

**Title:** HOMES THAT DON'T COST THE EARTH  
A CONSULTATION ON SCOTLAND'S SUSTAINABLE  
HOUSING STRATEGY

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## INTRODUCTION

Scottish Land & Estates is a membership organisation that uniquely represents the interests of land based businesses in rural Scotland. Many Scottish Land & Estates members have significant housing portfolios and therefore this consultation is of significant interest to the organisation. Our membership, which numbers around 2,500 in total own and manage some rented houses in rural Scotland. This housing stock, along with that of estates who are not members but have similar issues and concerns, provides the core of affordable housing in rural areas.

We very much support the general aim of improving the quality and warmth of the housing stock in Scotland and welcome the opportunity to provide comments on the Scottish Government's consultation "Homes that don't cost the earth: A consultation on Scotland's Sustainable Housing Strategy".

## QUESTIONS

### BACKGROUND

**Are the vision and objectives as set out in sections 19 and 20 appropriate for Scotland's Sustainable Housing Strategy? Please answer Yes or No and provide further explanation if you wish.**

**Section 19** the vision, taking each bullet point in turn:

- **Yes**

A step-change in the provision of energy efficient homes is required, but the challenge is how to fund it equitably and on a tenure neutral basis.

76% of the houses in Scotland are owned by Private Owners (POs). Each owner will need to think that it is a good investment to make. The problem is that the previous and current energy efficiency support regimes are not balanced between tenures or locations. It is known in particular that rural areas start with some significant disadvantages.

The funding and support measures announced as part of the Green Deal (GD) and especially the Energy Company Obligation (ECO), along with the economics driving the implementation process will only be partly tenure or location neutral. Hard to treat privately owned (PO) housing stock or stock in the Private Rented Sector (PRS), especially dispersed individual houses located in rural areas will still be at an economic disadvantage in comparison to concentrations of flats / Social Housing in urban areas.

The delivery of GD/ECO will be done in the market and subject to normal economic pressures. Energy Companies will be trying to

optimise the cost/benefit ratio in terms of the cost per tonne of CO<sub>2</sub> saved. Rural locations are likely to lose out because the identification of houses, administration, travel costs, difficult house types etc. will all cost more than the social sector and urban areas. So any increase in the level of energy efficiency standards that does not also receive equal funding support appropriate to tenure, location and situation will mean that the overall policy will **not** be tenure or location neutral and people in the private sector will perceive that they are being treated unfairly. Individual households will need to be persuaded that investment in energy efficiency is a good use of their resources and engaging people using the **voluntary principle** is most likely to generate and keep the support of owners. Any regulation(s) should be sensitively created and only used as a last resort.

- **No.**

The Fuel Poverty Forum reports indicate that it will not be possible to eradicate fuel poverty by 2016. This is because fuel poverty is a relative condition, 10% of income, that is heavily influenced by fuel prices, income levels and only partly by energy efficiency. Also the occupier comfort (indoor temperature) levels chosen do not seem to be based on evidence of direct health benefits. The occupier comfort levels chosen for Scotland are also higher than in England. The high occupier comfort levels therefore trigger “fuel poverty” quicker in Scotland.

There is also a need to treat the PRS fairly. The PRS occupies a number of key market segments, only some of which cross-over with the Social Housing sector. There has been a historic imbalance in public funding between the PRS and the Social Housing Sector, even for those cross-over parts of the market. The Social Housing Sector has been given significant public subsidy to achieve high standards of repair and insulation, as is shown in the improving results in the Scottish House Condition Survey (SHCS).

80% of the houses in the PRS are in single ownerships, one house is owned by one family. Insulation requires a monetary input. When a house is insulated, the tenant then has the opportunity to increase thermal comfort levels, which are a non-monetary output. It is estimated that up to 40% of the increased energy efficiency created by the investment is taken back in increased comfort levels. This is known as the “re-bound” effect. There is no evidence that tenants are able or willing to pay higher rents for the increased levels of comfort.

If the Scottish Government introduces mandatory standards for energy efficiency, there is the potential for those regulations to transfer financial resources from the landlord to the benefit of the tenant without any increase in rent. Also because of the “re-bound effect” that investment

may only achieve 60% of the potential CO<sub>2</sub> savings. There is a lack of fairness in this situation. These factors combined make the policy unachievable. This is therefore not a sustainable vision.

- **No.**

There are aspects of the strategy that are sub-optimal. There are a variety of underlying conflicts between the fuel poverty and CO<sub>2</sub> emissions reduction policies that need clarified. For example, included in the strategy is a fund for extending the gas grid. Gas has a 92% market share of the domestic heating market. In terms of energy security this dependence on and promotion of gas is not in our long term interest.

Another example is the way that electricity is treated in the Reduced data Standard Assessment Procedure Energy Performance Certificate (RdSAP/EPC) system. At the moment most electricity is produced using fossil fuels that are inefficiently transmitted over the grid, so it gets both a low RdSAP/EPC Environmental Impact rating (EI) and a low Energy Efficiency (EE) rating. However, especially in Scotland, electricity is likely to be increasingly produced through renewable sources.

This improvement could be within the lifetime of housing investments made today. Electricity devices are also cheap to install and easy to control and deliver 100% of their output at the point of use i.e. in the debate over the costs of improving thermal comfort levels they have some good points. Also innovations are happening that will: significantly increase the efficiency, reduce the cost of electric heat storage devices, and through SMART metering devices better manage the balance between the supply and demand for the intermittent renewable electricity now being produced.

At some stage the RdSAP software will then be updated to include the new efficiencies but the positive signal to the market, through the EPC, will only come in dribs and drabs on sales through the Home Report, or once in 10 years on the EPC cycle for the rented sector. All current EPCs will still show the poorer historic performance. This is not an efficient way for such significant structural change to be communicated to the housing market and consumers of energy.

So considerable care will be needed not to introduce regulations which stifle innovations. This example also illustrates how there could also be tensions between short term and long term objectives and policy clarity integrating all these factors will be needed.

In general relying on RdSAP/EPC to give the correct signals to the market may not be appropriate, because even as revised for Oct. 2012 RdSAP/EPC does not take account of all energy efficiency measures, or

give fuel price information. It is also not a transparent “user-friendly” system that assists owners to assess the costs and benefits of different measures easily. Also in relation to rural houses it actually discriminates against some cheap to run renewables e.g. firewood and other biomass heating systems. So significant investment is needed in the RdSAP/EPC system to make it “fit for purpose”.

- **No.**

Experience with previous government schemes, or those run by large corporates, is poor. The schemes are complex and difficult to understand. In terms of delivery there are a significant number of examples of poor quality: project management, reporting of information, technical specification, workmanship, misleading sales information, etc.

In particular the necessary role of the owner of properties in both private houses and PRS determining appropriate long-term sustainable options for their buildings has not been recognised. Landlords both from the social and private sectors should have a key role in deciding whether a project should go ahead or not. Landlords gain title to equipment and materials when installed. This means that they also take responsibility for any consequent problems.

They also have a continuing duty of care to tenants, especially in relation to indoor air quality and the risks associated with inappropriate insulation, air tightness and ventilation, which can quickly result in condensation, damp, mould and consequent health problems.

Our suggestion is that as well as GD/ECO and Scottish Government schemes fiscal measures should be used as incentives to support equity investment by owners. In particular an expansion of the level and scope of the Landlords Energy Savings Allowance (LESA) into an **“Insulation Allowance” for all property owners is required.**

**Section 20** strategies main themes:

- **Yes.**

A National Retrofit Programme is definitely needed. However more recognition of the constraints to the installation of improvement measures is required. Also, over time as the easier to treat properties are completed more investment in research and flexibility of funding mechanisms will be required to create financially sustainable solutions for “hard-to-treat” traditional properties.

- **No.**

Bringing in compulsory higher standards will cause un-intended consequences. In 2011 Bank of Scotland estimated the value of the private housing stock in Scotland at £263 billion. The proportion of the housing stock in the private sector is now 76%. The proportion of the housing stock in the private sector increased 16% between 2001 and 2011. For most house owners their home is also their main stock of wealth. However it is also known that households are already over-indebted and that mortgage finance is hard to get, the housing market is fragile and there are downward pressures on prices. The housing market is obviously in a highly sensitive condition.

Inappropriate regulation has the potential to tip the market into a further downward lurch, affecting Scotland's total wealth. Much more attention needs to be given to the affect any one or combined regulatory measures may have on both the private housing market and the PRS.

There also needs to be good quality credible information produced, that is market tested, on the costs and methods of improvement, risks and constraints for each archetype, location, and market segment before setting out on a policy of increasing standards and regulations for energy efficiency for existing private housing. If inappropriate standards or regulations are introduced it could: reduce the housing stock, increase rents to unsustainable levels and force owners to sell depressing the market further.

In rural areas it is likely to reduce the stock of affordable housing and increase the second homes problem, driving local people out of rural areas. A lot of owners/landlords will not have the capital or be able to get support from banks to finance the improvements, rents may need to be increased beyond local's ability-to-pay, and owners may therefore have to sell at a depressed price.

- **No.**

76% of Scotland's houses are privately owned by individuals or families. The strategy needs to focus much more on the situation and needs of the **owner** of the property. There is a difference between using tactics to influence individual owner's behaviour through intermediaries and a real strategy of engagement with the owners.

The vast majority of houses are not on the market where financial benefits can be realised – they are homes first and investments second. The house is the most important asset of the family and something the family usually cares deeply about.

Energy efficiency is only one aspect in the decision to purchase or rent a

property and there are a variety of competing needs for the limited funds available. The costs of improving energy efficiency are substantial, especially for hard-to-treat properties. There is no analysis in the document of the financial situation of house owners in Scotland, no segmentation of the market or analysis of the factors that are either likely / not likely to support an energy improvement decision by the owner of a property.

The analysis that has been done (*Scottish Government. 2011. Impacts of options for regulating energy efficiency standards in the domestic sector.*) uses unrealistically low cost figures, especially for hard-to-treat houses.

Also, as mentioned above, households are over-indebted and there are a significant proportion of POs who are in “negative equity”. The amount of funding coupled with the high rate of interest that individuals would have to pay under a GD agreement or bank finance will increase the overall level of household indebtedness. Contractual issues between mortgage providers and house owners may result.

