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Squaring the circle: the potential for biomass in Perth and Kinross

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Context

- ❖ The use of biofuels is well established in many parts of the world
- ❖ Limited use of wood products for heating in Scotland
- ❖ Time for change?

Context

- ❖ Demanding targets for greenhouse emissions
- ❖ Doubling of timber supply by 2020
- ❖ Commitment to sustainable development
- ❖ Concern with addressing fuel poverty

Wood Pellet Fuel

- ❖ Processed form of biomass fuel
- ❖ Made from a variety of materials – forest residues, sawmill co-products, recycled wood such as pallets
- ❖ 3 stage process
- ❖ Benefits

UK Experience

- ❖ Two pellet manufacturers
- ❖ Establishing large scale commercial customers was crucial to developments
- ❖ Barriers to the use of pellets
 - lack of an adequate supply and distribution network
 - higher installation costs to householders

Potential in Scotland

- ❖ Interest from a number of agencies
- ❖ 2003 Forest Industries Cluster Report
 - Potential marginal based on export markets
 - Need lower raw material prices
 - Examine domestic market potential, particularly in rural Scotland

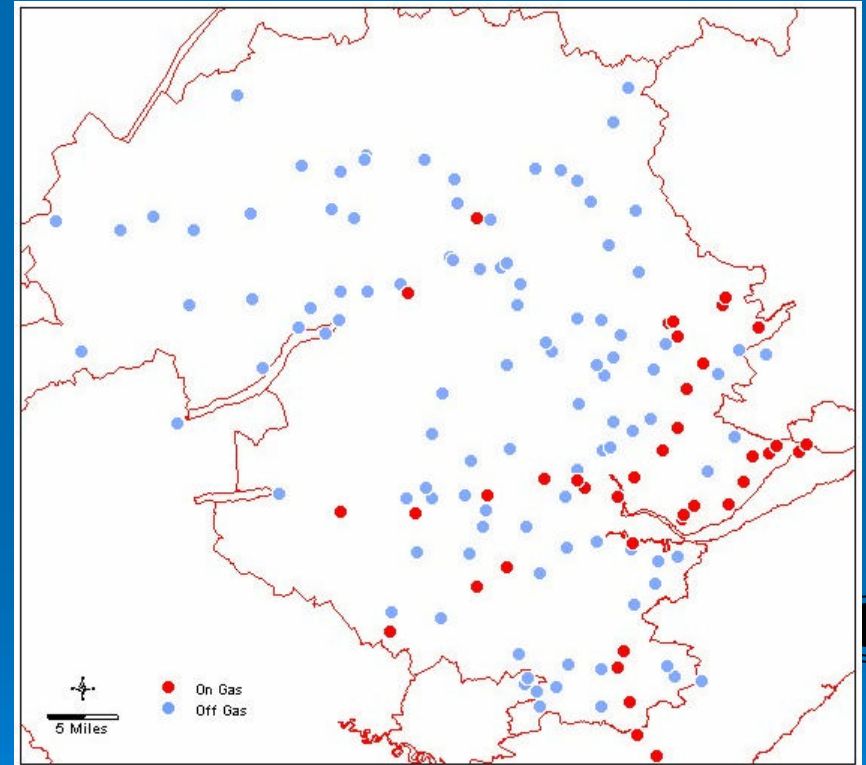
Perth and Kinross Wood Fuel Project

- ❖ To study the potential for locally sourced wood fuel to provide a means of increasing fuel choice and addressing fuel poverty in Perth and Kinross
- ❖ Attitude of residents to the use of wood pellets for domestic heating

Perth and Kinross Wood Fuel Project

❖ Methodology

- Collation and mapping of off-gas households
- Attitude survey of a sample of residents
- 5 focus groups in off-gas communities



Results

- ❖ Satisfaction with existing heating systems
 - *My house contained storage heaters when I bought it. They are not cost effective.*
 - *I have a new house with electric storage heating and a coal fire but I only use the storage heaters as the fire is too much work*
 - *I currently have a wood burning stove but it is not programmable and the stove and chimney need cleaning out*

Results

- ❖ Current attitudes to wood heating systems
 - *Old fashioned in a romantic way*
 - *A wood stove provides an alternative focal point to the TV*
 - *Getting wood is not convenient and I see it as dirty and messy*
 - *Cheap and dirty*

Results

- ❖ Reasons for using wood heating systems
 - *Carbon neutrality and local availability is important to me*
 - *Being a renewable resource is important – but we mostly burn hard woods not conifers*
 - *Wood is natural and totally non-polluting*

Results

❖ Views on use of wood pellet systems

- *Convenience certainly would be a bonus and if it is cleaner it is certainly worth looking into but I would need more details on the economic and environmental benefits*
- *Perhaps we have to think of what is sustainable. If you kept an open fire box as well as the pellet boiler, it would allow you to burn logs as a stand by.*

Results

- *As people become busier, they want systems that are more controllable - and as you get older people are less able to stoke traditional stoves. This is a great idea but what happens if the supply of pellets runs out and you have no other source of heat?*
- *Depends on the price*

Conclusions

- ❖ Well established technology – little known in Scotland
- ❖ Generally positive response from domestic customers in off-gas communities
- ❖ Seen as a leap into the unknown
- ❖ To stimulate the domestic market
 - a reliable local supply of pellets
 - demonstration projects
 - promotion of government support for capital costs
 - local commitment to use pellets in public building such as schools or community centres