

Challenges, Drivers and Solutions for New and Existing Projects

SESSION 1 - Current issues in the sector

Graham Ross, Austin Smith Lord – Introduction to the Event

The purpose of this event was to provide an update on current Scottish Government policy and regulations with relation to meeting Carbon targets and to clarify how policies such as Designing Streets, the Architecture Policy and Building Standards come together to create and maintain sustainable buildings and places. It was also an opportunity to help individuals and organisations to make connections and/or identify mechanisms that will assist delivery.

Graham Ross set the context for the conference by mapping out the timescales for the recommendations of the Sullivan Report from 2009, which lead to net zero carbon in new buildings by 2017. This report provides signposts for future standards and takes account of the problem of dealing with the existing housing stock.

Graham also introduced the Climate Change (Scotland) Act 2009, which calls for an 80% reduction in carbon emissions by 2050 and as an interim step, 42% reduction by 2020. In addition the Government is committed to a policy of delivering:

- Low carbon electricity by 2030;
- Low carbon road vehicles, and significant electrification of rail by 2050, with significant progress by 2030;
- Low carbon heating by 2050, with significant progress by 2030, through reduced demand, better energy efficiency and a massive increase in renewable and low carbon heating systems.

However he also reminded delegates that sustainability is about more than just energy and carbon.

Sandy Robinson, Scottish Government – Opening Address

Sandy described the need to consider sustainability in terms of *living* sustainably and the role that people, their lifestyles and use of places play in this, rather than just 'eco-bling'. People are ultimately in control of how much carbon is used and should therefore be at the heart of our designs.

Given the current pressures on development, the question was raised as to whether design and place making are unaffordable luxuries? He argued that a multifaceted approach was needed as, historically, purely technical approaches to design of buildings and place have not always succeeded.



However, we should not forget that reducing demand for energy is something we can control. The Scottish Green House Gas Emissions 2010 showed that a high proportion of emissions are generated by transport (23%), fifty eight percent of these are generated by cars and vans. A high proportion of these journeys are for shopping and commuting. These are journeys that we can reduce through better design and placemaking and thus these form a key driver in policy documents.

Sandy explored the example of Livingston as a place whose ability to reduce carbon is low as it is not very well connected and encourages car transport rather than local connections. He demonstrated that car-led developments have significant impacts on our health and wellbeing. It is predicted that by 2050 almost 60% of the UK population could be obese. While 79% of journeys under one mile are made on foot, this is not always a possibility. This illustrates the benefits of designing walkable neighbourhoods that are compact and well-connected.

We also need to consider future places rather than just regeneration and how to achieve sustainable design without the large price tag. This was illustrated through Gokay Deveci's Model D House - a Passive House standard dwelling with low running costs that cost less than £900 per m² to build.

There have been various studies into the value of place-making including Savills Residential Development Study in 2010, which considered connectivity and value; and the Princes Foundation for the Built Environment – Valuing Sustainable Urbanism, which compares sustainable urbanism, old urbanism and standard urbanism. The results showed that development built through sustainable urbanism had the highest residual land values.

The Whitecross development near Linlithgow formed part of the Scottish Sustainable Communities Initiative competition as a case study for sustainable living. The winning proposal by Malcolm Fraser Architects, in partnership with Stuart Milne, includes 1500 homes, a high street, business centre and school

among other things. The competition criteria was for a 60% reduction in carbon as a minimum, good place-making and consideration of the financial aspect.

It is important to consider what the forthcoming regulations (in terms of Building Standards) means for the industry, but to also consider the wider issues such as transport, health, lifestyle and a holistic view of sustainability. Sandy concluded by stating that a place that is sustainable, in his view, is one that will last and endure, is low carbon and can support us as a good society.

Bill Dodds, Scottish Government – The Role of Building Standards in Supporting Sustainable Development

Bill Dodds covered the history of Building Standards in Scotland; the recent, current and proposed consultations on new building standards; and a summary of the Climate Change (Scotland) Act’s 2009 implications on non-domestic buildings.

