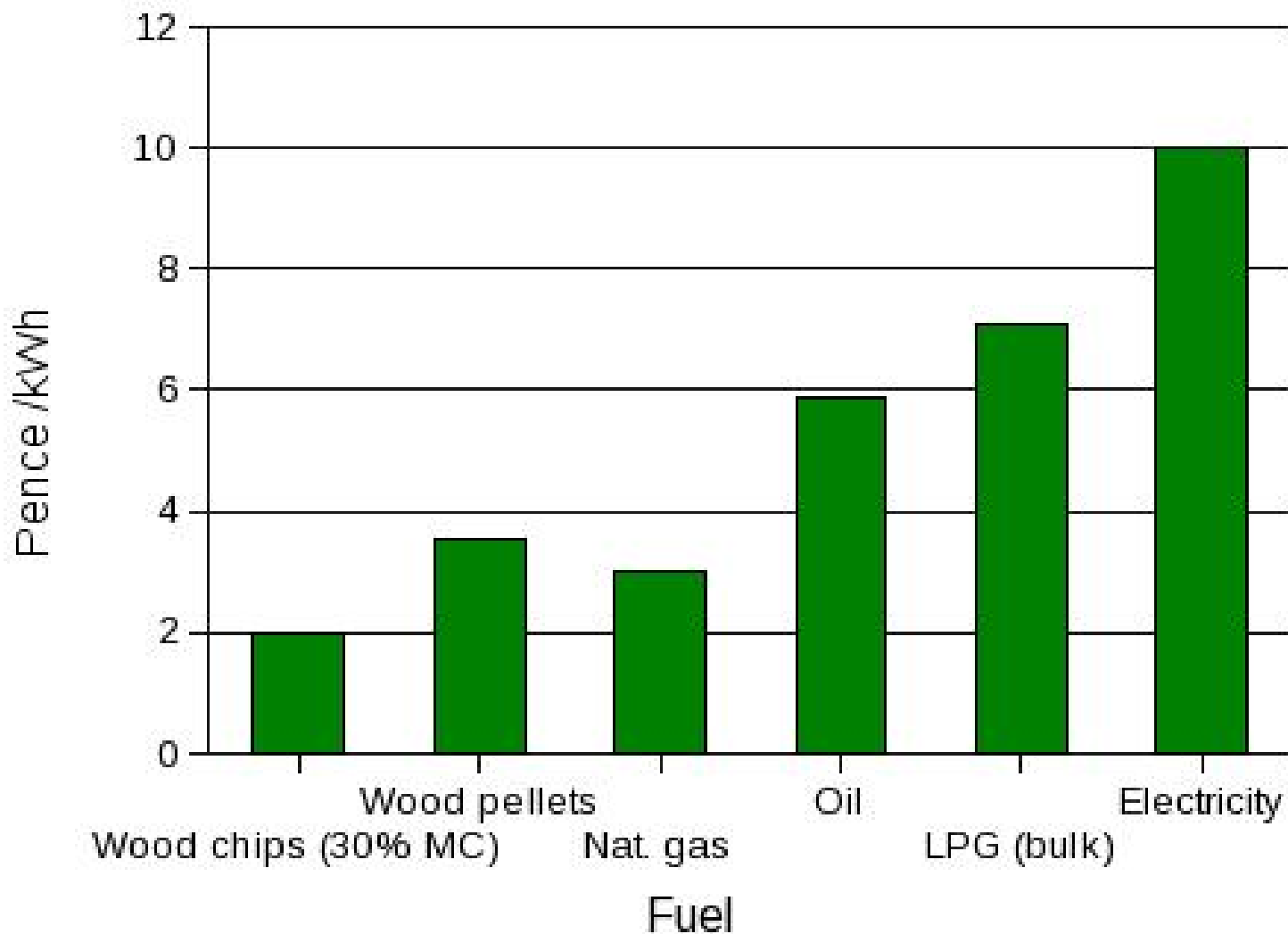
Pellet -



- **Cost**
 - The establishment of local networks of production and usage, allows financial and environmental costs of transport to be minimised.
- **Fuel Security**
 - Biomass can be sourced locally, from within the UK, on an indefinite basis, contributing to security of supply.
- **Carbon Reduction**
 - Correctly managed, biomass is a sustainable fuel that can offer a significant reduction in net carbon emissions compared with fossil fuels
- **Rural Benefits**
 - UK sourced biomass can offer local business opportunities and support the rural economy.

- **Land Management**
 - Woodlands, forestry and agriculture are generally perceived to be an environmentally and socially attractive amenity by the UK population, providing opportunities for recreation and leisure activities.
- **Pollution**
 - Many biomass fuels generate lower levels of such atmospheric pollutants as sulphur dioxide, that contributes to 'acid rain'.
- **Efficiency**
 - Modern biomass combustion systems are highly sophisticated, offering combustion efficiency and emission levels comparable with the best fossil fuel boilers.

Typical domestic prices for fuels



Graph: Courtesy of BiomassEnergyCentre.org.uk

Given the right circumstances woodfuel can compete with all other forms of fuel in terms of price and efficiency.

Fuel	Price per unit	kWh per unit	Pence per kWh
Wood chips (30% MC)	£70 per tonne	3,500 kWh/t	2.0p/kWh
Wood pellets	£130-150 per tonne	4,800 kWh/t	2.7-3.1p/kWh
Natural gas	2.5p/kWh	n/a	2.5p/kWh
Heating oil	65p per litre	10.2 kWh/ltr	6.4p/kWh
LPG (bulk)	38p per litre	5.8 kWh/ltr	6.6p/kWh
Electricity	10.5p/kWh	n/a	10.5p/kWh

- Aberdeenshire has 18% Forest Cover
- Moray has 28% Forest Cover
- 156,000 ha of Woodland in Grampian
- 124,000 ha of High Forest - Mature Trees
- Equates to 43 million m³ of timber

Long Term Production is increasing in Forest Sector

- Scottish Production Forecast is 6.9 million m³
- Rising to 8.9 million m³ by 2021
- The Grampian forecast increases in line with the rest of Scotland
- Currently the Grampian Forecast is 800,000 m³

Increasing use of harvesting residues.....



- The forest Sector can easily support considerable expansion in the use of small scale biomass technology.
- It's a question of scale!
- E.on power station at Lockerbie consumes over 500,000 m³ a year.
- The Scottish Forest Industry can only support 2-3 more of these scale developments.
- Yet for each Lockerbie, we can support 1,000s of small scale domestic and business installations.

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- Use Wood Fuel - usewoodfuel.co.uk
- Biomass Energy Centre - biomassenergycentre.org.uk
- Forestry Commission - forestry.gov.uk
- Forest Research - forestresearch.gov.uk
- Energy Saving Trust (SCHRI) - energysavingtrust.org.uk
- SRDP - scotland.gov.uk/Topics/Rural/SRDP