There is also inadequate analysis of the total costs of improvement of each archetype across the whole of the housing stock in Scotland, and what impact this potential liability will have on both house prices and PRS supply. The amount of subsidies that public sector and RSL’s have received over the years is also not recognised as an issue, in that the support has not been and will not be, even through the new eligibility criteria in GD/ECO, wholly “tenure neutral”. There is also simply not enough money in the ECO fund, only £185M in three sub-schemes, to support energy efficiency measures in hard-to-treat properties.

- **Sustainability.**

The concept of sustainability includes economic, environmental and social aspects. It also carries the theme of longevity. Homes that Don’t Cost the Earth (HDCE) has a strong focus on the environmental and social aspects of policy but does not consider the impact of the proposed policies on the economics of the housing market. Overall there is insufficient information and analysis of the dynamics of the housing market.

The development of policy over time and the integration of housing policy with other related areas e.g. energy security or energy generation through renewables does not get sufficient attention.

Other issues such as the balance between refurbishment and new housing need further analysis. For example it can take 40 years for the annual carbon saving features of new housing to payback the carbon

used in construction. For a refurbishment it may be as short as 3 years. This indicates that Life Cycle Analysis of all options is also required if policy is to be truly “sustainable”.

Tackling the historic situation of inefficient use of heat, light and power in our homes is a major and complex challenge, with many potential pitfalls that could create unintended consequences.

## CHAPTER 1: A NATIONAL RETROFIT PROGRAMME

### 2. What do you think are the main barriers that prevent home owners and landlords from installing energy efficiency measures?

Please refer to table 1 below.

No.	Barriers to Energy Efficiency measures	Practical solutions
1)	<p>Inability of owners to fund the improvements over the medium term. (See related points 4 &amp; 5 below). GD is a form of debt and at 7.5% is also expensive. The proposed measures cover the whole of the housing stock.</p> <p>76% of the housing stock in Scotland is privately owned. Many households are already over-indebted. It will be difficult to convince people to support the GD re-payment requirements where there is no evidence of improved cashflows as a result of an energy efficiency project.</p>	<p>Widen the eligibility criteria, scope and funding levels for ECO.</p> <p>Develop a variety of financing models, not just Green Deal &amp; ECO. There is a need to also encourage equity investment by property owners. The best way to do this would be through fiscal measures, e.g. expand LESA to cover all houses in private ownership to cover all fabric improvement costs as an “<b>Insulation Allowance</b>”. The level of the allowance should be related to the standard costs of the works for each archetype.</p> <p>GD/ECO eligibility criteria do not cover all possible options. Fiscal measures will be more flexible and also support innovation more easily.</p>
2)	<p>The disruption and hassle related to energy efficiency measures. These vary depending on the measure but those that need interventions in the fabric of the building such as Solid Wall Insulation (SWI) are considerable.</p>	<p>Determine the level of energy efficiency that will be required in 2050. Create and promote an option that supports achievement of that level in one step.</p> <p>At the same time allow landlords with multiple properties to agree a contract to improve all their stock over the period to</p>



	<p>It is not advisable for people to try to occupy properties that are having SWI installed. The intrusiveness / mess / hassle of improvement works, especially for hard-to-treat properties, where it basically becomes a building site, with safety concerns, are significant.</p>	<p>2050, with average improvement milestones.</p> <p>Improve eligibility criteria of ECO to allow landlords to access ECO funding while a property is empty. This could be conditional on agreeing a contract to provide affordable housing or intermediate mid-market options for a period of time.</p>
3)	<p>A phased standards and regulatory approach, in economic terms, has the potential to have a higher cost structure than going straight for the 2050 target in one go, in a house refurbishment.</p> <p>Costs such as taking out / putting back fixtures and fittings, kitchens etc. to install insulation behind have to be put directly against “energy efficiency measures”.</p>	<p>When a house is completely refurbished many of the incidental costs are not required e.g. re-decoration after SWI installation and become absorbed into the general refurbishment costs.</p> <p>In the PRS where the level of rent is largely based on the quality of the overall finish this means that a) there are no additional costs, b) the same costs e.g. decoration are aligned with what the market is demanding and c). the marginal cost of insulation is reduced.</p>
4)	<p>While energy efficiency works are being done, which could be a period of months for SWI there is a need to find alternative accommodation for owners / occupiers. This is a particular issue for the PRS, most of which are single properties in single ownership, so have no flexibility to offer alternative accommodation.</p>	<p>Develop practical measures to support landlords and especially tenants where there is a need for the occupier’s to decamp for a period.</p> <p>Local authorities could provide practical assistance in terms of temporary accommodation.</p>
5)	<p>Inability of improvement schemes to get Green Deal and/or ECO finance, because of the narrow range of eligible situations, approved methods and equipment.</p> <p>Also the overall level of funding under ECO will be insufficient to</p>	<p>Take into account the full range of archetypes and energy efficiency techniques in GD/ECO eligibility.</p> <p>Follow up research by Historic Scotland (HS) and others. Allow “breathable” natural insulation products to be eligible under GD/ECO. Produce tables of approved “U values” from the research</p>

	match the costs of the improvements required for “hard-to-treat” properties on an individual basis or over the whole of Scotland.	that can be inserted into RdSAP calculations. Disseminate this information widely among GD & EPC assessors.  Independently cost works across all Scotland’s house archetypes, verify cost models with real case study results.
6)	The high costs of improving “hard-to-treat” properties. For example for a small hard-to-treat house with solid walls, the cost of retrofitting to achieve high EPC EE/EI bands (e.g. Bands C EE & Band D EI can be as high as £35,000- £40,000 (Historic Scotland Technical Paper 16 2012, Bruce et al 2011).	<b>A system of exemptions or “abeyances”</b> are needed, based on the “Golden Rule”, whereby if a property cannot reach a certain SAP level because of practical or financial constraints, <b>MUST</b> be created so that harm to either the PRS or Scottish housing market is avoided.
7)	A sense of lack of fairness. Social housing has had financial support from government for many years. There has not been equivalent support for POs, or the PRS. It is the private sector and individuals who are the taxpayers who have funded the social housing investment, that are now being expected to also provide the money for the societal benefit of improved energy efficiency and CO <sub>2</sub> reductions in their own houses, potentially at great expense.  There are also particular issues for low income house owners.	Scottish Government to indicate respect for the contribution that the private sector has made as taxpayers and find tenure neutral methods of financial support for the future. GD goes some way towards this but POs & PRS have a disproportionate number of hard-to-treat properties that current levels of ECO funding will not cover.  Also experience has shown that to get behavioural change for a wider community or societal benefit the user who is being asked to make sacrifices responds better when they get something real back in return. Even if this is not the full amount they are more likely to feel that their sacrifice is being recognised.
8)	For the PRS there are additional financial issues. There is no evidence that tenants will support rent increases to fund improvements over time and also the impact of the “take-back” or “re-bound” effect is likely to mean that up to 50% of the energy efficiency improvements will be	Increase LESA tax allowances substantially. This balances the relationships between tenants and landlords, societal and private benefits. It is also a much more flexible way to finance improvements than any government scheme, including GD/ECO.  This is also linked to “fuel poverty”

	<p>taken up by increased occupier comfort levels, or installations not achieve efficiency ratings, rather than a reduction in energy usage.</p>	
9)	<p>Where the occupier is in fuel poverty and “under-heating”, the improvements are likely to be taken disproportionately through increased comfort levels. The “under-heating” will also create an extra financial burden through the “Green Deal” and is likely to make the overall financial position of these households worse. Also void periods will have to be paid for by the landlord.</p>	<p>A better way to approach this issue would be to encourage equity investment by the landlord. The best way to support this would be to increase LESA tax allowances substantially. This balances the relationships between tenants and landlords, societal and private benefits. It is also a much more flexible way to finance improvements than any government scheme.</p>
10)	<p>If RSL/PRS owner has multiple properties, especially expensive hard-to-treat properties, the cost of improvements will be significant and stretch the organisations cashflows and balance sheets. Payback periods will also be very long.</p>	<p>Allow multiple property owners the opportunity to agree a contract that allows the financing of energy efficiency investment to be spread over a period of years over the whole property stock, perhaps with an average increase in SAP values taken as milestones.</p>
11)	<p>Desire by owners not to change the look or space available in their property, especially if a house has been refurbished or re-decorated recently.</p> <p>Also traditional houses have small rooms. The insulation needed achieve high SAP levels, may significantly reduce living space.</p>	<p>To achieve the levels of energy efficiency will required more space taken from the inside of rooms in many properties. Hard-to-treat traditional houses often have limited space. To give an indication the wooden framing will need to increase in depth using 8x2s rather than 4x2s.</p> <p>Allow test of “reasonableness” to be used in any regulation / enforcement.</p>
12)	<p>Risks (and fear of risks) to health from condensation/damp/mould due to installation of inappropriate insulation and ventilation measures.</p>	<p>GD assessors and installers must receive appropriate detailed training for the house types that they wish to work on. There is also a need for Scottish Government to produce and disseminate information to occupiers on the changes to behaviour that are required in highly insulated and air tight houses.</p> <p>There also needs to be more flexibility in GD/ECO to allow appropriate natural insulation products that allow traditional</p>

		buildings to breath.
13)	Presence and legal protection of bats in lofts and walls because disturbance is a criminal offence. Protection of birds under WANE Act 2011 with criminal liabilities placed on all concerned with a property.	Any introduction of energy efficiency standards by regulation needs to allow “exemptions/abeyances” Owners of properties that are put under pressure to improve energy efficiency may inadvertently cause problems for protected wildlife.
14)	Constraints on traditional buildings that are listed or have historic features that might need planning permission or listed building consent to make appropriate/practical changes, along with additional costs.	Clarity on the prioritisation of Scottish Government conservation objectives is required. Is it complete preservation, conservation of key attributes but with limited energy efficiency measures allowed, or will property owners be allowed / compelled to install full energy efficiency measures?
15)	Current Historic Scotland guidance is not to remove lathe and plaster in listed / traditional buildings. However ECO funding will require SWI that achieves a minimum U value of 0.3. The current research projects by HS are only getting U values of 0.7. This means that lathe and plaster will need to be removed to achieve the 0.3 U value and the works qualify for ECO funding.	Much more comprehensive information is needed on the thermal performance of HS research on insulation solutions, including the production of U values, RdSAP / SAP & NHER values for each property that is treated. More research and case studies are needed to cover every single archetype in Scotland.
16)	Constraints coming from the structure and type of fabric of the building, where there may be no or limited practical options for improving a building, or even if there is a method that can be used, it’s costs may be disproportionate.	Again, where the “Golden Rule” cut-off applies, and ECO funding is not available and further investments are needed to improve the energy efficiency of a property, then a system for “exemptions” is needed.
17)	Conflicts between fuel poverty and CO <sub>2</sub> emissions reduction policies. The combination of these policies could create a situation where because the focus of support is on those least able to afford the indirect costs of the investments required; the government may fall short of its carbon reduction targets.	This is most acute with expensive hard-to-treat buildings in the PRS where the costs of improvements could force much higher rents that the tenants can’t afford.  Specific funding for the worst situations may be required.

