GOLD AWARD

Demonstration
The Housing Forum
CONSTRUCTING EXCELLENCE

Sustainable Energy & Social Housing

Generation Homes – low carbon refurbishment project, UK

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About Radian:

- Own 16,000 homes in South East of England.
- Build circa 800 new homes in the region / year.
- Annual construction spend approx €75,000,000
- Estimated carbon footprint >50,000 tonnes / year.
- 7,000,000 litres water consumed / day.
- Investment in renewable energy €1,750,000 (saving approx 225 tonnes $C0_2$ / year).
- Approx 12% families (homes) live in fuel poverty.

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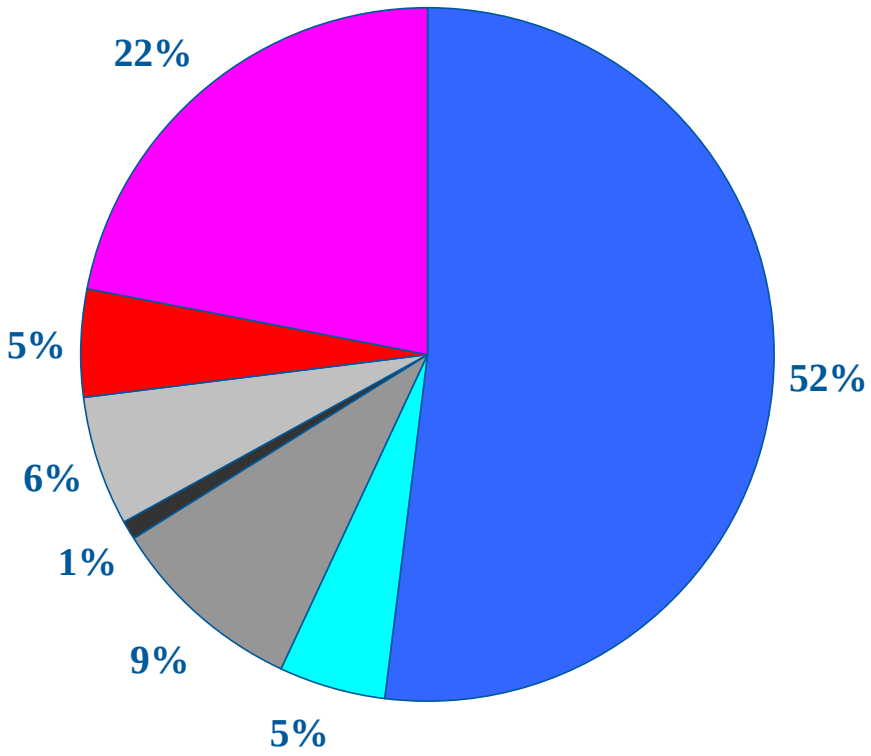
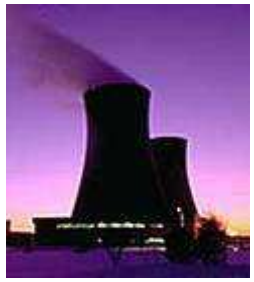
UK Energy Consumption



- Buildings
- Industry - Building materials
- Other Industry
- Agriculture
- Transport - other freight
- Transport - building materials
- Transport - People

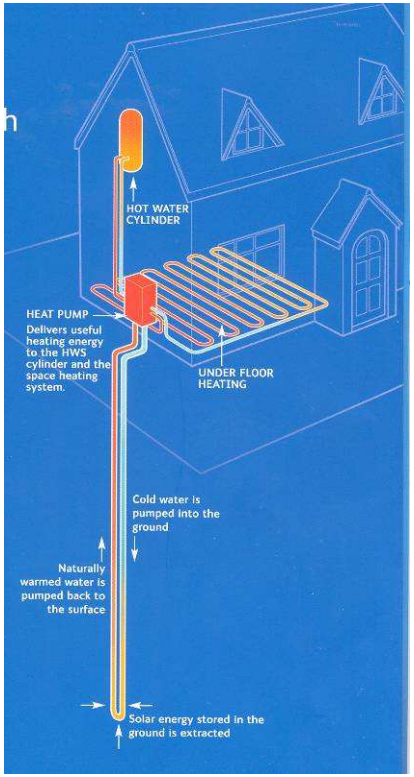


27% produced by 22 million existing homes!

‘Generation Homes’

March 2007

- Partnership with EST & ESD to demonstrate significant household CO_2 emission reductions on 6 homes built in 1950’s (min 60% target).
- Existing solid fuel (coal) heating.
- Residents running costs reduced from €1,500 to €750 / year.



Funded by energy saving trust™ | esd Part of the Camco Group | RADIAN | Generation HOMES | HOUSING CORPORATION