Building Standards date back to the Fitz Alaynne Assize in 1189, which tackled issues such as noise and anti-social behaviour and traces of modern standards can also be seen in the Dean of Guild Courts 1292 relating to drainage and food waste. The main reason for the introduction of Building Standards was for health and safety reasons. These standards are still very relevant today especially with regard to sustainability.

Changes to the system were introduced in Building (Scotland) Act 2003 in a bid to make them more consistent, responding to demand for more design flexibility, to integrate sustainability issues and in response to EU regulations. As part of this, there was a further achievement of sustainable development introduced. There are various technical handbooks that explain these changes in more detail.

In May 2011 the Sustainability Labelling Standard was introduced for domestic properties as a mandatory standard with additional aspirational levels to encourage sustainable design and support of the climate change agenda. This includes a quick start guide to help homeowners understand how to use their home more sustainably.



Three-month consultations were launched in September 2012 for the following:

- Section 0 – General
 - o To take account of EU regulations in relation to durability and fitness of materials.
- Section 2 – Fire
 - o New standard and guidance.
- Section 3 – Environment
 - o New guidance for access, water efficiency, wind driven rain and waste.
- Section 4 – Safety
 - o New guidance on ‘climability’.
- Section 7 – Sustainability.
 - o Amended and new guidance introduced to expand labelling to non-domestic buildings. Schools are being used as a pathfinder for this.

Bill also described the review of the energy standards through a working group and associated research. The research investigated the Sullivan Report recommendations for domestic and non-domestic properties. The results of this research will be published along with the consultation in January 2013, which will give industry an opportunity to make their views known to the Scottish Government. These standards will be introduced at the beginning of 2014.

In addition to these changes to building standards, regulations for Section 63 (Non-domestic buildings) of the Climate Change (Scotland) Act 2009 are planned for 2013. These require owners /occupiers to improve their buildings at sale or rental. Consultation on these new standards will happen in the near future.

Finally, Bill also outlined plans for existing housing – Deputy First Minister Nicola Sturgeon had just announced £3.5 million of investment into 19 projects to retrofit existing housing stock. This launches a National Retrofit Programme that will see solid wall insulation, double glazing and central heating installed into older homes.

Duncan McLean, LUC – Sustainability from Macro-to-Micro Projects

Duncan discussed three projects to demonstrate the process of ensuring sustainability in projects of various sizes, through case studies that Land Use Consultants (LUC) have dealt with across Scotland , these being:

1. SURF (Sustainable Urban Fringes) River Don Corridor Spatial Framework, Aberdeen

The aim of this project was to add to the quality of life of users of the River Don corridor, as a means of dealing with the fact that riverside areas are often neglected places that evolve in an ad hoc manner. The site analysis showed there were a number of high quality green spaces, however the public realm and some green spaces were poor and development was separated from the river corridor by security fences. Housing developments contributed to the problem by turning their

backs to the river. An interesting observation was that the more affluent areas had better access to the river corridor.

The proposal was to link the gap in the green network and link core paths and public transport routes, creating a spatial plan for the next 10-20 years. This creates a vision and context for local development and is now supported by the local plan.

2. Shawfield Integrated Infrastructure and Development Framework, Glasgow.

This project comprises a brownfield industrial site, parts of which are vacant. The scheme proposes various landscaped areas, green corridors and amenity space in response to the relevant context including the River Clyde waterfront and a motorway. The scheme aims to create a strong pedestrian and cycling spine to improve connections across the site as well as nodes and points of interest to encourage activity and emphasise views. The masterplan has been granted planning permission and they are now looking at Phase 1.