18)	The fiscal (tax) framework for the PRS is also un-friendly towards insulation works. This is because energy efficiency measures are classed as “improvements” and not “repairs”. HMRC has currently got an upper limit (£1,500) on Landlords Energy Saving Allowance (LESA), which does not cover the costs of insulation, especially of hard-to-treat houses.	LESA should be significantly increased. Scottish Government should lobby HMRC to increase LESA based on standard costs per archetype and size of house.
19)	5% VAT on insulation, which could go up to 20% depending on a court case going through the European Court of Justice.	Scottish Government should lobby HMRC to ensure that this retrograde step does not happen.
20)	Inability to offset insulation costs against other Schedule A income (relates to LESA). Opportunity for insulation to be treated in same beneficial way as double glazing if HMRC changed guidance.	Scottish Government should lobby HMRC
21)	Baffling terminology with no comprehensive and easy to understand glossaries of terms	Scottish Government should always include a glossary of terms with consultation papers.
22)	Stigma for owner occupiers with low incomes, who are in fuel poverty if perception given that they need “benefits”.	Special efforts with GD/ECO will be required to find and target this group, who are often pensioners

Table 1: Key barriers and solutions for energy efficiency measures.

### 3. Please explain any practical solutions and/or incentives to overcome any barriers you have identified?

Please refer to Table 1 above.

### 4. Given Scotland’s diverse range of housing, what support is needed to enable people to get energy efficiency measures installed?

There are around 5.1M people in 2,430,000 households in Scotland. A basic issue is that some 60-90% of Scottish households (*SHCS, 2012, Energy Use in the Home, measuring and analysing domestic energy use and energy efficiency in Scotland*) up to some 4M people, do not take account of the importance of improving energy efficiency. 76% of the housing stock is in the private sector, which as individual ownerships is much less structured than the Social Housing sector. Even in the PRS, 80% of properties are owned by PRS landlords that only rent out one house. The

housing stock is also Scotland's main store of wealth. This means that a comprehensive communications plan is needed to raise awareness of the need and benefits of improving energy efficiency and win "hearts and minds". The communications plan will need to be structured to fit with a diverse, segmented, politically and economically sensitive mass consumer market. This is a big task that needs expert market research, marketing and advertising inputs. **How can the Scottish Government work out what support is needed until it fully understands this crucial market and how best to communicate with it?**

The first place a marketing and communications plan should start from is to do sufficient market research to understand the market. We think that although the Scottish House Condition Survey (SHCS) and the various Fuel Poverty Forum reports, e.g. Fuel Poverty Evidence Review Aug 2012, are of high quality, they do not cover some significant and very important areas related to the understanding of people and the housing market. In other words there are significant gaps in knowledge. The work simply has not been done.

**We think there are three very significant gaps in knowledge:**

- **First, to gain a comprehensive understanding of behavioural factors and current use of heat, light and power in homes in a variety of house types, economic and social groups, etc. The approach to research hitherto has focussed too much on technical aspects.**
- **Second, to gain an understanding householder's attitudes towards energy efficiency measures.**
- **Third, to gain an understanding of the dynamics of the private housing and PRS markets and the likely economic and other impacts of introducing regulations, and consequent potential liabilities. This research needs to be carried out by respected independent economists.**

Furthermore, once the National Retrofit campaign is started the change in attitudes, and especially any changes in the economics of the housing market need to be monitored closely. Things like customer satisfaction surveys of the GD assessors, and installers will be required. Qualitative surveys of estate agents, mortgage companies, private owners, letting agents, and landlords will be needed to detect problems in the process before they become serious. There is potential for inappropriate regulation to depress house prices and impact on housing supply. There will need to be detailed and on-going studies of the housing market to monitor impact.

The complexity of the housing stock also means that one solution will not fit all circumstances and that specialist skills and advice will be needed, supported by appropriate research. At the moment there are conventional solutions and the research being carried out by Historic Scotland and others into alternative, usually more natural materials based solutions. There is however a considerable gap. This means that there needs to be an awareness raising programme for professionals,

such as architects, building surveyors, contractors, tradesmen, building control officers etc.etc. i.e. everyone in the building industry and especially for insulation companies. This is a big task that will need a comprehensive understanding of the communications networks in the building industry.

A key issue for all the professionals and people in the building industry will need to be made aware of and avoid, is the significant risk that condensation, damp and mould problems are not created by retrofitting and sealing buildings that were well ventilated previously.

A key area of support is the provision of advice that is “fit for purpose”. The Scottish Government therefore needs to continue to support research into all house types found in Scotland and ensure that the advice that is given to owners and occupiers is appropriate in all circumstances. At the moment some elements of conventional insulation approaches are being challenged by the research done by Historic Scotland, Universities etc. Bearing in mind the pressure to improve energy efficiency more investment is needed in research to speed up the provision of good quality advice to for all archetypes found in Scotland.

At the moment there is a lot of emphasis on the one-stop-shop approach. This needs to be augmented by support for the range of specialists that will be required to give appropriate detailed advice for each archetype.

## 5. What specific issues need to be addressed in respect of improving energy efficiency in rural areas, particularly more remote or island areas? How should these be addressed?

	Issues	Potential solutions
1)	A lack of understanding of the motivations of people living in rural areas and the structures and networks of rural society by many people from urban areas.	Gain an understanding of the issues from the rural perspective (See SAC Rural Scotland in Focus 2012 report). There also need to be site visits and seminars specifically focussing on rural issues.
2)	Confusion over what the term “rural” means.	From a land based “remote rural” perspective the way the term “rural” is used in various definitions is odd. DECC’s definition of “rural” includes settlements up to 10,000 people and Scottish Government “rural” definition includes of towns of up to 3,000 people in size.  It is likely that even under the current definition of “rural” used by the Scottish Government that most of the housing issues are actually in villages and small

		towns. Perhaps some other term/definition could be used?
3)	The technical weaknesses: higher exposure, individual houses, high proportion of pre-1919 stock, all creating poor energy efficiency	Create a “rural weighting” for any energy efficiency standards.
4)	Higher fuel costs: off gas grid, Fossil fuels - oil, LPG, coal etc.	<p>Already significant innovation and installation of renewables technologies in rural areas. Both the opportunities and the constraints should be systematically investigated and any unnecessary “red tape” removed.</p> <p>A detailed understanding of the different technologies and the situations where they are likely to become economic alternatives needs to be created amongst housing professionals.</p> <p>The “rural weighting” suggested above should focus first on the EI and have a bigger differential between the EI and EE SAP values &amp; EPC bands than is suggested in the EESSH case studies.</p> <p>For example it is not widely known that firewood, a very rural fuel, only costs 2p/kWh. This means that in some localities this renewable fuel can be used by rural people to avoid fuel poverty, in an environmentally friendly way, even with relatively low levels of insulation. However the technology is rated poorly in RdSAP for energy efficiency purposes.</p>
5)	The economic weaknesses in remote rural areas, which affects the ability-to-pay by owners and the affordability of rent increases.	Create a “rural weighting” for any energy efficiency standards. Too much pressure to force owners to invest to improve energy efficiency could lead to owners reducing the supply of PRS houses rather than spending money they haven’t got.
6)	The additional costs faced by energy companies, advisers, assessors, suppliers and installers of energy efficiency	Create partnerships to work within rural networks, for example trade associations such as Scottish Land & Estates, and community organisations, and use existing



	measures operating in rural areas.	<p>social networks for key elements of the communications plan.</p> <p>Provide top up grants for such things as administration costs, travel costs, etc.</p> <p>Encourage local solutions, e.g. train rural GD installers using on-line training resources.</p>
7)	<p>The sensitive economics of the rural housing and PRS markets.</p> <p>In rural areas the traditional estates provide a significant amount of affordable housing. There is very little “Social Housing”.</p> <p>There is already a “Second Homes” problem, where up to 50% of local housing stock in some rural areas is only used as a holiday home by people from urban areas.</p> <p>Lack of affordable houses for local people in rural areas.</p>	<p>Create a “rural weighting” for any energy efficiency standards.</p> <p>Scottish Government to lobby HMRC to support changes to fiscal regime for PRS, including: IHT, CGT, Schedule A, VAT, LESA, &amp; “Insulation Allowance”.</p> <p>Create a positive incentive for estates to continue to offer affordable housing in rural areas. Avoid creating situations that force estates to sell properties.</p>
8)	The immature support structures for renewables installations	<p>Identify any barriers to entry to Scottish/UK market for significant new renewables products. Lobby for the removal of barriers to entry, or where particularly beneficial technologies are found provide practical support and financial assistance to get them through the accreditation system.</p> <p>Rural areas have a high penetration and lots of opportunity for other renewable options e.g. small/medium/large wind turbines.</p>
9)	Discrimination in RdSAP system and some government reports, against some renewables e.g. biomass	For rural areas especially, remove the bias in the RdSAP/EPC system against wood burning stoves and log boilers. At the moment wood stoves and log boilers

		<p>are default treated as multi-fuel stoves, with an efficiency rating of only 65%. For manufacturers to get this changed, each model (often with efficiencies already tested in Europe of over 80%) has to be tested, then registered with SEDBUK before the actual high efficiency is recognised by the RdSAP/EPC system.</p> <p>Firewood is carbon neutral and at around 2 pence per kilowatt hour, the least expensive fuels. It is used widely in rural areas, and its use under-reported in national Forestry Commission woodfuel statistics. There needs to be research into the actual levels of usage and whether the combination of its “green credentials” and its low cost means that a higher proportion of the housing in rural areas is already achieving government targets for CO<sub>2</sub> emissions and fuel poverty than is reported under current statistical methods.</p>
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Table 2 Issues and solutions specific to energy efficiency improvement in rural areas.

