

Remaking Suburbia
INITIATIVES TO DATE

Keynote address
John Doggart
Chairman
Sustainable Energy Academy, UK



www.rmit.edu.au



**Transforming Housing
to be fit for the 21st century**

John Doggart Chairman SEA

www.s-ea.org.uk

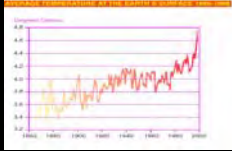


**Learning and action
to cut carbon**



Why Act? – 4 Tsunamis

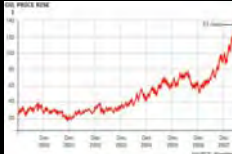
Global warming



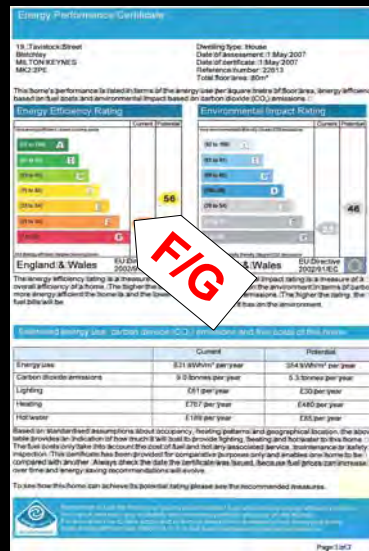
Pollution



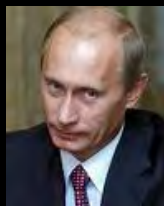
Fuel Costs



Poor Performance



The Fifth Tsunami



+



=



How to save most carbon?

Factor 15 savings

Carbon neutral new housing policy, starting today

3.6%

60% carbon saving policy for existing housing

56.5%

Annual Carbon savings in 2050, assuming current demolition and newbuild rates. Sources: SEA, ECI, Royal Commission on Environmental Pollution, the Urban environment, 2007

Improving Capacity: Housing Ownership



Source: DCLG

Opportunity: Size matters

200,000 jobs



500,000 Houses to be transformed per year at £20,000 - 30,000/house, for 40 years

Newbuild 2007 costs £16.05 billion :
Source BERR 2008

Opportunity: Size matters



The four problems:

- **Desire**
- **Knowledge**
- **Delivery Capacity**
- **Incentives**
- **But : A lot of interest**

Improving Desire: Old Home Superhome Campaign

- **Network of exemplar houses C60 or better**
- **Accessible for the public to learn and be inspired from a trusted source**
- **Touch and feel experience**
- **Aim for 1000 Superhomes in 5 years**

Improving Desire: Old Home Superhome

- Currently 27 houses throughout country, recruiting more
- 30,000 people visited in first year; 9 Video Fly-throughs
- 93% very pleased
- 25% want help with their projects
- Average £200 spend and 0.1 tonnes CO2 saved per visitor

Chester Rd

Semi-detached
Victorian
House in
Conservation
area

Transformed
to use 60%
less carbon

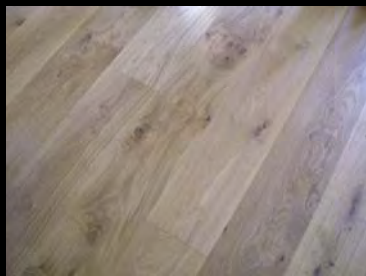




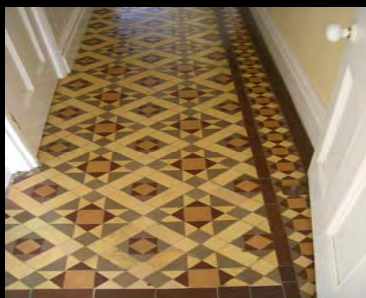
Walls are internally insulated with 100mm Diffutherm Fibreboard



Cornices have been carefully remade by specialist plasterers



Ground floor was insulated under new oak flooring, from sustainable sources



Period details were maintained, retaining the mosaic hallway floor



Original windows have been overhauled, double glazed and draught stripped



At the back, new windows are high performance Rational double glazed, argon filled, low e



Energy use was reduced by high efficiency lights and appliances, and by a sun pipe to light the normally gloomy hallway



Thermal solar panels expected to reduce heating for hot water by up to 75%

Water harvesting and recycling



Front tank

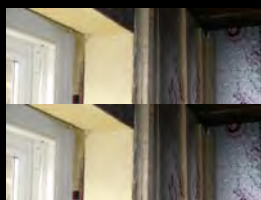


Garden tank



Grey water diverter

Russell Smith's House in Sutton



Donnachadh McCarthy's Carbon neutral house in Camberwell



Large south facing areas of PV and solar thermal



Wood burning stove



Export meter



Clacton



Oxford



Hereford



Marlow

Open House



Houses are very popular, Camden averaged 120 visitors every Sunday

Superhome Locations



Location
Brighton

Welcome to the SEA Superhome locator!

