

Meeting of Freeland Village Hall

Sustainability Sub-Group Friday 15th January 2010

Present: Martin Shann, Neil Edwards & Colin Smith

Colin will contact Martin Merritt to ask if he will join the group

Neil advised that under Energy Performance of Buildings Regulations the new Hall would obtain and display an Energy Performance Certificate. This requires a calculation to be performed using a standard software package SBEM. The SBEM calculation will create a notational energy rating (NER) for the building and then set an improvement factor (probably 24%), this will create the target energy rating (TER). It is this TER which the actual Village Hall building energy rating (BER) has to achieve. The NER is based on a standard building built to current building regulations, and improvements to the insulation, glazing alone may not be enough to get the BER < TER. It is likely therefore that other measures will be necessary.

The group discussed what measures might be available e.g:

- a. Insulation and Ventilation: forced/natural (noise- inside and out), heat recovery
- b. Solar hot water
- c. Ground source heat pump (COP to 6)
- d. Air source heat pump (COP 3)
- e. Photo-voltaics
- f. Biomass e.g. wood chip
- g. Wind energy
- h. Rainwater harvesting

A good general strategy seems to be to insulate to the point where it is economical to maintain the building at minimum temperature (12°C) when not in use, by means of underfloor heating driven by ground or air source pump. (note a specialist heat exchange company ICE Energy is based in Eynsham). Natural ventilation is preferred. An automatic control system to raise and maintain the temperature when in use will be needed

The next stage will be to create an energy model (?) for the building from the existing designs. Jo or Martin Merritt may be able to do this. Usage profiles will be needed.

Martin Shann will review the potential source of funds provided by Jo, download applications where available and list the application deadlines.

Neil offered to find some one who could do lighting/power scheme for the building.

Colin will convene a meeting of the whole group (including Martin Merritt) as soon as possible.