



Susan Torrance

**Sustainable Housing
Design and Financial Issues**

Highland Housing Alliance



- What is the Alliance ?
- Company Limited by Guarantee
- Owned by the Highland Council and the developing RSL's and Trusts in the Highlands
- Set up to Land Bank - £ 10 million revolving fund
- Operational since 2005
- Acquired 8 sites – 450 units under active development, 2000 in pipeline
- Research and innovation objectives

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- Sustainable housing – physical attributes
- Components – items that can be easily maintained and renewed, with carbon neutral results
- Local materials, processes which do not involve environment harming chemicals or importing items with long distance transport requirements
- Heat and power – energy efficiency
- Water – recycling, use of rainwater harvesting

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- Sustainable housing – people issues
- Transport – public transport available
- Health – close to doctor's surgeries, hospitals
- Amenity, play, community facilities – hall, church, pub. Happiness factor
- Cost of housing – rent, mortgage, running costs
- Design of housing – extendable, storage space, regular sized rooms, well lit and warm
- Able to be used and visited by people with disabilities

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- All sounds worthy, but does represent additional initial capital costs - £ 1500 vs £1000 per sq m
- Availability of land that hits all sustainable community targets, rare – compromises
- Cost of housing rapidly becoming unsustainable
- Public agencies such as Communities Scotland are willing to fund innovation in sustainable components, etc, but must still work within cost guidelines. Aviemore project – worked because of access to land and public sector control.

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- Publicly funded affordable housing.
- Requires to be built to a set whole cost figure which includes land, infrastructure, house build and fees.
- High land values, increasing tender prices, difficult infrastructure means that funding for innovation is squeezed or difficult
- Housing Associations have however led the way in district heating, solar panels, biofuel, ground and air source heat pumps and solar gain.

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- Private housing market
- Whatever is built in the Park, sells
- Examples of good one off designs, small quality developments, but some standard products too
- Incentives to do something driven by other factors
- New building regulations, insulation standards, planning requirements for sustainability
- Government targets for housing to be carbon neutral

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- “To lower the carbon impact of new development...the DCLG will shortly publish the Code for Sustainable Homes which will set out levels for sustainability in homebuilding and challenge developers...”
- “It is the Government’s ambition that by 2016 all new homes will be “zero-carbon”, meeting the highest Code standard for energy efficiency.”
- “...an ambition for all new homes to be zero carbon within a decade with a time limited stamp duty exemption for the vast majority of new zero carbon homes.”
- “..in order to raise energy efficiency standards significantly beyond where they are now the industry will have to modernise production methods and innovate through employment of new technologies.”

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- Concern that this will merely raise the price of new housing still further.
- House prices in the Park for first time buyer homes already well above the affordability threshold for those on average wages.
- HSPC website – 24th May 2007
- No property in Badenoch & Strathspey below Offers Over £ 130,000 – not new build – ex local authority houses
- Offers over – selling 15 to 20% above
- £ 20,000 wage will not buy lowest priced new properties

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- So, how can we afford sustainability ?
- Value Management Exercises – sometimes marginal cost savings in fuel between installation of biomass, different types of insulation, solar etc. More expensive capital cost and long term payback periods compared with gas/electric
- Co2 emissions = major difference
- Major project required to give good neutral advice to householders
- Insulation alone often brings biggest benefits

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- So what will drive people to choose sustainable options ?
- Annual running costs – very marketable if low
- Biomass should give certainty of supply and diminish risk of fossil fuel price rises.
- Woodfuel pellets may increase reliability of boilers and decrease capital costs
- Concern for the environment – young people
- Grants – easy to obtain and cover bulk of cost
- Better mortgage deals for sustainable houses

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- All for nothing if land prices keep pushing up actual cost of housing – not sustainable
- Proposed Land Development Tax – give back proceeds to invest in sustainable options for housing built on the taxed land
- Investment in community infrastructure
- R & D for local solutions to biomass, solar, water, drainage and use of materials
- Plonking bit of timber cladding on a house, if from Latvia, may look green, but isn't

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- Example of non sustainable housing market
- San Francisco Bay Area Housing Crash – Google it !!
- “Prices still disconnected from fundamentals. House prices are still far beyond any historically known relationship to rents or salaries. Rents are less than half of mortgage payments. Salaries cannot cover mortgages except in the very short term, by using adjustable interest-only loans. Anyone who buys now will suffer losses immediately, and for the next several years at least”
- Interest only loans, long periods for payback, susceptibility to interest rate rises.
- Not so far removed from UK market