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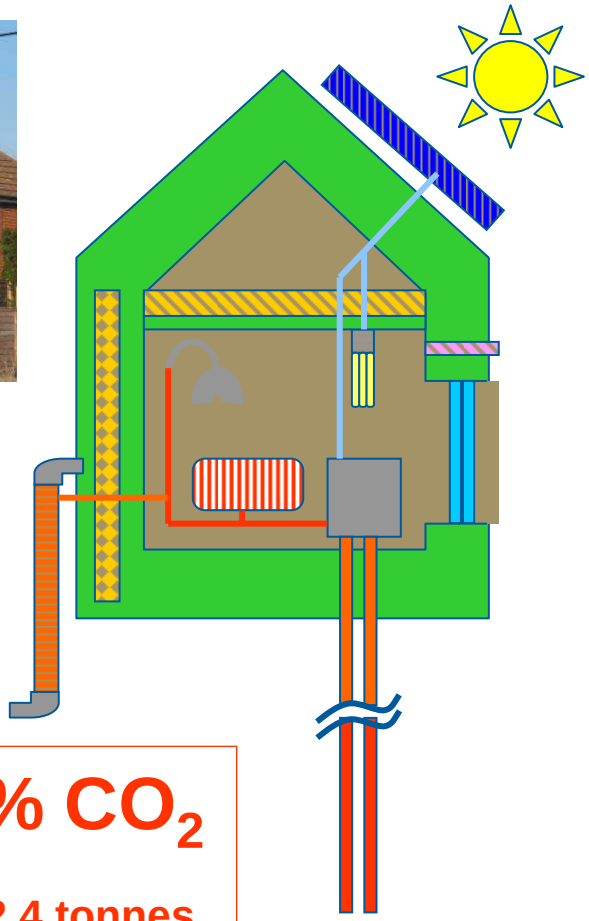
‘Generation Homes’
Kingsley, Hampshire

Generation HOMES

- Energy efficiency:
  - Cavity wall insulation
  - Loft insulation 300mm
  - Double glazed windows
  - Low energy light bulbs
  - Draught proofing & ventilation
  - Waste water heat recovery
  - Ventilation with heat recovery
- Renewables:
  - Ground source heat pumps
  - Solar Photovoltaics



-75% CO_2

9.8 to 2.4 tonnes

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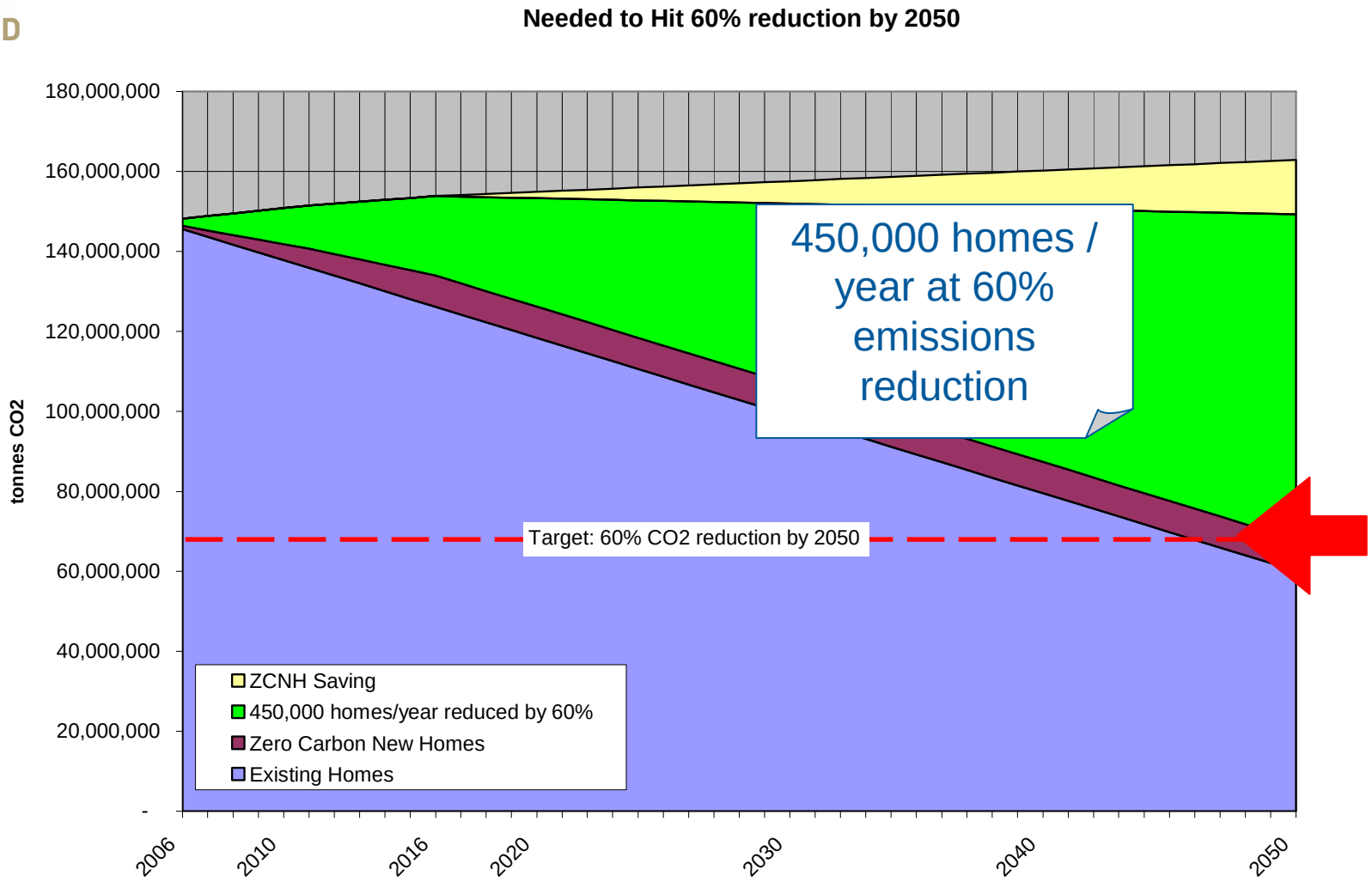
‘Generation Homes’



GOLD AWARD

New housing –
Renewable Energy examples

Solar roof ‘Sunergy’

28 solar thermal

75kWp PV

21 kWp PV & 8 solar thermal

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GOLD AWARD WINNER 2007

Environmental Sustainability

The 2007 South East Low Carbon Awards

www.generationhomes.org.uk

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