3. Inverness City Centre Streetscape and Transportation Project

The key objectives of this project were to improve the pedestrian environment, which was poor due to high traffic flow and a poor mix of materials. Additionally the aim was to create civic spaces that act as destination points. The scheme included gateways into the historic core creating public transport only routes with shared surfaces to remove congestion and improve the pedestrian experience; additionally the public realm was designed to respond to the heritage of the city.

More pedestrian space was created by increasing the pavement widths; this has increased the street activity and people have started taking ownership of the space. In addition to the main high streets, back lanes were designed to reduce the pedestrian scale through material treatment and improve views. A local artist was involved to create public art for the main gateway space. This created a feature / focal point and creates destinations in its own right as well as encouraging pedestrian interaction.



Local materials were used including Caithness Stone for pavements. These were sourced 100 miles from the site, however, the granite bollards were sourced from China, but are effective in terms of being multifunctional – traffic management and seating.

Chris Hayes, Skanska – The Technicalities of Sustainability

As an example of how his company is tackling delivery of more sustainable development, Chris described Skanska’s Green Design Strategy and the associated colour palette benchmark approach to assess how sustainable a project is. The palette grades over three colours:

- Vanilla - Construction process / product is in compliance with law, regulations, codes and standards.
- Green – Construction process / product is beyond compliance but not yet at a stage of near-zero impact.
- Deep Green – Construction process / product is future proofed e.g. consumes zero net energy and produces zero waste.

Skanska aim to produce all schemes to Deep Green by 2015. Chris described how to achieve Deep Green, stating that this requires a mixture of process – how, e.g. sustainably sourcing aggregates and reducing carbon in manufacture; and product – what, e.g. reduction in energy use in the final product.

Chris described a number of case studies Skanska are involved in and how they are reducing their carbon / energy emissions (these are further detailed in the pdf of his presentation). He also set out Skanska’s steps to meeting future needs of sustainable buildings as: sharing energy through the creation of surplus energy; produce energy locally from renewable and otherwise wasted energy sources and; cut buildings energy demand by e.g. using insulation and equipment that is more energy efficient. A place to learn about such approaches is Vauban in Freiburg, Germany.



Q&A Session

Q. Land and Buildings Tax Bill – replaced tax duty – previously had zero carbon buildings listed, but no one claimed the reduction for zero carbon. But this financial incentive would have been good to keep.

All agreed.

Q. Clarify where Building Standards announcement leaves us with regard to the Sullivan Report.

BD – We are sticking with the Sullivan Report as the results were robust and were researched with regard to costs. The original 2013 aspiration of 60% for non-domestic buildings has been reduced to 30% and for domestic properties the 70% objective has been reduced to 45%. This is lower than previous aspirations, but a balance has been struck between the figures as the climate and industry is very different to 2007 when the original aspirations were set, also to align them with the desire to retrofit more properties. The Sullivan Panel is to reconvene to discuss aspirations for the net zero carbon for 2017 to explore how practical they are.

Q. New regulations – Any regulations would have to be implemented at the point of sale. A lot are better done as a whole building approach for economic and feasibility reasons. If a Housing Association sells one flat, do they need to do all the standards then?

BD – The triggers are sale or rental of a property but this relates to commercial buildings rather than domestic. We are hoping that there will be a cost benefit assessment done to find payback in the short term. It is not necessarily physical changes to buildings, but operations methods too.

Q. Targets are set by politicians, are they realistic and sustainable and is it possible to build and get a profit?

CH – They could stifle investment, but help people innovate. It can be done, we just need to think about it differently.

Q. How does policy compare between EU countries?

Scotland is 'Green'. The Sullivan report has a strong target and is innovative and forward thinking. The EU is ahead in how to drive standards e.g. passive houses.