**6. Taking into account the models and funding sources outlined in sections 1.20-1.37, what role might local authorities and other agencies play in bringing about a step change in retrofitting Scotland’s housing?**

The role that Local Authorities and agencies should play will be better understood once good quality market research of the occupiers and owners of the housing stock has been carried out as indicated in the response to Q4 above.

In addition the SAC Rural Scotland in Focus 2012 report shows the way that the networks of business organisations, volunteers and community based organisations could help. Local Authorities can cover big areas and the granular nature of this issue may mean that it will be best for Local Authorities to enable, facilitate and fund other smaller even more local organisations and networks.

Local Authorities and agencies could facilitate the focussing of effort on particular segments of the market. For example in Aberdeen City and Shire there is a “Traditional Granite House Group” that is trying to focus on that particular type of building. In this case with a market segment that covers at least two Local Authorities a project based approach might be appropriate.

There also needs to be much more focus on communication with **owners and occupiers**. Local Authorities can have a role in this and support advice centre's etc. but the system needs to be structured to cope with a mass market rather than only basing support structures around the geographic areas of Local Authority boundaries.

The Scottish Government should consider the benefits of peer education and networking. It might be a better use of taxpayer's money for Local Authorities and agencies to fund projects and engage with communities of interest and local networks, rather than the Scottish Government doing the work directly.

## **7. What role should the Scottish Government play in a National Retrofit Programme?**

The Scottish Government needs to fund appropriate research in the following areas:

- Housing market dynamics and economics, and potential unintended consequences
- The full range of appropriate energy efficiency and ventilation methods for each archetype found in Scotland
- Check guidance being given by GD assessors, so that it is appropriate to each archetype found in Scotland.
- Behavioural influences on the use of heat/light/power and energy efficiency measures
- Occupier comfort levels in a variety of situations.
- Monitor progress

The Scottish Government needs to fund the creation of a communications plan and to support the provision of appropriate advice and guidance to all levels.

The Scottish Government should avoid a simplistic central belt focussed delivery model.

As 76% of the housing stock is in the private sector, the Scottish Government should engage with associations and stakeholders representing the interests of the private sector, to see what partnership working can be created. In general the Scottish Government engagement with private owners and the PRS needs to be improved.

The Scottish Government should widen the eligibility criteria of funding schemes to enable partnership working with the private sector. For example the Warm Homes Fund should be opened to private sector organisations.

The Scottish Government should evaluate the long term sustainability of the dominance of gas (92%) in the supply of domestic heating. The review should include issues relating to energy security.

The Scottish Government should make it clearer to all how its separate funding support is linking with GD/ECO.

The Scottish Government should establish agreed costs for each archetype found in the private sector, then develop case study models with the private sector and analyse the total cost of improvements required for each archetype across the whole housing stock.

The Scottish Government should maximise the use of positive incentives and the **voluntary principle** to ensure energy efficiency measures maintain goodwill among occupiers and owners of houses.

## **8. What role could the devolution of additional powers play in achieving more retrofit?**

As the process is largely defined by EU Directives, in the first instance, we think that the best policy would be to maximise co-operation and tactical lobbying of the existing institutions in the UK.

## **9. What further action is needed to achieve the scale of change required to existing homes?**

We think that one of the most important issues is actually to produce better quality information about the housing market and the costs of carrying out energy efficiency measures. It is difficult to quantify the scale of change without accurate financial / economic information.

A key issue is not to assume that one measure, or system or scheme will gain sufficient traction to effect the changes. We think that it will be necessary to offer better financial incentives to property owners and the PRS to make the change happen. In particular we think that a change to the fiscal regime to introduce an "Insulation Allowance" will be necessary to capture parts of the market that will not find GD/ECO available or attractive.

## **10. How can we make sure that a National Retrofit Programme maximises benefits to all consumers (for example, older people, those from ethnic minorities, those with long term illness or disability)?**

The eligibility criterion of the ECO covers a number of the vulnerable groups under the "Affordable Warmth" eligibility criteria. The key issue then will be to make sure that enough people in the network including PRS landlords are made aware of the scheme and how to access it.

## **CHAPTER 2: THE ROLE OF STANDARDS**

### **11(a) Should the Scottish Government consider whether a single mandatory condition standard (beyond the tolerable standard should apply to all properties, irrespective of tenure?**

No.

The aim of improving the condition of private sector housing stock is laudable. However there are various fundamental difficulties in implementation. The imposition of a mandatory condition standard above that of the tolerable standard for all housing types would have implications with regard to cost, affordability (both from a Government and private individual's perspective) and a risk of unforeseen consequences to the housing market and private individual's personal financial security (and, as a result, their ability to afford other, equally important, items e.g. provision for old age, the weekly family budget, assistance with children's university education, holidays etc).

The various incentives currently in place to encourage home owners to upgrade have not been given sufficient time to make an impact. Nor should we forget that the Repairing Standard already exists for the PRS.

Further it is most likely that the burden of enforcement would fall upon Local Authorities: we refer to our comments in answer to question (b) below.

In some respects forcing private individuals to upgrade/improve their properties is equivalent to retrospective legislation. People will have purchased certain types of property for various reasons. If legislation is introduced which will **require** them to upgrade/improve their property, they will then be required to spend money on the property which was unexpected at the time of purchase.

It will also be very difficult to settle on a fair standard given the differences amongst the types of properties in Scotland. As mentioned above, a mandatory standard could have huge implications with regards to an individual's finances. They may be forced to carry out works to the property when that wasn't the intention at the time of the purchase. This could create serious ill-feeling towards energy efficiency measures in general, which is not the aim.

The SHQS is applied to Social Housing partly because of the huge input of public money to enable RSLs to achieve the higher standards. It is appropriate that this level of public funding has appropriate Key Performance Indicators (KPIs) to create a benchmark that allows and supports public scrutiny. The situation for POs and the PRS is different in that these areas have not received the same public funding.

### **11(b) If so, how would that be enforced?**

There could be two (at least) enforcement regimes. Both are, in essence, in place at the moment: Local Authorities have power to take steps in respect of houses which do not meet the tolerable standard and, separately, in terms of the Housing (Scotland) Act 2006 ("the 2006 Act") in respect of houses which do not meet the Repairing Standard.

However, to achieve an aim of compelling private owners to upgrade their properties to (for example) the SHQS an extension of the use of the powers in the 2006 Act would be needed. Firstly, the powers in the 2006 Act would need to be reviewed in light of their proposed new use and primary legislation introduced, as required, to amend the 2006 Act. While it may be relatively straight forward to introduce amendments to the 2006 Act by expanding the references to sub-standard properties and properties in serious disrepair to incorporate wording which would allow enforcement of upgrading, the practical implication of the extension of such powers on enforcement by Local Authorities, would, we consider, given the number of houses which the Scottish Government states require to be upgraded, be vast.

We also think it would be very difficult to enforce from a practical level especially in relation to rural properties.

**12(a) In box 6 we identify a checklist for maintaining a quality home. Do you agree with our proposed hierarchy of needs? Please answer Yes or No**

No.

**12(b) If you think anything is missing or in the wrong place please explain your views.**

Include “double glazing and draught proofing” after “insulation”

Also there should be more emphasis on room to room and floor to floor insulation (as well as whole house), as this is likely to change behaviour’s and reduce the use of energy in buildings. This benefit may need to be balanced with the additional costs involved.

To reinforce the room-to-room approach we suggest zoned heating and timer controls are added.

**13. Should local authorities be able to require that owners improve their properties, in the same way they can require that they repair them? For example, could poor energy efficiency be a trigger for a work notice. Please answer Yes or No and provide further explanation if you wish, for example on how this might work.**

No.

While we consider that Local Authorities could be given the power by amendment of the 2006 Act, to require owners to improve their properties, for the reasons given in answer to Question 11 and below we do not consider such powers should be introduced.

How would Local Authorities know which properties might require improvement (as opposed to repair)? Would all properties be obliged to have an EPC? How would

Local Authorities monitor this? If owners did not carry out the improvement works where would the funds be found to pay for this? The cost of monitoring and enforcement (before the cost of carrying out any actual work) would be prohibitive.

As mentioned previously, it may also put owners under unnecessary financial pressure to comply with the legislation. It is one thing making an owner repair their property but another matter completely to make an owner improve their property.

**14. Should local authorities have a power to enforce decisions taken by owners under the title deeds, tenement management scheme or by unanimity? For example. Should they have explicit powers to pay missing shares of owners who are not paying for communal repair work, in the same way they can for agreed maintenance work?**

No.

Local Authorities should not have the power to enforce decisions taken by owners in terms of title deeds or a Tenement Management Scheme (TMS).

However, consideration should be given as to whether owners, in a situation where they have decided to carry out work but one (or more) party(ies) has not paid for the work, should be able to apply to the Local Authority for payment of the share of the party(ies) who did not pay. The Local Authority could then “acquire” the other owner’s rights to recover the cost from the non-paying owner(s).

There are cost implications for Local Authorities (and therefore, the tax payer) in this, however. How would the Local Authority recover the costs from the non-paying owner(s)? What would happen if owners disappeared/did not have the money? There may be room for a regime whereby a Local Authority could serve a notice on a property so that the costs were recovered on sale. However, if a property is mortgaged, there may be no free sale proceeds to meet the cost. Local Authorities have not always achieved a good success rate at recovering other sums (e.g. Poll Tax/Council Tax), and, accordingly, such repair/improvement costs could become a burden on the tax payer.

Local Authorities already have power to issue Work Notices and Maintenance Orders in certain situations. While this relates to sub-standard housing and disrepair, we do not consider this power should be extended to include power to enforce improvement in the condition of properties.

