

Jim MacDonald
Deputy Chief Inspector
Historic Scotland
Longmore House, Salisbury Place
Edinburgh EH9 1SH

Tuesday 8 December 2009

Dear Mr MacDonald

Historic Scotland Micro Renewables Consultation Response

I am writing, on behalf of Changeworks, in response to the public consultation on Historic Scotland's *Managing change in the historic environment* guidance note on micro renewables. Below are a series of responses in relation to general and specific aspects of the August 2009 consultation draft. These responses relate only to the micro renewables consultation draft.

In general, Changeworks welcomes this Guidance Note, and in particular its positive support for renewable energy in historic buildings as summed up in this quote: *'The use of renewable energy technology is strongly encouraged where the character of the historic building or place is protected through careful siting and design'*. Changeworks feels this captures the fundamental need to consider conservation as 'management of change'.

1. Consultation questions (as per Historic Scotland's consultation guidance notes)

Background: In what capacity are you involved, or have you previously been involved, with seeking advice on the Historic Built Environment?

Changeworks is a Scottish sustainable development organisation. Their work includes research and demonstration projects to identify innovative ways to reduce domestic CO₂ emissions. Recent projects, carried out with the support and involvement of Historic Scotland, have focused on historic dwellings, notorious for the challenges they present in terms of finding acceptable energy efficiency and renewable energy solutions.

These projects have involved securing consents for works, and have been strongly supported by conservation bodies including Historic Scotland, The City Of Edinburgh Council, Edinburgh World Heritage and The Cockburn Association, among others.

Among these projects are the award-winning *Energy Heritage* and *Renewable Heritage* projects, which focused on energy efficiency and microrenewables in traditional and historic homes; details are available at www.changeworks.org.uk/content.php?linkid=373 and www.changeworks.org.uk/content.php?linkid=424.

Content of Guidance Notes: Do you think the guidance notes present Scottish Ministers' advice on the Historic Environment in a clear and consistent manner? Please explain why / why not.

Changeworks feels that the micro renewables consultation draft does present advice clearly and concisely. However, this area is one that requires an in-depth understanding of the technologies and surrounding issues: while it is recognised that this Guidance Note does not have the capacity to explore these issues in more depth, Changeworks feels that further reference documents should be included in the *Further information and advice* section.

In particular, Changeworks recommends that their 2009 publication *Renewable Heritage: A guide to microgeneration in traditional and historic homes* should be included under *Other selected publications and links*. This guide is one of the most comprehensive and up-to-date documents currently available on this subject, and was produced following in-depth research, a high-profile demonstration project in Edinburgh's UNESCO World Heritage Site, and consultation from a wide range of organisations including the above-mentioned conservation bodies. *Renewable Heritage* is available online at www.changeworks.org.uk/uploads/Renewable_Heritage_Online.pdf

Layout of Guidance Notes: What are your views on the layout and use of the guidance notes? It would be useful if you could consider:

- *how easy the documents are to read?*
- *are the documents accessible?*
- *do you think the images are appropriate for the issues they illustrate?*

Changeworks feels that the micro renewables consultation draft is clearly laid out, easy to read, accessible and contains appropriate images.

Future Guidance Notes: The 14 Guidance Notes replace guidance from the withdrawn memorandum. What aspects of the Historic Environment should be considered for inclusion in an expanded series in the future?

No comment.

2. Other responses

The following responses relate to the content of the micro renewables consultation draft, and are presented in the order they appear in the Guidance Note.

- *Key issues* (page 2, point 2)

Include an additional bullet point, to read as follows: '*what technology is best-suited to the building and its users*'. This is a fundamental consideration when planning micro renewable installations, and enables both the building's and the users' requirements to be considered.

- *Introduction* (page 3)

The following quote would be well suited to being put in bold font, to stress Historic Scotland's general stance on micro renewables: *'The use of renewable energy technology is strongly encouraged where the character of the historic building or place is protected through careful siting and design'*.

- Images 1 and 2 (page 3)

Reference both these images to Changeworks' *Renewable Heritage* project. As the majority of images in this Guidance Note reference the location and / or project in their captions, Changeworks strongly feels these images should be treated in the same manner. The Renewable Heritage project was developed and led by Changeworks, in partnership with Lister Housing Co-operative and Edinburgh World Heritage. Changeworks feels that these organisations' involvement should also be recognised. Changeworks proposes the following text be included in the caption: ***'As part of the Renewable Heritage project, led by Changeworks in partnership with Lister Housing Co-operative and Edinburgh World Heritage, solar water heating panels have been added to the inner south-facing slopes of the valley roofs...'***

- *Background* (last paragraph, page 3)

Reference Changeworks' 2008 publication *Energy Heritage: A guide to improving energy efficiency in traditional and historic homes*. This comprehensive guide has been upheld by members Historic Scotland as the best guidance currently available on this subject, and was produced following in-depth research, a high-profile demonstration project in Edinburgh's UNESCO World Heritage Site, and consultation from a wide range of organisations including Historic Scotland. *Energy Heritage* is available online at www.changeworks.org.uk/uploads/83096-EnergyHeritage_online1.pdf

- *Principles for new micro-renewable development affecting historic buildings and their settings* (page 4)

Include the following text at the end of the first paragraph: ***'...it is important to start by identifying the interest and character of the historic building and its setting, as well as the appropriateness of the proposed technology'***.