SESSION 2 - Building Sustainably into New Build and Retrofit Projects

Karen Campbell, Homes for Scotland – The Benefits of New Build

Karen set out the challenges for house builders in meeting the proposed 2013 building standards. As the 2010 standards are already more than 70% efficient than the base year of 1990, Karen argued that we have very energy efficient homes already; so do we need to go further at this point in time? The Sullivan Report states that targets should only be increased 'if practical' to do so. Research undertaken by BRE for the Scottish Government states that the reduced Building Standards regulations to 45% can be hard to meet as associated capital costs are high, averaging about £1,711 - £8,700 per home to achieve these targets and £5,889 - £11,970 per home for the 60% reduction target.

There is also an issue with energy efficient homes not being recognised in mortgage assessments. An example she cited was the Scottish Housing Expo in 2010, which received 30,000 visitors in the one month. Despite its popularity, there were issues with understanding how to value and benchmark these energy efficient properties. Karen proposed that mortgages should be re-evaluated – as affordability assessments do not take account of the cost reductions of energy efficient homes e.g. reduced bills.

Currently there are competing priorities between a need for housing in Scotland vs. increased costs and availability of homes and housing values decreasing. Despite a clear need to increase housing output, in 2011 only 11,000 homes were built, half of what is required annually to meet the 450,000 required by 2033.

Karen outlined the Homes for Scotland proposal for a Retrofit Reward. She stated that builders are ready to build sustainable homes but are concerned about imposed costs. The proposed retrofit awards scheme would enable builders to build to new building standards or, to build to 2010 standards and pay a financial contribution to retrofit existing homes.



Key summary:

- Housing output at lowest level since 1987
- Increasing energy standards on new build homes = diminishing returns
- Upgrading existing homes = cost effective solution
- Retrofit Reward for greater impact on the built environment



A report by Dr Mohammed Imbabi of the University of Aberdeen studied the impact of changes to Building Standards. This report is currently under review by the Scottish Government. Some of the results suggest that there are only small gains by the new building standards and that they would diminish returns for house builders. It has been calculated that it would take over 500 years to get a return from the 45% standard on domestic properties. The money reward scheme would be targeted at those in the worst fuel poverty. This would join the pipeline of existing mechanisms in place rather than money going to setting up a new scheme.

Colin Reid, GHA Sustainability Manager – Retrofit for Results

Colin began by explaining how GHA’s £1.3 billion investment since 2003 has benefited a significant number of households suffering from fuel poverty. The investment has been focused on retrofit through external cladding (which deals with residual damp issues and provides a visual statement of regeneration) and consequently reducing energy bills, on average, by £333/year. The programme is contributing to the Scottish Government’s target to eradicate fuel poverty by 2016. Colin set out other energy efficiency targets set by the UK Government that need to be met including: home heating costs reduced by £4.2billion by 2015; replacement of 12 million boilers by 2022 and; non-domestic properties Energy Performance Certificates should achieve more than E by 2018. Some of which may be hard to achieve for example the requirement to meet rating E should be done prior to re-rent or sale. On average commercial properties stay in a property for 3 years, this equates to 100,000 properties that would need retrofitting before 2018.

There are investment support finance schemes that can assist in the delivery of these measures including:

- Energy Company Obligation (ECO);
 - o ECO £1.3 billion
 - o Affordable Warmth £325 million
 - o Carbon Saving £975 million
 - o Carbon Communities £190 million
- National Retrofit Programme;
 - o £60 million from the UK to The Scottish Government
 - o Up to £200 million total annual (UK)

Colin went on to describe Shawbridge Street - a scheme developed by GHA. This development was scheduled for demolition but was reallocated for rent in ShawlandsTRA. The



scheme had 40 electric storage heated flats, which were within the lowest 5% of the Scottish Index of Multiple Deprivation. The flats were single glazed, had a flat roof and an average EPC of (E) 43. GHA fitted external wall insulation, double-glazing, enclosed balconies (for solar gain) and recycling nodes among other energy saving aspects. The final result scores highly on the BREEAM Refurbishment of Domestic Building 2012.