We think that giving Local Authorities the power to enforce decisions taken by a majority of owners in terms of title deeds or a Tenement Management Scheme has some merit. If there is a majority vote within the tenement that certain works should be carried out then we do think that the Local Authority should be able to enforce this against any dissenters.

However, although it seems logical to give Local Authorities power to enforce decisions taken by owners in terms of their title deeds or a TMS and the necessary powers may be able to be granted by means of amending the Tenements (Scotland) Act 2004 (the 2004 Act), from a legal perspective the matter could prove complicated. Where there is no provision in the title deeds (or the title deeds for all the flats in a tenement do not make the same provision) for making decisions, then the rules set out in the TMS (in Schedule 1 of the 2004 Act) will apply – i.e. majority decision. Where the title deeds do make provision it would in most instances be for decisions to be made on the basis of a majority of proprietors. Accordingly, it is not the decision making which is at issue but, rather, the reluctance of those in a tenement property to incur the cost of repairs where they may have difficulty in recouping costs from uncooperative owners. This issue would be resolved (subject to the provisos made above) by giving Local Authorities power to pay the share of such an owner and take on recouping the cost – in other words the owners would have confidence to proceed with the decision they have made in the knowledge that they would not have to pay the share of an uncooperative owner and then recover the same through the Courts. Local Authorities already have power to serve work notices and maintenance orders etc (as referred to elsewhere in this response) in terms of the 2006 Act where work is required to maintain a property but the owners have not made a decision to do so. The introduction of a power to enforce decisions of owners, therefore, would result in duplication (a) between owners and Local Authorities and (b) of powers already held by Local Authorities; and lead to potential confusion about which route was the correct one to pursue.

**15. Should local authorities be able to automatically issue maintenance orders on any property which has had a work notice?**

No. Such a power is not required.

Section 42(b) of the 2006 Act allows a Maintenance Order to be issued if a Local Authority considers a house has not been, or is unlikely to be, maintained to a reasonable standard. We see no merit in being able to issue a Maintenance Order automatically. If a Work Notice requires to be issued by a Local Authority due to an owner not maintaining the same, then they would already, in terms of the current wording, have grounds to consider issuing a Maintenance Order.

We think that a works notice should be used for any necessary repairs but not improvements.

**16. Should the process for using maintenance orders be streamlined and if so, how?**

**Please answer Yes or No and provide further explanation if you wish.**

No comment.



**17. Should local authorities be able to a). issue work notices on housing affecting the amenity, and b). require work such as to improve safety and security, on properties which are outwith a Housing Renewal area?**

We consider sufficient rights already exist.

A Housing Renewal Area (“HRA”) can be designated if a Local Authority considers the “appearance or state of repair of any houses in the locality is adversely affecting the amenity of that locality” – Section 1(b) of the 2006 Act. A Local Authority can require an owner to carry out work to implement an HRA Action Plan – Section 30(1) of the 2006 Act. The order which designates an HRA must include an HRA Action Plan – Section 2(1)(b) of the 2006 Act.

Work Notices can be served on sub-standard houses outwith an HRA – Section 30(1)(b) of the 2006 Act. Accordingly, with specific reference to safety and security, a Local Authority can already issue a work notice outwith an HRA where a house is sub-standard. If there is a risk to safety, we consider the house would be sub-standard. We do not consider it appropriate to allow service of a Work Notice on houses outwith the HRA for amenity purposes only. If the situation is sufficiently severe the Local Authority should designate an HRA.

**18. Should local authorities be able to issue repayment charges for work done on commercial properties, in the same way they can for residential premises?**

**Please answer Yes or No and provide further explanation if you wish.**

Yes.

Local Authorities have power in terms of the Building (Scotland) Act 2003 to serve on the owner of a building a Defective Building Notice requiring the owner to rectify defects in the building as the Notice may specify. The defects which may be specified are defects which require rectification to bring the building into a reasonable state of repair having regard to its age, type and location. Section 28 also includes powers for the Local Authority to carry out necessary work and recover the expense from the owner. There are separate powers and duties in respect of dangerous buildings.

To assist in recovering the cost of such work it would be useful if Local Authorities could serve repayment charges in the same (or a similar) way as for residential properties.

N.B. Section 69(1) of the 2006 Act applies Part 1 (providing for service of Work Notices and Maintenance Orders on residential properties and giving Local Authorities power to carry out work and recover costs) to non-residential premises forming part of any building containing a house. However, Part 7 of the 2006 Act is not entirely clear as to whether the power to serve a Repayment Charge would also apply to commercial premises forming part of a building where there are also residential

properties. Extending the Repayment Charge regime to commercial properties would also clarify this point.

There may still be issues with the practicalities of recovering the costs, however. We refer to our comments in answer to Question 14.

**19. What action, if any, do you think the Government should take to make it easier to dismiss and replace property factors?**

We are unclear as to the impact this would have on improving standards and energy efficiency. The Property Factors (Scotland) Act 2011 has not been given time to have an effect.

**20. What action can be taken to raise the importance placed by owners and tenants on the energy efficiency of their properties?**

This will naturally become more important to private owners as the price of fuel, etc. increases. However, they will need to feel that they have the ability to carry out work (both in relation to cost and physical practicality). The communications plan raising awareness (Q4) with energy efficiency “championed” followed up by the provision of clear, concise and accessible information are needed.

Provide additional incentives. We have mentioned how the UK fiscal regime could be beneficially changed. As well as the points mentioned above, we think that it may be a good idea for the Scottish Government to change legislation to provide a council tax reduction based on the EPC rating of the property (similar to car tax i.e. cars with low CO<sub>2</sub> emissions pay no road tax).

**21. Should the Scottish Government introduce minimum energy efficiency standards for private sector housing?**

**No**, the **voluntary principle** should be given more time and support to work. There are many reasons:

- The proposed regulatory regime is not clear and some of the prior consultations were carried out using inaccurate information.
- There are fundamental aspects of the assumptions behind the proposed regime that need to be investigated to establish whether they are correct, valid and fit for purpose.
- Extensive checks / due diligence is required to establish any potential unintended consequences on the economics of the housing market, both freehold and rental. In particular the impact of unexpected costs for the seller at point of sale or rental and the impact on the purchaser of uncertain liabilities that will reduce the price they are prepared to offer. The uncertainty created is also likely to affect confidence in the market. The potential negative impacts on the housing market and PRS are still to be investigated by the Scottish Government.

- The complexities of house type in the private sector.
- The retrospective nature of the proposed regulations. People bought their houses and often made long term inflexible commitments at that time, when these issues were not considered as important.
- The risk of reducing the flexibility of approaches that can be made in a free market and also the potential to increase the marginal costs of improvement measures. Bearing in mind the scale and potential total costs of the desired changes, even small marginal costs become important.
- For the reasons given in answer to question 11, the costs and practicalities of enforcement
- RdSAP/EPCs, the most likely measure of energy efficiency, are in flux and still generating significant criticism (even the latest model) for: inability to input all energy efficiency measures, lack of accuracy, especially with traditional buildings and innovative renewable systems.
- RdSAP/EPCs work on historic data and may give inappropriate long-term signals to the market, for example as electricity generation is de-carbonised, electric heating systems will become greener and more attractive options.
- The RdSAP/EPCs system is not transparent and not user-friendly.
- Behavioural issues can have a very significant influence on real outcomes, which are not in the control of the PRS landlord.
- To capture the goodwill of owners and occupiers.
- There are situations where owners and/or occupiers are ineligible for support measures e.g. ECO funding and do not have the cash to fund energy efficiency improvements. Low income owner occupiers, very often pensioners, will come into this category.
- The real risk that owners and occupiers will install, or allow to be installed, inappropriate insulation and air tightness systems that introduce condensation / damp / mould problems to houses. These could quickly lead to health problems.

There are many other reasons given in the responses to other questions.

## **22. How could we amend EPCs to make them a more useful tool for influencing behaviour change to improve energy efficiency?**

At the moment EPCs are produced by trained assessors using complex software. The situation is a bit different if they are going to be used as one of the main regulatory tools for a mass market of 2.43M houses.

As a tool for the mass market, even if they are still produced by trained assessors, significant improvements to the system are required. It will be necessary to make the system much more visible, transparent and user-friendly. There is potential to use a variety of innovative communication methods, including virtual reality houses, to raise awareness of the practical options, and the costs and benefits of each option.

One key issue is that **each** house owner or occupier will want to be able to manage their own situation. They will want to be able to do a cost / benefit appraisal either formally or informally of a variety of options. As such they will want to cost the options in capital and revenue terms, taking into account other issues such as security, mess and hassle, before they make their decision. For each option they will be asking the question....what if....I change this or that.....what benefit will I get and how much will it cost? RdSAP/EPC was not conceived with this purpose in mind. Significant improvements to the visibility of the system will be needed, along with a much improved website, FAQs, helpline etc.

Creating an improved awareness and understanding of how RdSAP/EPC can work to the benefit of consumers should be a significant part of the communications plan outlined in our response to Q4.

There are a number of weaknesses in the RdSAP/EPC system:

- A general lack of transparency of the input data and information analysis. Several inputs are controlled by commercial companies e.g. BRE, Sutherland Tables. This is not acceptable for a potential regulatory tool for 2.43M houses.
- Lack of transparent fuel cost inputs and inability to vary those inputs with local up-to-date prices. This could lead to inappropriate decisions being made on which fuel type to choose for a heating system.
- Use of 3 year rolling average historic fuel costs. Investment appraisal is a forward looking process.
- Lack of transparency on EPC report or publicly available SAP guidance material of standardised assumptions on occupier comfort levels. A user therefore has no means of comparing what they know about their own expected comfort level, the insulation and heating system in their house, with the information on the EPC report.
- Poor structure of the EPC approved software, in that separate reports have to be generated each time a slight change to the input data is made. The process of doing cost/benefit analysis is an iterative one. The lack of core data retention and the inability to respond flexibly to changes severely restricts the usability of the system.
- Standardised assumed levels of comfort could affect investment decisions by over-stating savings that could be made from investment in insulation or heating system options. When linked to the GD this will mean households will pay more.
- The financial outputs encourage investment in central heating systems that could create higher fuel bills and increase CO<sub>2</sub> emissions. The opposite of the stated purpose for the EPC system.
- Lack of warnings that poor quality fitting of insulation and lack of appropriate ventilation can quickly cause condensation and damp problems.

