
Environmentally Sustainable Maintenance and Housing Associations

Summary
June 2009

Misia Jack and
Raymond Young for Sust.



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Introduction

This study investigated the potential for a more sustainable approach by Housing Associations (Registered Social Landlords - RSLs) to their maintenance programmes. It was developed following requests by housing associations to Sust. to produce more guidance and training on sustainability issues for maintenance staff, and was designed to provide the information upon which those programmes could be developed. 26 RSLs were interviewed across Scotland.

The key findings were:

There is a strong interest within the RSLs interviewed in developing a more environmentally sustainable approach to maintenance; and yet, all but one interviewed RSL stated that sustainability was not a key driver in its maintenance programmes. Maintenance staff indicated that they would welcome guidance/training on specific issues.

- With a few exceptions, sustainability is not generally regarded as a 'way of life', but is seen more as an energy issue for new build or refurbishment projects with other sustainability issues such as materials/toxins seen as 'add ons'. The phrase 'sustainable development' is perceived by many maintenance staff as placing sustainability as a development issue.
- Where environmental sustainability in maintenance is being taken seriously this is generally the result of leadership by the Chief Executive and senior management team.
- RSLs have been encouraged to try renewable technologies without any supporting programme of post occupancy evaluation in place. This has resulted in a growing scepticism about the effectiveness of such technological 'fixes', with poor advice from consultants, contractor incompetence, tenant inexperience, and a lack of training in new skills for maintenance staff, cited as contributing factors.

- The delivery of maintenance is changing in that, RSLs are developing new procurement approaches.
- The crucial activities for maintenance teams have become those of specifying materials, setting standards, negotiating contracts, supervising them and of monitoring and evaluation.
- Disjointed funding regimes often act as a key barrier to achieving more sustainable solutions.
- There is a perception that low environmental impact solutions cost more with little hard evidence of whether or not there are extra costs in a sustainable approach to maintenance, and there was a consensus that further research is required.
- The primary advice document funded by the Government - The Sustainable Housing Design Guide - is not well known. No training about key issues addressed in the Guide has been carried out for maintenance staff and it has not permeated day to day operations.
- There is also a lack of awareness of Sust, the Government's key organisation for the promotion of sustainability in the built environment.

The report makes recommendations to:

- the Government that it should take a more interventionist role to ensure that all RSLs have a more pro-active approach to sustainability;
 - the RSLs that they should ensure that maintenance teams are properly integrated into their sustainability programmes;
 - Sust. that it should provide a greater leadership role in sustainable maintenance involving information and training.
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Findings

RSLs manage 272,000 homes in Scotland, approximately 10% of the housing stock, and they spend over £33million annually on maintenance. Maintenance is at the heart of the landlord role. It ensures that tenants are well housed in warm and dry homes, are provided with a responsive repair service, that their homes are kept at least up to a recognised standard through a regular programme of cyclical maintenance and modernisation, and protects the landlord's assets. A high quality housing maintenance service which has low impact on environment and which creates local jobs is fundamental to addressing fuel poverty, economic instability and Scotland's ability to meet the emission reduction targets outlined in the Climate Change Bill.

Despite recognition of the importance of ensuring that the existing stock is 'fit for purpose', much of the policy work carried out by successive Scottish Governments has been concerned with increasing housing supply within more and more restricted funding regimes. The emphasis has been on reducing the amount of the capital Housing Association Grant (HAG) per unit. There are concerns that this will lead to poorer build quality and thus higher long term maintenance costs and to realising immediate savings rather than considering a whole life cost approach, with the implication that sustainability may not be a priority. This could be exacerbated by factors such as the current economic downturn.

The delivery of maintenance and the role of the in-house team within RSLs is also changing. RSLs in the future may share arrangements, will outsource more, and will be more concerned with achieving value for money through their contracting arrangements. The crucial activities thus become those of specifying materials, setting standards, negotiating contracts, supervising them and of monitoring and evaluation. This puts the maintenance team in the client role. Collaborative working is thus a potential growth area.

There is a strong interest within the RSLs interviewed in developing a more environmentally sustainable approach to maintenance. However, within the RSLs that were interviewed for this study, there was not only an ambition to provide the best maintenance service, but also a high level of aspiration to provide this in an environmentally sustainable manner. All but one of the interviewed RSLs stated that sustainability was not a key driver in its maintenance programs. Maintenance teams have a pragmatic approach to environmental sustainability – their approach starts with energy efficiency and a desire to make best use of resources while providing value for money. With a few exceptions, sustainability is not seen as a 'way of life' but as an energy issue for new build or refurbishment projects with other sustainability issues such as toxins viewed as 'add ons'. This reinforces a widely held belief that sustainability for RSLs is basically about development. The language itself is misunderstood in that, more often than might be expected – 'sustainable **development**' is perceived by maintenance staff as the responsibility of development staff.