This interactive tool will help you locate the houses around the UK that are part of the Old Home, Superhome Alliance.

Each of the properties listed have been modified to save energy and reduce their carbon emissions.

To get started simply move your cursor over the map to the left to pick a location and click to see a list of the houses in that area.

This tool will be updated often with new houses so be sure to check back soon!

Please note: 'email homeowner' and 'more information' features on this tool are currently disabled - please use the main contact information for SEA for further details

www.s-ea.org.uk

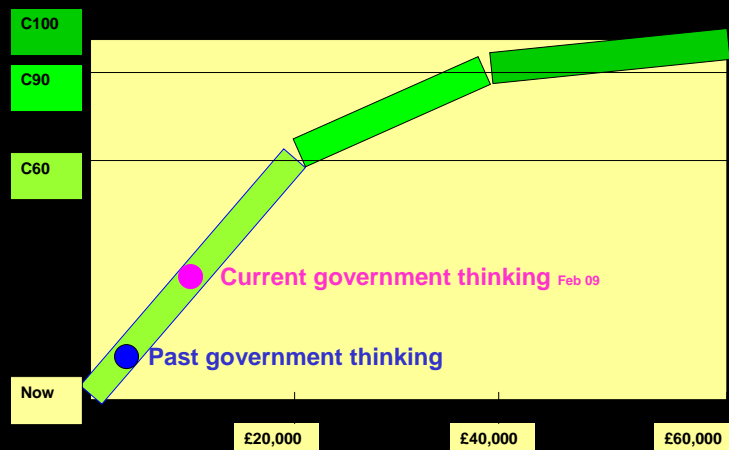
Improving Capacity : MyGreenBuilder

MyGreenBuilder
Database

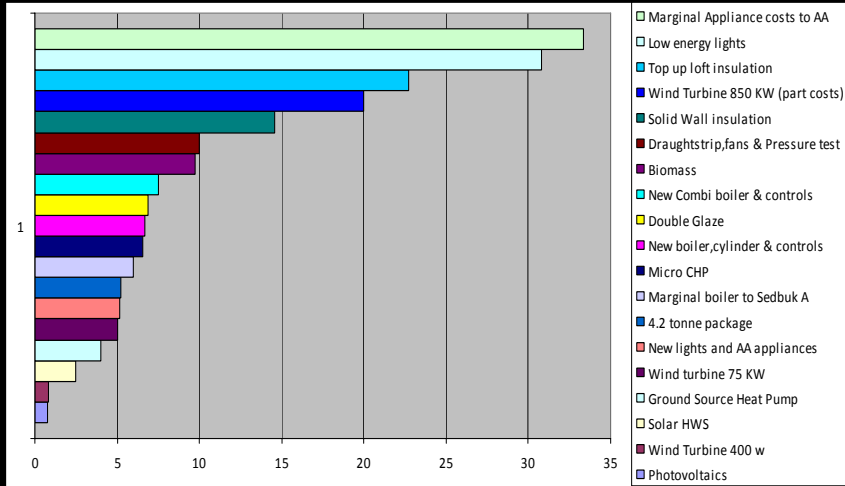
Uses star rating

The screenshot shows a web-based form titled 'MyGreenBuilder Database'. It is divided into several sections for data entry, including 'Project Details', 'Building Information', and 'Energy Performance'. The form contains numerous fields for text, numbers, and checkboxes, organized into a structured layout.