- Inability (still) to input the correct “U” levels for a range of measures to improve the energy efficiency of the house and linked with a very narrow range of eligible measures under GD, see HS Technical Paper 16.
- EPCs are valid for 10 years and cost between £80 - £120 per house, in the private sector. There is doubt over the accuracy of the surveys done to date. They become out-of-date very quickly as soon as any additional measure is done. The credibility of the system is not high.
- An urgent programme to make the RdSAP/SAP processes fit for purpose for all building types, including pre-1919 solid wall houses is required. Fit for purpose should include both technical adjustments, and improvements to the presentation of the information for non-technical users i.e. occupiers and owners of houses.

**23. Are there other key principles that we ought to consider when looking at the possible introduction of regulations?**

**Yes, we agree with the main principles outlined.**

However the key issue for us is that the Scottish Government needs to “champion” the needs for the changes and the benefits to individuals and families, to create a positive atmosphere that will encourage people to invest their time and resources in making the improvements because it is the good and right thing to do.

For the reasons given in our answer to Question 24 below the use of regulation to force private individuals to improve their properties must be a last resort. We do not consider such regulation should be introduced at this stage. Many other key principles are at stake:

- For regulations not to damage the wealth, of individuals or society as a whole, that is embedded in the housing stock.
- Sustainability, including economic sustainability.
- The positive values of the “**voluntary principle**” in maintaining flexibility in approaches, and the goodwill of the people involved who might therefore be more willing to make sacrifices for the greater good.
- The point at which Government has the right to enforce standards of behaviour on the individual;
- The individual’s rights to private property and to live their life in the way in which they choose;
- Respect by the Government for the individual and their choices;
- The costs which will be imposed on individuals – both through the requirement to carry out work on their own property and as tax payers;
- The effect of taking more responsibility away from the individual: if Government take on responsibility then this will lead to an expectation that the Government will carry out these tasks for the individual at society’s cost as a whole and that maintenance and condition of housing, etc. will no longer be the individual’s responsibility. The more the state does, the less the individual will do.

We would be concerned (particularly in relation to the last bullet point above) that this could represent “the thin end of the wedge”. If it did, then there are, potentially, considerable implications for the economy (e.g. in relation to the impact on the housing market and, flowing from that, the economy as a whole). More information would be required as to the likely effect of measures to enforce improvement of standards before consideration can be given to doing so.

Regulations could discourage private landlords from renting out their properties in the PRS. Minimum standards could be counter-productive and reduce the supply of property in the PRS. We do not believe that the impact upon supply has been properly quantified.

#### **24. How could regulation be used to support the uptake of incentives?**

Regulations can be aligned with incentives and support measures but they cannot be used to directly **support** the uptake of incentives. Regulation means enforcement and once you have enforcement the thing to be done is required and not incentivised.

The use of legislation by Governments to prohibit an individual from acting in a certain way which may cause harm to other members of society, or society as a whole, is **not** the same as the use of Government power to force people to act in a certain way. This is particularly so if it results in a financial cost to the individual and society.

In other words more regulation could mean less uptake of incentives because people take their property off the market permanently.

#### **25. In section 2.68 we identify design options for the standard. Do you have any views on the options set out in that report? Are there other options that we should be considering?**

Yes, do not regulate at this time. There are a number of fundamental problems with all of the proposed systems. Some of which are covered in previous responses to questions e.g. Q 11, Q23 etc.

However it is likely that the RdSAP/EPC system will be involved as this is the measure used in the related Energy Efficiency Standards for Social Housing (ESSH) consultation. Our comments on the inadequacies of the RdSAP/EPC system are covered in our answer to Q22. We do not think that it is fair to use such an inadequate system as the basis for regulation, or setting legally binding standards, until it has been significantly improved.

Also the 2011 report *Impacts of Options for Regulating Energy Efficiency Standards in the Domestic Sector* has used costs which are very low, i.e. understated, especially for traditional hard-to-treat properties. Historic Scotland Technical Paper 16 and the case studies in Bruce et al 2011 indicate much higher costs.

In the 2011 Impacts paper the highest cost indicated for an insulation option is £12400 for a Band D EE and £13,400 for a Band C EE. In HS Technical Paper 16 which has not done an EPC yet the cost of general improvements could be as high as £35,000. In Bruce et al 2011 the costs to achieve Band C EE, is £35,000 - £40,000. In the Impacts 2011 paper the maximum total cost of carrying out the improvements is estimated at £7.8 BN. The real costs from the case study exercises indicate that this is a significant underestimate of the true total cost of making the improvements.

The potential social, economic and political consequences of setting standards based regulatory system up incorrectly because of all the issues mentioned are significant. The modelling approach taken in this paper is appropriate with some additional categories but the input values need to be re-done using **industry agreed costs**. The models then also need to be validated by detailed case studies, which include real costs. Then the analysis of the total cost picture, split by archetype, across the whole housing market can be done.

In addition because of the importance of the housing market as the main store of Scotland's wealth, the various regulatory options need to be examined from the perspective of the housing market by private housing market experts and independent reputable economists.

There is potential for some houses in economically marginal areas to be removed permanently from the PRS market. The financial equation, where there are low house prices or low rents and high costs of energy efficiency measures, is a reality that needs to be taken account of. GD/ECO funding is likely to be inadequate / ineligible in many cases. There will need to be a system of exemptions for situations that don't meet the combined GD/ECO criteria and get insufficient financial support.

The introduction of GD and ECO are being delayed and criteria are being changed, RdSAP/EPCs are inadequate and being changed. So some key aspects of the new regime are in flux. We at least need to wait and see how they settle down and how successful they are before thinking about what type of regulation will be appropriate or not.

Also bearing in mind the complexity of the private housing market and PRS it may be appropriate to try and develop a series of alternative approaches to regulations, because one set of rules will not suit all circumstances. A national effort such as the "National Retrofit Programme" should try and identify a variety of alternative approaches that suit the various market segments, so that improvement potential overall, is maximised.

**26. Do you agree that any regulations for private sector housing ought to reflect the energy efficiency capacity of the property and/or location, as is proposed for the social sector?**

Yes.

As indicated previously houses in rural areas suffer from a number of technical weaknesses: higher exposure levels, individual houses, high proportion of pre-1919 stock, higher fuel transport costs, off gas grid, high fossil fuel prices of oil, LPG, coal etc.. All these factors suggest that if the Scottish Government does want to introduce a minimum standard for energy efficiency for the private sector then there should be a “rural weighting” i.e. a lower acceptable SAP value/band.

However the rural sector is also at the forefront of renewable energy generation. SCOTTISH LAND & ESTATES would therefore support EI as being the more appropriate part of the EPC to use for rural areas, however if the Scottish Government also wishes to include the EE measure, then this should be set significantly lower to take account of the technical weaknesses identified. The detail of this proposal should be a matter for further discussion.

**27. If you agree with Q26, should houses of the same type in the social and private sectors be expected to meet the same standard?**

No.

The private sector has not had the same historic public funding support to achieve the relatively high levels of energy efficiency that the social sector has. It would therefore be unfair to impose the same level of energy efficiency.

The part of ECO funding that the private sector in Scotland is eligible for is totally insufficient for the task of bringing all the private sector stock up to RdSAP/EPC EE Band C or D. Rushing this process could significantly affect property values and PRS supply. The mechanics and economics of the situation need much more detailed consideration to avoid damaging unintended consequences on the housing market and PRS.

The **voluntary principle** should be allowed to work and it should be supported with real resources by the Scottish Government, the first of which is the awareness raising campaign. Then the success of the GD/ECO system in accelerating change should be monitored. As mentioned before 90% of households do not take account of the need to improve energy efficiency. There needs to be a period of time allowed for any communications plan to have an impact, and then for people to take up GD/ECO offerings before considering regulation.

**28. Are there other specific issues we need to consider in introducing regulation on the energy efficiency of the home for particular groups of people, for example older people, those with disabilities, people from minority ethnic communities?**

We think that the regulations should be determined by the physical characteristics of the property rather than by who lives in the property. Support for vulnerable groups is



built into ECO under the “Affordable Warmth” eligibility criteria; otherwise it would also be more efficiently be done through the welfare system.

**29. Should we consider additional trigger points to point of sale or rental? If so, what?**

Yes,

This is an area that needs much more discussion involving a range of partners, including the private sector, once the market research identified in our response to Q4, that allows better characterisation and segmentation of the market has been done.

One suggestion is that individual owners or owners of multiple properties should be able to negotiate a long term contract for the improvement of the energy efficiency of their property over time, with their Local Authority.

**30. Should rollout of any regulation across the owner occupied and PRS sectors be phased or all at once? If you think that rollout should be phased how do you think this should be done?**

No

We don't think that regulations are the right way forwards initially for the private sector. We support the voluntary principle, along with monitoring of the success of GD/ECO, and any other incentives that are introduced to the market.

We think that it would be a good idea to analyse the potential impact on the housing market of the various trigger points, or schedules suggested, in detail using people with the appropriate expertise.

If regulations are to be brought in we think there needs to be a variety of acceptable approaches that matches the characteristics and market segmentation that might be established from the process we outlined in Q4, starting with market research.

If regulations are introduced they should be done all at once so that there is clarity of the requirement over the long term. With regards to carrying out the works, we think that this should be phased in, over the long term, again giving the voluntary principle as long as possible to work.

It makes practical sense for works to be carried out when the property is empty, which logically is at the point of sale or rental. However this seems to shut off ECO funding possibilities. This is a very bad feature of ECO because ECO is supposed to support solid wall insulation, to a U value of 0.3 minimum. This will mean stripping off the lathe and plaster making the house into a building site.

Also, bearing in mind that there is a high proportion of hard-to-treat properties in the private sector, PRS and especially in rural areas there will need to be a system of exemptions. The criteria for exemptions will need further discussion. There should also be a “rural weighting” as mentioned above.

