

REQUEST
promoting low carbon refurbishment

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Update of the UKs REQUEST Pilot Project

Trigger Point Guidance

May 2011

The refurbishment challenge

- EPC recommendations are generally for a system or whole house solution – most owner occupiers don't refurbish their home in one go
- Home-owners want their builders to give them energy saving advice but builders are risk averse

The refurbishment challenge

Most trigger events driven by functional needs. Energy saving particularly for heating / windows.

	Total	Entire room	Kitchen	Bathroom	Central heating or boiler	Windows
Needs modernisation	56%	60%	72%	67%	64%	59%
Don't like the way it looks	28%	44%	46%	43%	5%	17%
Part of refurbishment plan	23%	23%	25%	27%	14%	21%
Improve property value	23%	20%	23%	23%	13%	22%
Save on energy bills	22%	11%	9%	10%	64%	53%
Change way we use the room	15%	12%	15%	17%	5%	4%
Reduce CO2 emissions	12%	7%	8%	5%	37%	25%
Running out of space	10%	2%	4%	4%	4%	3%
Cold and damp problems	9%	7%	3%	7%	11%	24%
New property - make MY home	7%	9%	10%	11%	4%	3%
Make property safer	7%	3%	3%	2%	10%	21%
Friends/family did similar project	4%	2%	3%	4%	2%	3%
Foods, a leak or fire	2%	2%	1%	3%	1%	1%
Too much external noise	2%	1%	1%	2%	3%	11%

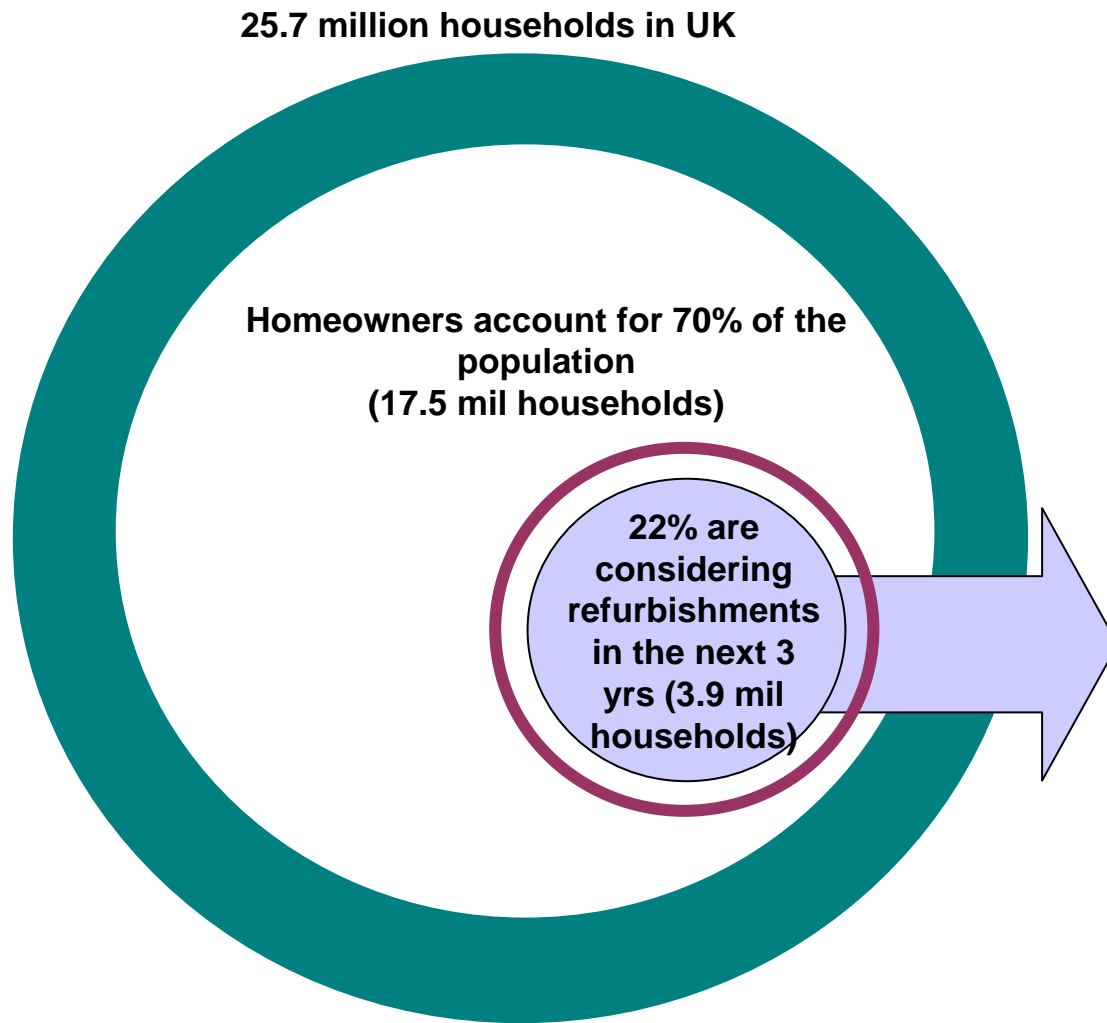
Base: total (2161), entire room (572), kitchen (303), bathroom (261), heating (249), windows (199)

A1 Which, if any, of these reasons is prompting you to plan for this refurbishment to your property in the next 3 years?