- *Identify potential physical impacts* (page 5)

Changeworks suggests changing the tone of the last sentence, as follows (or equivalent): *'When forming trenches, boreholes or foundations, care should be taken to avoid damaging the underground archaeology that sometimes surrounds historic buildings'*.

- *Identify potential sensory impacts* (page 5)

Changeworks suggests that brief reference should be made to the positive role that visible renewable energy technologies can play in raising awareness, and in demonstrating the environmental credentials of a building. While Changeworks recognises the importance of sensitively installations in keeping with the building and its surroundings, Chageworks feels it is important not to portray micro renewables negatively along the lines of 'it should be hidden away out of sight', as this leads to a presumption of ugliness and a negative perception of the systems. Particularly at this time when micro-renewables are still largely emerging technologies, sensitively-

handled visibility can provide a valuable means of education and support. This can be of particularly significant potential on some public buildings.

- *Consideration of the requirements for each main type of micro-renewable technology* (Heat pumps, paragraph 3, page 6)

Change *'river, canal, loch or pond'* to **'body of water'**. This allows for the inclusion of the sea, another potential water source.

- *Consideration of the requirements for each main type of micro-renewable technology* (Heat pumps, paragraph 4, page 6)

Brief mention could be made of exhaust air heat pumps, which use the heat from internal areas such as kitchens and bathrooms (that would otherwise be wasted) as a heat source. These require mechanical ventilation and associated ducting, which would require careful planning in some historic buildings.

- *Consideration of the requirements for each main type of micro-renewable technology* (Hydro, paragraph 1, page 6)

Include the following text at the start of sentence 2: ***'In most systems, an intake...'***. This allows for the inclusion of the Archimedean Screw, an emerging option for hydro systems, which is installed differently from more conventional turbines.

- *Consideration of the requirements for each main type of micro-renewable technology* (Biomass, paragraph 2, page 7)

Reference should be made to the fact that many older historic buildings were built with solid fuel heating in mind, and contain space for stoves and flues in existing fireplaces and chimneys, which would allow these original features to be brought back into use.

- *Consideration of the requirements for each main type of micro-renewable technology* (Solar, paragraph 1, page 7)

Remove the reference to using solar thermal heating for space heating, as this is not generally felt to be a viable option in the UK, as the period of peak heating demand (winter) is the period of lowest potential for using solar power.

Include the following text at the end of the penultimate sentence: ***'increasingly incorporated into existing building materials such as roof tiles and glazing'***.

- *Consideration of the requirements for each main type of micro-renewable technology* (Wind, page 7)

Building-mounted turbines are often not advised, in large part due to the fact that larger turbines are generally more efficient and generate more meaningful amounts of power. Free-standing mast-mounted turbines have the additional advantage that they require less works to the historic building, and can generate its power from a different (albeit adjacent) location.

- Image 3 (page 7)

As per comment number 3 (see above). Reference Changeworks' *Renewable Heritage* project. Also reference the fact they are grade 'B' listed, and are situated in a conservation area and in the UNESCO World Heritage Site. Changeworks proposes the following amendment to the caption: '**Solar water heating panels located in the roof valley of grade 'B' listed tenements in a conservation area and World Heritage Site, installed under Changeworks' Renewable Heritage project**'.

- *Further information and advice (Other selected publications and links, page 9)*

Include Changeworks' 2009 publication *Renewable Heritage: A guide to microgeneration in traditional and historic homes*, as noted earlier in this response document.

- *Further information and advice (Selected contacts, page 9)*

Delete '*Scottish Community & Householder Renewables Initiative*' and corresponding contact details, as this grant no longer exists.

Replace with the following, to provide details of the grant stream that has replaced the community stream of SCHRI: '**Community And Renewable Energy Scotland (CARES)**' and retain existing contact details for Community Energy Scotland who manages this grant. Replace their website link with the following:

www.communityenergyscotland.org.uk/cares.asp

Include the following, to provide details of the grant stream that has replaced the householder stream of SCHRI: '**Energy Saving Scotland home renewables grants**' and use the following contact details: 0800 512012,

www.energysavingtrust.org.uk/scotland/Scotland-Welcome-page/At-Home/Grants-and-offers/Energy-Saving-Scotland-home-renewables-grants

- *Further information and advice (Cover images, caption 1, page 9)*

Reference Changeworks' *Renewable Heritage* project.

Lastly, as a fundamental general point, Changeworks feels the most important question behind any potential renewable energy installation should be '*Will it work?*'. Installing a system that is visually discreet but which does not perform is counter-productive. If a south-facing roof is the only viable option for micro renewables on a historic building, and that happens to be the principal elevation, this poses an important decision. Visibility should not automatically exclude micro renewables, particularly where no objections are received to an application. Historic buildings have the opportunity to champion sustainable energy, while becoming more sustainable themselves.

Yours sincerely

Nicholas Heath
Project Development Officer
Sustainable Futures