**31. What other issues around enforcement do we need to think about when considering how different approaches to regulation might work?**

The practicalities of enforcement must be considered. The Scottish Government should not introduce regulation/legislation which is impractical. Such regulation/legislation will not be enforceable and will fall into disrepute. This has a negative effect on the public’s view of regulation and compliance with it, as a whole.

As mentioned before if enforcement at some stage might need the use of “powers of access and inspection” to gain entry to property then the system might be unworkable and could easily attract significant negative PR and fall into disrepute.

**32. In sections 2.76-2.79 we suggest that one way of regulating would be to issue sanctions.**

**(a) Do you think that sanctions on owners should be used to enforce regulations?**

No.

Reasons given above in answers to Q23 - Q31. We support the Voluntary Principle.

**(b) Should owners be able to pass the sanction or obligation on to buyers?**

No

This is a financial liability, which would depress prices in the housing market and restrict supply in the PRS. This area needs much more analysis and thought, including input from private housing market experts and housing economists.

The effects on prices and supply are likely to be most damaging in areas of the country that are not doing well economically, i.e. it will impact most at the margins. To illustrate the point, take a property in a remote rural area, one where there is no market for Second Homes. A typical property might be a 2 up 2 down cottage with one or two other rooms. It might be worth £150,000 on the open market but as per the costings shown in HS Technical Paper 16, could cost £35,000 to install energy efficiency measures.

The scenario might be for a Private Owner, who has a substantial mortgage and is in negative equity. The house’s was bought in 2008, its value then was £150,000, and the owner took out a 90% mortgage for £135,000. Since 2008 house prices have dropped by 25% and so it is now worth £112,500. The owner is already in negative

equity by £22,500. If they then decide to try and clear their debts and sell, or the bank forecloses, their negative equity would increase by £35,000, the cost of passing on the liability, to £57,500.

From the purchasers perspective the market price for the property now would be £112,500 but due to the passing liability for energy efficiency measures, they would only be prepared to offer £77,500.

Although this is a stark example, the system of passing the liability for energy efficiency measures can be seen to potentially depress prices.

The effect of the system in the PRS works the other way round in that if a landlord is forced to invest in energy efficiency measures, either rents have to be substantially increased perhaps to unaffordable levels that locals cannot afford, or the landlord has to sell or otherwise remove the stock from the market.

In terms of process, if sanctions are brought in by regulation, then we think that these should be able to be passed on to a purchaser otherwise you may find that sale / purchases are completely held up and the prospects of improvement are reduced.

**33. The Scottish Government does not intend to regulate before 2015. The working group will consider what options for timing of any regulation might be appropriate, but, given all the points set out in sections 2.80-2.81, from when do you think it might be appropriate to apply regulations?**

It is not possible to say definitively at this stage. The current schemes promoting energy efficiency need to be given time to have an impact along with the incentive of rising fuel costs. More information needs to be gathered on affordability and the effects on markets and other personal financial obligations of individuals before regulations can be introduced.

Also more research is also needed on what works might be appropriate for different house types before regulations can be introduced.

## **CHAPTER 3: FINANCIAL MARKET TRANSFORMATION**

**34(a) In Section 3.4 we describe the range of legislative and policy levers that we believe are available to help us transform the financial market such that it values warm, high quality, low carbon homes. Do you agree that this is the full range of levers? Yes/No**

**No**

We agree that individuals value warm, high quality, low carbon homes already and will increasingly do so. However, generally, the right house in the right location is more important to individuals than energy efficiency factors. Other factors such as the general condition of the house, decoration and fixtures and fittings are all likely to

have more influence than energy efficiency. Much of it comes down to choice. Some people prefer traditional style properties whilst some people prefer very modern properties. It is important not to lose sight of the fact that one third of properties built in rural areas have been built pre-1919 and these are all important to current housing stock.

**34(b) Can you suggest any other ways to help transform the market for more energy efficient, sustainable homes?**

The “championing” of the cause, with a professionally developed communications plan to win **owners, potential owners and tenants** hearts and minds. We’ve outlined some ideas on developing an appropriate communication plan in our answer to Q4.

Fiscal measures could go a long way to making increased levels of energy efficiency more financially attractive. We’ve outlined some ideas in our response to Q2, however the Scottish Government has some opportunities available to it. For example a discount on Council Tax for an energy efficient home, which would give a benefit every year, or a discount on the forthcoming Land & Buildings Transaction Tax, which is likely to bite at point of sale or rental.

Make more green sites available for one-off new build properties which are energy efficient properties. Also, speed up the planning process for the building of such houses which, at present, puts many people off building new homes as it is likely to be 2 years from conception to entry.

Consider lobbying HMRC for fiscal incentives as mentioned in our response to Q2.

**35. What changes would be required to current survey and lending practice to enable mortgage lenders to take account of the income from new technology or savings on energy bills?**

With regard to new technology, lenders could take account of income from FIT’s.

With regard to savings on energy bills, we feel that in the scheme of things, savings on energy bills may be minimal so won’t affect the amount of the loan in many cases.

However lenders and indeed purchasers will also take into account the condition of any renewable or other heating system in valuing a property. It is likely that some technologies may have quite steep depreciation rates, and therefore quickly lose their value.

**36. Section 3.15 lists a range of challenges that may prevent the benefits of a more sustainable, energy efficient home being fully recognised in its value. What further challenges, if any, need to be addressed?**

We seem to have confused messages from the Scottish Government due to changing rates of solar PV and FIT's. This creates uncertainty as to the benefits of a more sustainable home. Publicity is required to identify the financial benefits of each system and where people can get advice. Qualified professionals remain baffled by the range of subsidies and technologies which are out there, so the average householder will be very confused and suspicious of rogue sales people.

**37(a) Sections 3.16-3.22 sets out the action that Scottish Government is currently developing to encourage greater recognition of the value of sustainable homes. Do you agree that this action is appropriate?**

The action which the Scottish Government is undertaking is appropriate but potentially much more requires to be done if this is to be successful.

More could be done with a communications plan focussed on influence owners, as outlined in our response to Q4.

**37(b) What further action is needed to influence consumers and the market?**

As mentioned above, the Scottish Government needs to make individuals more aware of the issue of energy efficiency and what it means for them financially. At present, we do not think that the public are fully aware of the issue of energy efficiency and what it means for them in their own home. A process to change this is outlined in our response to Q4.

## **CHAPTER 4: NEW BUILD MARKET TRANSFORMATION**

**Q38. What steps can we take to ensure that we design and develop sustainable neighbourhoods?**

The Scottish Government's stated outcome for new build housing is for Scottish companies to maximise the potential of innovative design and construction so that they can deliver more, greener homes as part of sustainable neighbourhoods and that this will create export and other economic opportunities.

Scottish companies will only deliver more, greener homes using innovative design and construction if there is a demand for them. Scottish Land & Estates' vision is that every new home is built to high energy efficiency standards because that is what consumers will want and demand. This demand for the most energy efficient of homes will be driven by the financial benefits to the home owner over the purchase of energy inefficient homes. Some of these benefits will be inherent in the home they buy, such as lower maintenance costs because of the better build quality, and lower primary energy costs. Other financial benefits will be derived from new financial incentives introduced by Government such as a nil rate of Land Transaction Tax and 100% discount on Council Tax.

In response to this demand Scottish companies will quickly adopt innovative design and construction techniques because if they don't they will be unable to compete on price and skill with early entrants to the market not just in Scotland but south of the border too. Scottish Land & Estates views with some disbelief the notion that export markets will open up for innovative new products developed in Scotland. Scotland is already 5 years behind England and at least 15 years behind the rest of Europe in this field and will continue to lag for many years to come as product developers elsewhere move ahead with new products in response to existing demand in these countries.

Sustainable neighbourhoods arise from the conjunction of the three elements of sustainability – economic, environmental and social – none of which can be taken in isolation. Energy efficient housing can contribute to the sustainability of a neighbourhood or community but this contribution is worthless if there is no economic or social infrastructure there to complement it.

Home owners live where they want to live. This may, or may not be close to where they work. Trade-offs between housing and transport costs are made by households all the time. Government cannot, and should not, legislate for this. Where Government does have a role is in allowing developers – through the planning system – to build in locations (especially in rural areas) where they can offset potential increased travel costs against the energy savings made by highly energy efficient homes.

**Q39. Section 4.10 sets out the main challenges to address in taking forward our aim of new build transformation. What further challenges, if any, need to be addressed?**

The Scottish Government gives a number of ways, or objectives, in which it aims to achieve its stated outcome of a transformed new build housing market. The first of these is the development of building standards for 2016 recommended by Sullivan. These will take new homes in Scotland on a significant step towards the Passivhaus standard and Scottish Land & Estates would urge Scottish Government not to be deflected from this course. These standards should incorporate standards of energy use and waste in the construction process to ensure that construction methods move towards more innovative techniques.

Secondly, Scottish Government believes that the public sector should take the lead by example, including through a subsidised house-building programme with a strong focus on energy efficiency. Scottish Land & Estates supports this approach subject to the recommendations made in response to Question 41 (below).

Scottish Land & Estates, however, disagrees with the assertion that a flourishing export market in leading edge energy efficiency products, developed and manufactured in Scotland, will emerge.

Where new homes are to be developed the Scottish Government already has policy instruments in place, such as Designing Streets and Designing Places, in order to

influence better place-making through the planning system and Scottish Land & Estates supports these.

The first challenge identified by Scottish Government is to achieve far higher energy efficiency through significant changes in construction practice. Scottish Land & Estates believes that Scottish companies will only deliver more, greener homes using innovative design and construction techniques if there is a demand for them. Using the Greener Homes Prospectus to highlight studies of cost effectiveness is a very small step in the right direction but not nearly enough to change public perception. What is required is a massive and sustained campaign led by a housing champion who commands respect across the housing spectrum, the purpose of which will be to raise the profile of energy efficiency – the reasons for it (global climate change), and the savings associated with it (lower maintenance costs and energy bills) – so that every new home buyer wants, and indeed will only accept, a house built to these new standards.