A2 And which, if any, of these events is motivating you to undertake this particular refurbishment project?

The refurbishment challenge

22% households considering refurbishment projects in next 3 years

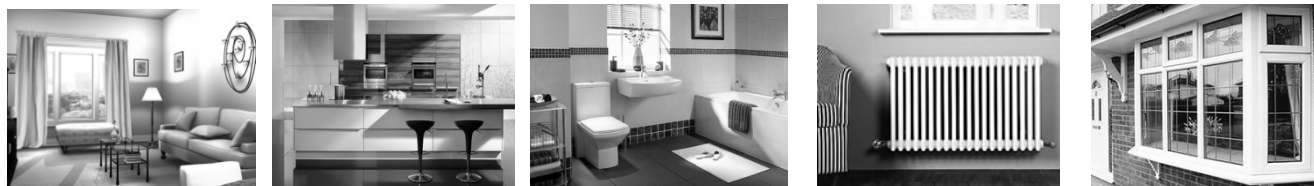


<i>Projects considering undertaking in the next 3 years...</i>	Total Home-owners
	(1287)
	%
Fitting a new kitchen	10
Fitting a new bathroom / cloakroom	9
Fitting double glazing	6
Building a brick extension	5
Converting the loft	4
Refurbishing the entire property	2
Retiling the roof / building a new roof	2
Installing a conservatory	2
Rewiring / upgrading the electricity	2
Installing central heating	1
None of these	78

Home owners

Room and windows show best potential for energy saving stretch

Averages shown



	Total	Entire room	Kitchen	Bathroom	Central heating or boiler	Windows
Project Budget	£5,430	£1,950	£5,760	£3,415	£3,230	£4,680
	+13%	+21%	+16%	+15%	+16%	+12%
Quality Stretch	£694	£399	£902	£515	£502	£572
	+11%	+27%	+10%	+16%	+18%	+39%
Energy Saving Stretch	£572	£521	£578	£554	£570	£1,832

Base: total (2161), entire room (572), kitchen (303), bathroom (261), heating (249), windows (199)

A3 What sort of budget do you have in mind for this project? / A5 If you were to stretch your budget to get a better quality end result, how much extra would you be willing to add to your budget? / A10 How much would you be willing to stretch your budget to include energy saving as part of your project?

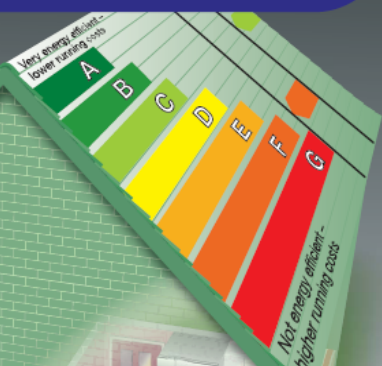
Trigger point guides

HOMEOWNER

Cut your energy costs

A homeowner's guide to additional energy performance improvements

planning a new kitchen



Very energy efficient - lower running costs
A B C D E F G
Not energy efficient - higher running costs



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TRADE

Make eco-building your business

A guide for trade additional improvements to consider when

fitting a new kitchen



Very energy efficient - lower running costs
A B C D E F G
Not energy efficient - higher running costs



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Pilot project outline

- Key actors
 - Federation of Master Builders
- Target groups
 - Jobbing builder
 - Home-owners

Trigger point - Kitchen

Upgrading Structural elements

- **Stepping stone standard**

- Kitchen Upgrading walls and floor with 80mm High performance insulation, Renewing door and windows to band C, mastic seal to penetrations, internal and external edges. Low energy Lighting

- **Best Practice standard**

- Kitchen As above with 100mm floor insulation with 35mm perimeter, renew door and windows to band A, fit aerated low flow taps and fittings.

Our approach - Timeline

- **Dec 2010 – May 2011** complete trigger points guides for home-owners and builders (specifically kitchen, bathroom and living areas) / complete training manual / distribute guidance to housing professionals and home-owners in South Wales and London.
- **June to August 2011**– identify 20 specific projects, complete “before” SAP and EPC assessments of properties, host 2 workshops with builders on trigger points standards, application and specific jobs and Q & A.
- **July – October 2011** – complete refurbishment works, and document decision making, build schedule, variations to quotes, price actual and quoted, customer satisfaction, validation of guidance approach.
- **November 2011** – complete “after” SAP and EPC assessments of properties and begin to compile pilot report.

Impact of pilots

- We anticipate at least 50% of the builders guides will be collected by housing professionals and we predict up to 20% of these will lead to demonstrated uptake of recommendations.
- We expect on average 3 recommendations from the EPC taken onboard per average property in the UK.
- Approximately 799 kWh/yr energy savings for one average UK property. For 20 properties this is approximately 15,856 kWh/yr energy savings. Based on 3 bed semi-detached house in the UK refurbishing one room, assumed to be the kitchen.
- At least 0.2 t CO₂ /yr savings for one average property. Assuming approx. 4 t CO₂ /yr per property. Based on 3 bed semi-detached house in UK refurbishing one room, assumed to be the kitchen.
- We expect 12m households to conduct at least one retrofit project up until 2020. This based on 22% of Home-owners retrofitting one room.
- If 20% of these are retrofitted to the standards in our guidance then this will equate to a CO₂ saving of 468,000 tonnes per annum in 2020.



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