Colin concluded by stating the challenges that ECO and NRP can pose, these being:

- Internal works – staff must be ‘approved installers’;
- Partnering with supply, industry, utilities RSLs and Local Authority;
- ECO funding method preference;
 - o Single Agreement
 - o Calculated per project
 - o Brokerage
- Stock Profiling up to 2015.

Alex Brown, Nordan – Lessons from Scandinavia

Alex discussed the lessons learnt from working with timber builders in Norway. There are some lessons to be learned from the comparable nature of the countries environment and their decision to stick with tradition and continue building timber clad buildings, including window frames.

Nordan’s vision was to discover how to make timber windows sustainable and durable in all weather conditions. They did this by reconsidering the design of the timber frame and its ability to let water in and drain away. The subsequent changes in design and materials produced a more efficient design that stopped rot, reduced heat loss (use of thermal glass) and created a more sustainable product. These windows were installed in Stirling University and the heat loss was compared with existing windows.

In 1989, the Nordic Council of Ministers decided to introduce a common, official environmental label. The Nordic Swan is now one of the world’s most successful eco-labels and has been followed by the EU ‘Flower’ eco-label. An example of the Swan’s consideration is a product’s impact on the environment from the raw material to waste i.e. throughout the product’s lifecycle.

Panel Session

Q. Stuart Milne Homes – How do Scotland’s Building Standards rate compared with other EU Countries?

KC – Scotland’s standards are ahead of England.
 BD – Scotland’s standards are comparable to Scandinavian countries.
 CR – England and Wales build to the Code for Sustainable Homes (CSH) Level 3, which is a 25% reduction in carbon, whereas Scotland’s equivalent is a 30% reduction. GHA build to ECO very good standards.
 Iain Robertson – The leagues show Scotland is in the middle of EU countries, Germany and northern countries / Scandinavia are high.

Q. John Gilbert Architects– The Homes for Scotland Retrofit Reward is a persuasive retrofit proposal. What money is contributed to the reward and how much is actually needed to retrofit?

KC – There is currently a debate on the value of the contribution as it needs to be meaningful to meet the standards and can’t disadvantage the sale of properties. There is a cost impact to meet the new Building Standards so it is introduced as a way of encouraging the building of homes to continue.
 CR – A word of caution, ECO Valuations are not fixed. They can be as much as £8800 per property. For the NRP scheme £1 is given for every £2 contributed, in the long term it would pay for itself. Also photovoltaics and heat pumps are eligible for the feed in tariff. Some companies offer free installation of photovoltaics as they can claim the amount on the feed in tariff.

Q. Deborah May, RIAS – Politics impact these schemes. There are good targets for carbon emissions yet the deterrent is GDP – no incentives for repair and retrofit. There is a new global definition of GDP to meet global targets, so this should result in the removal of VAT from materials for energy efficiency in retrofit, for example.

CR – UK Government currently in disagreement with the European Commission regarding this – the EU still argues that there should be full VAT on materials and not the 5% that the UK Government is arguing for. CR agrees should be zero VAT.
 BD – UK Government sets the level of VAT.
 DR – Threat of informal economy – neutralisation of VAT between new build and VAT.



Q. Are there case studies to support this?

KC – Need financial incentives – money talks. Need more people demanding energy efficient homes. More competition for energy efficiency would help retrofit. Stamp duty rates not yet decided so hopefully incentivise. Council tax would be very powerful if revenue neutral; would have to charge more though.

Q. Neil Phillips – There is a lot of talk about new buildings and nothing about district heating even though there are benefits from this form of technology.