The second challenge is then to ensure that the industry has the capacity to deliver homes to this standard. Scottish Land & Estates agrees with Scottish Government that this is where the social housing sector can take the lead but believes that this will only happen if affordable housing developers collaborate and improve their capability to procure houses to this standard. This is going to require them to think and behave smarter and acquire new project management skills. To encourage them to do this Scottish Government should require all developers in receipt of public money to build to the Silver Standard as a minimum without public subsidy. Housing Associations in England, and some private developers in Scotland, are already doing this and should be looked at as exemplars. Because the market in Scotland for Passivhaus is still undeveloped some public subsidy should be given only for developments to this standard. As a better understanding of risk emerges so the fear and uncertainty of building to higher standards, and using new and innovative technologies, falls away and capacity improves as a result.

Constrained availability of finance in a depressed housing market limits demand for innovative products and inhibits investment in research. But if public sector procurement adopts best practice, including life cycle costing and reduced carbon and energy consumption, makes best use of new and emerging technologies, and manages major contracts more effectively making best use of procurement and project management skills, this barrier will slowly break down.

As a result “early adopters” will no longer be fearful of the risks they take.

In the early stages of the procurement by affordable housing providers of homes built to higher energy efficiency the number of house builders able to offer modern methods of construction will be limited. In any case the need to drive down costs through economies of scale will inevitably lead to a market in which only a small number of large suppliers will be able to operate. Those developers further from the market will no longer be able to use local companies. This will have to be accepted

as a consequence of the move to the higher standards until such time as modern methods of construction become viable at a smaller local scale.

Affordable housing providers in the Social Housing sector will have to undergo a major culture change in order to wean them off their dependency on public subsidy. The PRS should be allowed to develop on a level playing field with RSLs, to encourage competition and the efficiencies and innovation that can result. However this might also mean that changes in legislation are needed for RSLs to enable them to operate more flexibly and efficiently.

The biggest challenge is to change the perception of energy efficiency so that it is more highly valued by consumers. The Scottish Government needs to embark upon a massive and sustained campaign led by a housing champion who commands respect across the housing spectrum, the purpose of which will be to raise the profile of energy efficiency – the reasons for it (global climate change), and the savings associated with it (lower maintenance costs and energy bills) – so that every new home buyer wants, and indeed will only accept, a house built to these new standards. This new enthusiasm will feed through into demand for the products of house builders, the services provided by surveyors and valuers, the mortgages provided by lenders and the insurance offered by insurers.

Associated with, and critical to, the valuation process, so that homes can be compared on the basis of their energy efficiency, is the way in which energy efficiency is measured and that information communicated to the consumer and valuer so that it is meaningful. The SAP methodology as the measurement tool is widely discredited and needs to be revised if it is to be in any way appropriate for the proper assessment of homes built to the new standards.

The timescale within which all this must be done is a further challenge. The Scottish Government must put in place quickly a timetable for action which is certain and to which it is committed. But the timetable must give sufficient time for the education of consumers and the industry to take place. Entrenched and conservative positions and attitudes within the sector will not be changed overnight so plenty of time must be allowed for this adaptation process to take effect. It is important that the campaign referred to above is sustained, and on a sufficient scale, to make a real impact.

#### **Q40. What action is needed to increase the capacity for developing and bringing to market innovative methods of construction?**

A number of actions are required. These will be designed to stimulate demand.

First of all there must be a concerted and sustained campaign to raise the profile of energy efficiency in the public mind so that house buyers demand new homes of the higher efficiency standard required (see response to Q4).

At the same time the Scottish Government must put in place those fiscal levers at its disposal to further stimulate demand. The proposed Land Transaction Tax, for



example, would set at a nil rate for all new homes built to the highest standard of energy efficiency. This will have the immediate and very visible effect of offsetting the potentially higher purchase price so that the net price of such a property will be directly comparable to that for a new house built to the lower non-qualifying standard. But the biggest selling point will be the 100% discount on Council Tax, for this will not apply just to the year in which the house is purchased but for every year in which the house is occupied and will offer the prospect of a permanent annual saving.

Action is needed to require developers in receipt of public subsidy to build affordable housing to a much higher standard. This will fairly quickly demonstrate to house buyers and to the industry that there is nothing to fear in adapting to new technology and this greater confidence will feed through into higher demand.

Sullivan proposed new building standards in 2016 that would take new housing in Scotland to zero carbon. The Scottish Government must take immediate action to confirm this and state categorically that it will adhere to it. At the same time the Scottish Government must set out a timetable for the implementation of all these actions to which it must, again, state its firm commitment.

**Q41. What further changes to the operation of the Government's Affordable Supply Programme would help it to champion greener construction methods and technologies in the medium term?**

Scottish Land & Estates believes that access to public subsidy through the Scottish Government's different investment programmes should be widened to allow private developers to compete on level terms with the traditional affordable housing providers. There is widespread evidence that private developers using innovative methods of delivery, particularly in rural Scotland, can build more affordable housing units per £1 of public subsidy than traditional developers.

Reducing the level of subsidy to affordable housing providers, and forcing them to build to higher standards as a matter of requirement (rather than as a matter of choice) will force a change in culture within organisations that have, since their inception, depended on, and expected, high levels of subsidy. The blow could be softened by allowing these organisations to work more flexibly and with less bureaucracy.

In either case raising the standards will force a change in construction techniques to ensure that affordable housing is viable. There are plenty of examples where this has already been done and affordable housing built within commercial budgets.

**Q42. What further action is needed to influence the construction industry to make greater use of innovative methods to deliver more, greener new homes?**

## CHAPTER 5: SKILLS AND TRAINING

The construction industry will respond to demand and make greater use of innovative methods when home buyers demand them. The Scottish Government can influence the planning and building control systems to make renewables an easier option. However for the industry to be in a position to respond to this demand when it arises it also needs to have a trained workforce. The Scottish Government therefore needs to start putting in place funding to support the industry's need for training.

The Scottish Government's stated outcome is to be able to have Scottish workers with the skills and training necessary to enable Scottish Companies to take advantage of the opportunities offered in building new sustainable homes, upgrading existing homes and in developing export markets. Scottish Land & Estates agrees that the work outlined in the Consultation offers opportunities for Scottish companies but questions why it is only Scottish workers that will benefit from this. As remarked upon above, Scottish Land & Estates wonders where exactly the export markets are that Scottish Government believes exist for the products of these new skills?

**Q43(a). Has Chapter 5 of this consultation identified the key challenges to ensuring Scottish Companies have the skills to take advantage of the opportunities expected to be on offer?**

Scottish Land & Estates believes that the Consultation has identified all the key challenges. Confidence in the Scottish Government's long term direction of travel is critical if Scottish companies are to invest in training. In Scottish Land & Estates' response to Question 40 of this Consultation it was suggested that the Scottish Government must take immediate action to confirm the application of the zero carbon building standard for all new housing from 2016 as proposed by Sullivan and state categorically that it will adhere to it. Further confidence in the Scottish Government's commitment will come from the very visible, widely publicised and sustained campaign proposed above.

**Q43(b). If not, what other challenges are there?**

How to train people in remote rural areas? Improved and comprehensive on-line learning would be the answer.

**Q44. What further action is needed to ensure there is appropriate investment in skills and training to meet these opportunities?**

The Consultation distinguishes the different categories of work that are required to deliver the Scottish Government's Strategy. The skills required, and therefore the training that needs to be in place, differ for new build and retrofit, between the retrofit of newer buildings and traditional buildings and the assessment of energy performance. The actions required of Scottish Government will differ depending on the category of work that needs up-skilling.

The requirement for all new build housing to meet the increasingly rigorous new energy efficiency standards, sign-posted by Scottish Government in advance, will drive the market for modern methods of construction and new construction techniques. Scottish companies will have to invest in the installation of the necessary off-site manufacturing equipment, and in the training of operatives, or find themselves unable to compete and get left behind. In order to achieve the economies of scale necessary for viability this investment is most likely to be undertaken by a relatively small number of companies and the training of skilled operatives in the use of the highly specialised manufacturing equipment can be expected to be undertaken by the companies themselves.

The huge amount of work to be undertaken by the retrofit programme will be carried out by local tradesmen the length and breadth of the country most likely to be self-employed or employed in small businesses with a handful of employees. These tradesmen will most probably be uni-skilled and be working full time to satisfy demand for their services. The key people: the foremen, clerk of works or business owner are all time poor. The time and resources they can devote to re-training is therefore severely limited but if the need for a multi-skilled workforce is to be the objective, training may be required over many years. The need to re-train the existing workforce indicates that the funding support for training, which is primarily focussed on 16 – 19 year olds and those out of work, may need to be altered slightly.

For the Scottish Government's ambition to be achieved it is this segment of the industry that requires the greatest level of support in the medium to long term. It is also critical that this support is delivered in way that works with their needs, which will mean locally, in bite-sized chunks or on-line. It is also important that businesses everywhere know that this support is available to them.

Likewise when it comes to ensuring that the skills are available to retrofit traditional buildings Scottish Government must commit sufficient resources over a sufficient period of time to overcome market failure.

Scottish Land & Estates believes that the increased need for the assessment of energy performance will drive the delivery of trained assessors and that the industry will respond accordingly. There may be a shortfall in the short term but a well signalled route to increased standards will give that segment of the industry time to adjust.

**Q45. How can the construction industry be made more aware of the potential funding and support for skills and training development opportunities and engage effectively with those providing training to ensure that it meets their current and future needs?**

Having committed the appropriate resources Scottish Government must publicise this widely to the industry to ensure that it takes up the opportunities for training that are on offer.

**Q46. How do we ensure that skills and training opportunities are provided on an equitable basis to all groups in society?**

Scottish Land & Estates is opposed to the statutory application of quotas.

**Q47. Apart from training and skills opportunities are there any other issues that should be addressed to make employment in construction and other industries becomes more representative?**

No.

**Q48. Please describe any specific difficulties relating to skills and training that apply to those in remote and island areas and your view on how these may be addressed.**

Scottish Land & Estates' answer to Question 44 suggested that the very small scale and fragmented nature of the businesses that operate in the Scottish construction industry, and which are going to be exclusively working on the retrofit programme (both on traditional and newer buildings), require training programmes to be delivered locally. Tradesmen delivering services to remote rural communities and to the Scottish Islands just don't have the time, nor can they afford to travel any distance for training. If these constraints aren't overcome the necessary training and up-skilling just won't happen. On-line training may have a role to play.