

T172 Video Notes

Band 1 – NHER Survey (Home Energy Survey)

One-third of all houses fall below required set standards for insulation.

Age of building is important.

Standard occupancy heating means using the heating in the morning, night and at weekends.

One-quarter of the CO₂ emissions comes from housing.

Band 2 – Green Homes

Houses account for 1/3 of all energy used in the UK and 1/4 of all CO₂ emissions.

Social housing in Newark – developing sustainable energy for the district.

Fuel poverty – people who can't afford to heat their homes.

Central heating a big loss of money. It isn't using it to its full potential.

Newark is aiming for a one pound per week for heating costs.

Adding insulation helps a great deal in the savings for heating costs.

The autonomous houses – Southwell a self-sufficient house for energy, waste, and water.

No central heating at all – solar heating with super insulation to keep the heat in is used.

Solar cells for electricity are used along with a composting toilet.

Green Millennium community – all energy efficient houses. They have three times the insulation of regular homes built today (under floor and wall cavity). Insulation is in the roof from recycled newspapers. Solar panels should provide 60% of the hot water usage. Double glazed, argon-filled low E glass windows. Uses materials that are of a low impact on the environment.

Cost is about 10% extra of a new house build. Can recoup cost when sold and in energy savings within a few years time.

Passive solar gain – using the heat provided in one spot to heat the rest of the house.

A balance between environmental features and what the buyers are willing to accept. Not perfect but the model is sustainable.

Steps to sustainability – it works but requires effort and commitment.

Earth insulation – moderates the house temperature. Super insulation minimises heat loss. Materials picked for environmental purposes. Energy needs to come from sustainable resources. Naturally occurring ecosystem to treat sewage. Each house commits itself to 16 hours a week to the sustainability of the community.

The lifestyle encompasses in so many ways different aspects of sustainability. Physical example of a sustainable community.

Need to change thinking – technologies are already there but have to get the people to embrace it.