Improving Knowledge: Cost and Performance



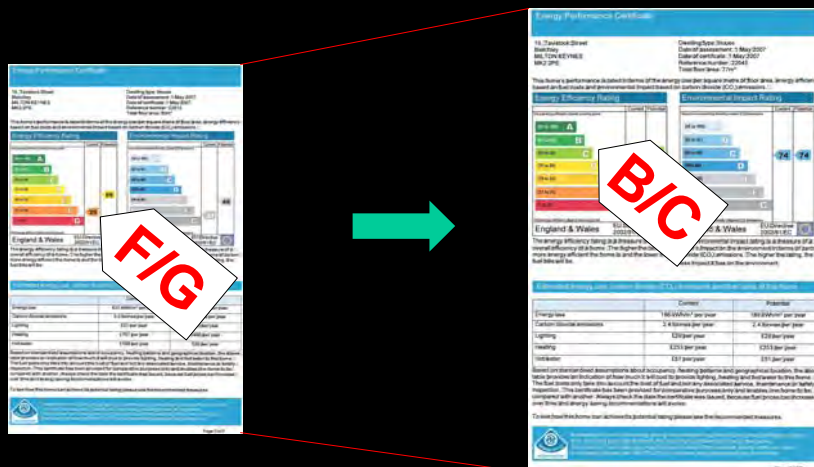
Improving Knowledge: Cost Efficiency



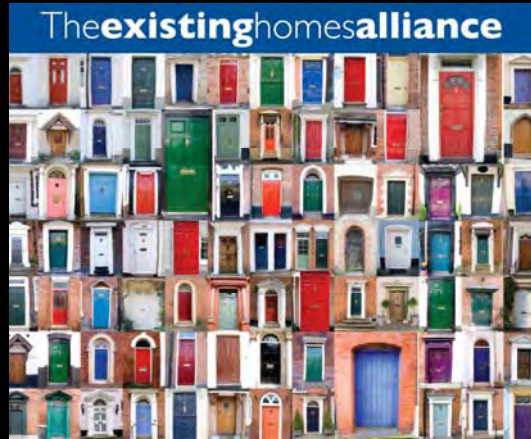
Tonnes CO2 saved per £1000 spent

Source John Willoughby 2007

Improving Incentives: 6% rise in house value



Existing Homes Alliance



www.existinghomesalliance.org

Supporters of the Declaration



Summary

- **Grow the footfall: More Superhomes, more publicity**
- **Grow the action: More advisors, better follow-up, more visitor spend.**
- **Better Information: Advice designed for Homeowners; training for small builders; MyGreenBuilder register**
- **Better Incentives: Government pump priming**

Transforming Housing to be fit for the 21st century

John Duggart Chairman SEA

www.s-ea.org.uk



Learning and action
to cut carbon





Carbon Heroes



Russell:
Project
Manager



Johnachadh:
Environmental
correspondent



Barbara: Strategy
Director



Elaine:
Photographer



Sarah:
Sustainability
Advisor



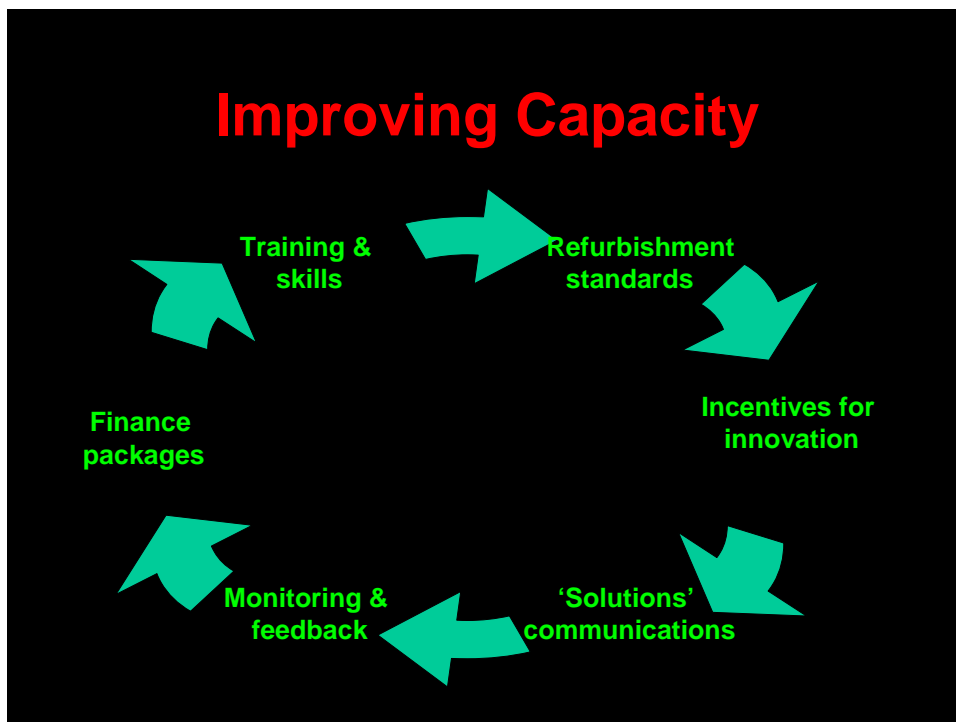
Sally and Tony:
Butler - PR
manager



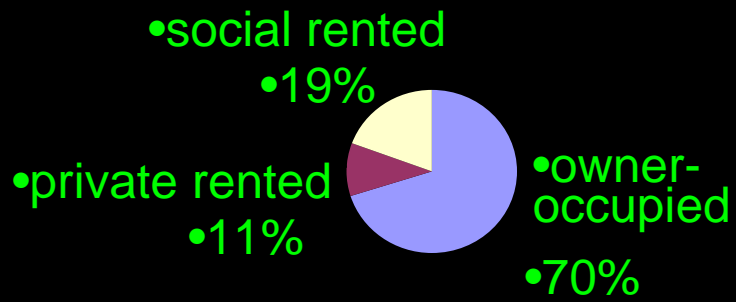
Gavin: Energy
Researcher



David: Architect



Improving Capacity: Housing Ownership



Source: DCLG