CR – Shawbridge did not use district heating because it had concrete flooring and it would have been too costly to install. Currently in discussion about funding for district heating and fixed charges for households and an appropriate billing mechanism as it is not yet affordable e.g. £18/month standing charge and that’s without any heat. Biomass is also a good mechanism for increasing the carbon you save and could reduce costs. However, in Edinburgh you are not allowed to install biomass plants because it is an Air Quality Management Area (AQMA) as is Glasgow although they will accept if an Environmental Impact Assessment (EIA) has been carried out. A heat mapping exercise is currently underway to help scale up existing district heating and increase benefits through economies of scale.
 CH – Scotland’s Low Carbon Investment Conference illustrated the state of the market – open market, residential properties aren’t necessarily good users of heat. New industrial and residential development – houses are run by individuals who like choice – you have to have district heating schemes for 15 years for them to be viable for the community. People also often move house regularly so it doesn’t work and isn’t feasible. Need to make sure you have the right technology and the right user for it to work effectively.

Q. How will we meet the targets?

CH – The issues are in the construction process. Construction Skills Council received funding to teach about green building, why its good etc and general raising of awareness. Passive homes need people with the right skills to install them correctly. There is a skills gap in awareness and training.
 KC – Construction Skills Scotland – future skills agenda. No new trades needed necessarily, but a tweak to existing e.g. how to install photovoltaics on roof. KC concerned with the length of apprenticeships and the need to train now and perhaps that isn’t happening. 70% green agenda not changed the way we deal with skills / training.
 CR – GHA would overclad buildings, are there enough skills to do this? GHA have 50,000 properties. How are we meant to do the 1 million properties expected? Trading standards – there are ancillary and preparation works that need to be done in order to get the green deal – will these be missed? Are they aided? Are there skills there to do it?
 AB – Few comparisons in the UK because there is a low retention of skills. Talent potential is critical. There is a need for apprenticeships where the UK has failed need to look at the future generation.
 BD – As building standards are more advanced there are concerns for developers and there needs to be a wide

dissemination of information. It is important to understand how to look after our built heritage – we had existing skills but we are beginning to lose them. Information is available e.g. Building Standards has made a technical information pack to teach about cavity wall insulation in timber frame buildings.

SESSION 3 - Funding Future Projects

Scott Restrick, Energy Action Scotland – Financial Market Transformation and the Green Deal

Scott outlined the Green Deal – a financing mechanism and a framework of advice, assurance and accreditation for the energy efficiency supply chain for homes and businesses. It is a method of enabling the cost of installing energy efficiency measures to be financed through a charge attached to a properties electricity meter (hence it is not a personal loan). It is estimated that eighty properties will need to be retrofitted every hour for the next 20 years to meet government targets; the green deal is seen as a stepping-stone to meet these targets as it allows multiplying up rather than a one by one property approach.

The Green Deal can be a complex process as there is a lot going on and a lot of parties are involved in the process. The scheme started on the 1st of October 2012. The first deal is likely to happen at the end of January 2013.

Previously standards were not necessarily consistent across the construction industry as they depended on the company doing the work to ensure the standards were met. Now the Green Deal integrates industry wide standards. Advisors will be qualified under National Occupational Standards for Green Deal Advisors and use an approved Green Deal Assessment tool – domestic – Reduced Data Standard Assessment Procedure (RdSAP) and non-domestic – Simplified Building Energy Model (SBEM). This provides an assessment of the measures which could be installed in a property; the estimated energy savings that they would achieve and; the likely eligibility and level of Green Deal finance that could be accessed to cover the cost of their installation.

All new EPCs for sale or rental purpose from October 2012 in Scotland will be lodged as Green Deal ready assessments. This gives an indication of the recommended measures such as cavity wall insulation; the indicative cost of such a measure; the typical savings over three years; rating after improvement in terms of energy and environment; whether it is available with Green Deal and; if additional finance may be required – the Energy Company Obligation can be used in certain cases to bridge the funding gap, although this is for the domestic sector only.

Scott stated that there is a ‘golden rule’ for the Green Deal which caps the charge placed on the electricity meter, is an important principle of the policy. It states that bill savings in the first year must exceed the Green Deal repayment and that



the repayment term must not exceed the expected lifetime of the measure. Although there are no Green Deals yet, it is expected there will be a 7.5% repay rate.