The RSLs identified that insulation and energy efficiency are relatively easy to address, and are the starting point for developing a sustainable approach to both new build and refurbishment. However, associations acknowledged a number of challenges that they believe have to be overcome so that sustainable development principles can be fully applied to maintenance programmes:

- a **perception** that environmental sustainability would be **costly** to implement in maintenance programmes;
- a need for **encouragement** from the Government and the Regulator, who have not identified sustainable maintenance as a key sustainability issue;

– a lack of **commitment** to sustainable maintenance from many voluntary members of Committees of Management and senior members of RSL staff;

– a need for access to good **information and training** about environmental sustainability and specifically – about sustainable maintenance of the existing housing stock.

There is evidence that RSLs have been encouraged to try out renewable technologies without any supporting programme of post occupancy evaluation in place. There is, as a result of this experience, a growing scepticism about the effectiveness of technological ‘fixes’, further confused by problems with poor advice from consultants, contractor incompetence, tenant inexperience, and lack of training in new skills for maintenance staff. This needs to be counterbalanced with objective information about actual performance. Another big challenge is how to get RSLs to move on from energy to other sustainability issues – such as landscape, water management, materials and toxins, and therefore to focus on health.

Funding is considered by maintenance teams as a major constraint. Disjointed funding regimes often act as a key barrier that stands in the way of greater achieving more sustainable solutions. The perception that low environmental impact solutions cost more needs to be investigated, as there is little hard evidence on whether or not there are extra costs in a sustainable approach to maintenance, and further study would be needed to examine whether this is perception or reality.

A real concern is that few maintenance personnel appear to have read the primary advice document funded by the Government – The Sustainable Housing Design Guide. No training about key issues addressed in the Guide has been carried out and so the document has not permeated into day to day operations.

There is also a lack of awareness of Sust. – the Government’s key organisation for the promotion of sustainability in the built environment. More specific guidance and training is needed for maintenance staff who reported that they would welcome guidance/training on specific issues. There is potentially a role for Sust. to act as a single gateway or signpost to information and advice.

Where environmental sustainability in maintenance is being taken seriously it is as a result of leadership by the Chief Executive and senior management team. The importance of the individual commitment to sustainable development cannot be underestimated. It appears that where one person is responsible for both development and maintenance, the RSL

is more likely to apply sustainable development principles to maintenance, and there will be a greater integration of maintenance thinking into project briefs.

To ensure that all RSLs take a pro-active approach to sustainability may require a more interventionist role by the Government. As with disability issues and Health and Safety, legislation which requires compliance with defined standards and better regulation may be the only way to ensure that Scotland’s housing stock becomes more sustainable. The social housing sector can lead the way without the need for primary legislation since the Government as funder and the Regulator are able to make sustainability a high priority, if the political will is there.

Recommendations

The **recommendations** of the study are

The **Government** should:

- upgrade its sustainable development requirements for RSLs to include specific standards on maintenance and should enforce it through the Housing Regulator’s audit procedures;
- provide a ‘one-stop shop’ approach to public funding for RSLs; and a consistent, simple application process;
- introduce whole life cycle costing assessments for all capital funded programmes;
- introduce a common approach to life cycle cost calculations in maintenance programmes in order to develop benchmarks and enable monitoring require RSLs to use the information generated by Energy Reports from EPCs to inform a programme of ongoing planned maintenance and upgrading;
- commission the development of a standard Post Occupancy Evaluation (POE) process and introduce it as a funding requirement;
- encourage innovation by RSLs through a special HAG funded programme that is also tied to formal POE processes, highlighting whether or not it is worth mainstreaming certain approaches;
- commission further research to update the financial costs, the business case for sustainability and the benefits of a sustainable approach to maintenance, including whether costs could or should be shared with the tenants through increased rents.

RSLs should:

- ensure that their maintenance teams are properly integrated within their management structures;
- involve maintenance teams in development decisions at as early as stage as possible;
- support collaboration between development staff and maintenance staff in – decisions relating to environmental sustainability of their housing stock;
- encourage committee members and senior staff to embed sustainable development principles throughout the RSL to ensure the effectiveness of their Sustainability Policies and Action Plans.

Sust. should provide a greater supporting role by:

- updating and marketing the Sust. Website to become the key Scottish website and single door to information on environmental sustainability in maintenance,
 - offering bespoke training for RSLs as well as general courses, and these should include Chief Executives and Finance staff;
 - offering specific training events and information for maintenance staff developing a maintenance benchmarking group (virtual and real!) where maintenance staff can get help and support and provide through it practical advice to Maintenance Teams on what is going to make the greatest impacts;
 - developing training on sustainable maintenance management (including CPD training) with professional bodies such as SFHA, RICS, BIFM, CIOB and Construction Skills;
 - discussing training and support for tenants with the Scottish Tenants Federation and Tenants Participation Advisory Service;
 - promoting best practice through publishing case studies and using its links with European partners, especially in the Nordic countries and Germany.
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About the study

This study was carried out by Misia Jack and Raymond Young for Sust. as part of the Sustainable Designs on You Programme. It was developed following requests by housing associations to produce more guidance and training about sustainability for maintenance staff. The study looked at 26 RSLs; these RSLs could be described as among the leaders in the development of a sustainable approach to maintenance, and are not necessarily a representative sample.

The full report can be found at www.sust.org

The Sust. Sustainability in Architecture Programme is fully funded by the Scottish Government and is based at The Lighthouse, Scotland's Centre for Architecture, Design and the City.