Scott also touched on the Carbon Emission Reduction Obligation and Carbon Saving Communities Obligation (CSCO), but there was insufficient time to discuss this. The associated slides are included for completeness.

Bruce Newlands, Kraft Architecture – Alternative Funding Models – What is available?

Bruce discussed Kraft Architecture’s aspiration to create a Sustainable Construction Product development programme, i.e. a closed loop process of production that results in zero waste materials. These would be developed through material resource and use and up-cycling materials. Bruce illustrated this through the example of Thermabond – a building insulation product made from recycling textiles and went through the various stages:

- Waste - the waste was collected from a post-industrial source – woollen mills, where up to 4000 tonnes a year of waste material is produced. Half a tonne of insulation is needed in new homes at 2013 standards; hence this waste could be a sustainable means of meeting the targets.
- Gathering - Social enterprises already collect these materials to divert their transportation from landfill.
- Processing - Kraft Architecture had to learn more about this stage, taking a fabric first approach.
- End Use – Use for loft insulation to tackle fuel poverty, reduce CO² emissions and add value down stream. Twenty five percent of heat in a home is lost through the roof and is the easiest place to tackle first.

Bruce went on to discuss the difficulty in developing the process / cycle to reuse materials. This included feasibility studies to identify waste streams and market analysis; prototyping to produce a technical specification and identify manufacturing partners and suppliers; product testing through UKAS Accrediation and applicable standards and finally commercialisation as the product needs to compete with other

main stream products in the market e.g. those used in social housing, while also having low carbon credentials.

Academic funding was available to support early scoping to allow exploration of the technical feasibility of Kraft's ideas using Glasgow Caledonian and Edinburgh Napier University's expert advice. Kraft was also successful in applying for a £45k SMART Feasibility Award to develop an off site 'homegrown' timber frame and a natural fibre insulation. This included a 9-month research and development programme in March 2010 to prove the technical and business case for the product.

The initial findings showed a number of woollen mills across Scotland, most concentrated around the central belt. Many generate 50-100 tonnes of waste a year. The funding helped carry out feasibility reports and produce a prototype, learning from French manufacturing methods. The product met conductivity and building standards and is ready to manufacture. They found that all sorts of fibre could be used including wood fibre, feathers and mattresses. The hardest stage in the process was the commercialisation – who would back the produce to mobilise it and buy the machines, etc.? Zero Waste Scotland invested their Capital Investment Fund to invest in machines.

Next steps include testing the feasibility of a variety of Scottish Waste Fibre streams, moving beyond post-industrial textiles into other industrial waste streams, wood fibre and cellulose.

Nigel Tyrrell, Unity Trust Bank – The Role of Specialist Banks in Development Funding

Nigel began by outlining the Unity Trust Bank's background as a joint venture between the trade unions and Co-operative Bank formed in 1984. The bank is independent and is a values-led organisation meaning they consider the social responsibility of an organisation before giving a loan i.e. what is the social impact if we give a loan? E.g. if it is for a local charity, it will have a positive impact on the local community. Nigel described their key driver - to be the Bank of choice for wholly UK-based organisations in the social economy, aiming to be a force for the common good.

Nigel went on to describe the cornerstones of their proposition being: safety and security; one-stop-shop (handle all day-to-day banking needs); walking the walk (a social enterprise whose business model is built around the sector) and; award



winning service. Unity Trust Bank's target market is those with a loan requirement of less than £5m and a preferred loan finance of straight housing/ units purchase which are completed within 6/9 months. These loans are secured by existing, unencumbered housing stock.

David Ross, Fife Council – Alternative Funding Models Case Study

Fife Council has a target of 2,700 new affordable homes to be built over the next five years. These are not housing association or council build – instead work with the private sector to deliver these and look at funding sources. He set out various tasks that need to be considered:

- Need and demand, people want and can afford these homes/ new areas – mid market rent properties form part of this.
- Design and construction, insulation and heating price isn't lower but comparable with traditional homes – look at rent levels vs. energy costs. Put rent high and overall building costs will remain stable.
- Deliver vehicles, go into partnership with developers.
- Barriers, planning and procurement rules in terms of being able to go into partnerships.

There has been a review of Fife Council's thirty-year business plan. Fife Council has the largest housing stock in Scotland and hence is a large asset. The key question is how do we look after this?

- Favourable Borrowing Costs;
- Management and Operational Efficiencies;
- Realistic Assessment of Risks.

David illustrated this through two case studies:

1. West Port Cupar with Kingdom Housing Association

Part of the site has 21 units for rent, 9 of which are mid-market rent David discussed the issue of whether it was fair for those moving into a new house to have low rent and pay reduced energy costs so there has been an 'in principle' agreement that these new homes should have a slightly higher rent. This increase in income stream can go into investing in new homes and improvements. Seven are for sale after 5-10 years with two more retained for rent. The local authority guarantees some rent for a period so that the properties can be passed onto local authorities / housing authorities so that builders get some guarantee of a return. Fife Council is also looking into deferred housing costs.

2. Rosewell Drive, Lochore Sharp Homes and Ore Valley Housing Association

This housing development was going to be refurbished but instead 31 new homes were built. Private funding was provided by Sharp Homes for the construction. The houses were built on existing foundations to reduce building costs. The scheme might be able to attract pension funding because of the scale of the development.

Q&A Session

Q. Susan Torrance – Scottish Federation of Housing Associations – The recent launch of the funding for lending scheme (FLS) should help guard against a contraction in lending over the next 18 months and, if the external environment is sufficiently supportive, should underpin the housing market and support the government’s wider growth agenda offering finance at a low rate of 1.75% - is the Unity Bank signed up to this?

NT – No, they are not involved – this type of EU funding is focused towards the larger banks.

Q. Neil Phillips - Loans for Green Deal are paid by savings in energy bills attached to the electricity meter. Utility supplier collects the money, what if the supplier changes, how do you cope with the transfer of the loan?

SR – This was the reason for the delay in the process. Separating out of suppliers income stream is difficult. Supplier of energy – National Grid, transfer, calculate additional fees to meter, doesn’t matter who the actual supplier is. The Green Deal charge should be separately itemised on the bill. It is a separate and isolated process. The rules of engagement are publicised but not in place until March 2013.

Lori McElroy – Closing Address

Lori closed the event by summarising the various discussions throughout the day. Session 1 introduced Scottish Government Policies and Legislation in relation to sustainable places and buildings and demonstrated how the industry is responding in terms of delivering against the targets set down within the regulatory framework. A key point was the use of case study material to illustrate the difference that these policies can make when working with an enlightened client / local authority in terms of transforming not only how places look but also how people use the spaces thus created and the knock on effect in terms of positive socio-economic sustainability outcomes.

In session 2 the focus shifted to the domestic housing market – which was timely given the ministerial announcement, regarding the up-coming changes to the building regulations.



A key point was the fact that the new and existing housing markets and fuel poverty and the low carbon agenda shared the same platform. This provided an often-missed opportunity to make comparisons and explore trade offs that could need to new ideas in existing communities (as opposed to the regurgitation of old ideas in new developments). The fact that we were unable to cover the non-domestic markets in the same depth was acknowledged, but we will be running more seminars/ follow up round-table discussions and would welcome feedback on topics for next year.

Session 3 covered funding and resourcing of energy efficiency and accessing funds for innovation. A key theme was the gradual emergence of new opportunities post the economic downturn and how this and a ‘can do’ attitude is slowly turning things around.

Presentations

The speakers presentations are now available online at <http://www.ads.org.uk/sust/news/a-ds-building-sustainably-conference-presentations> for you to download.