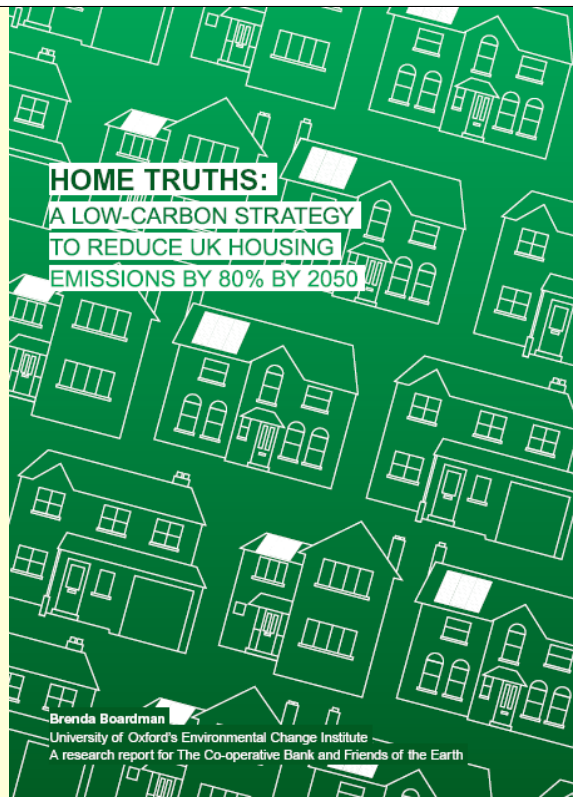


Home Truths

HECA 13.5.08

Dr Brenda Boardman, MBE, FEI
Environmental Change Institute
University of Oxford



Stress 80% reduction

Existing houses, not new build

New homes are having to – Code for Sustainable Homes, Building Regulations

Bring fuel poverty and cc together

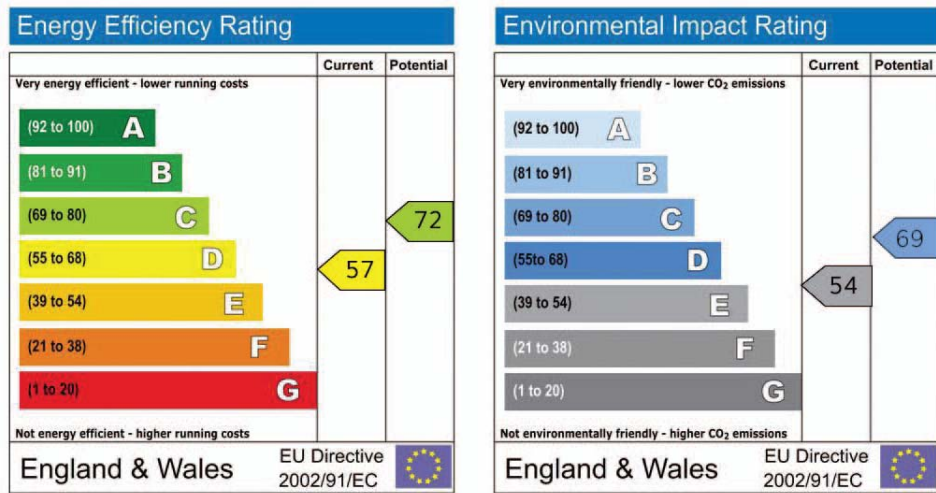
Not going into the problems of old HECA

Right concept, wrong process

Objectives

- Reduce carbon emissions by 80% by 2050
- Eradicate fuel poverty – legal obligation
- Radical new approach by Government
- Get people taking action

Energy performance certificates



Mandatory for all homes now (temporary procedure)

Scottish is similar

Both based on RdSAP

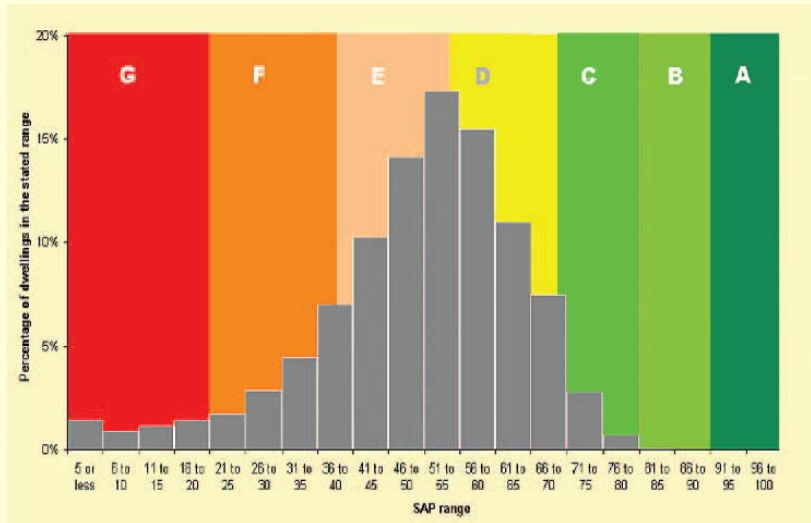
Explain RdSAP

Explain why CO₂ is different numbers, electricity vs gas, etc.

Average = D/E boundary, ie 57 just slightly above average

Fuel poverty, NI 187, requires those less than 35, approx G and F, those above 65, approx C, B, A

Distribution of efficiency



Bunched up at 0, nowhere near 100 – requires LZC

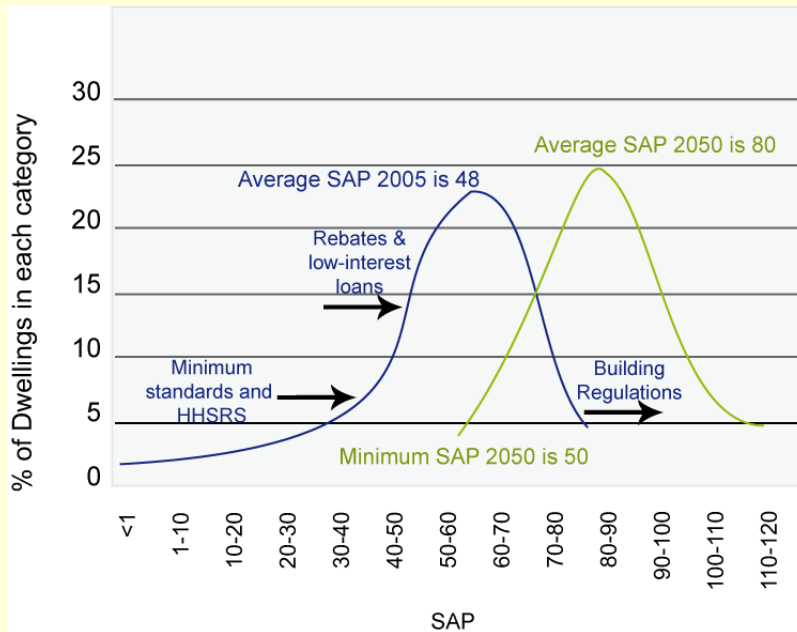
All shown as 0 on EPC = a problem

G and F = HHSRS

And phase out E from 2013 onwards

Slow turnover of stock = lived in for up to 40 years

Transforming the housing stock



EHCS – which year?

2 bottom policies are Govts, but not v strong

Rebates, etc is mine

SAP 120, even though SAP 2005

X – axis = epc, new database = your distribution, not the policies

Overall targets

Long tail

Old HECA, just an information summary. Never a policy.

Policies

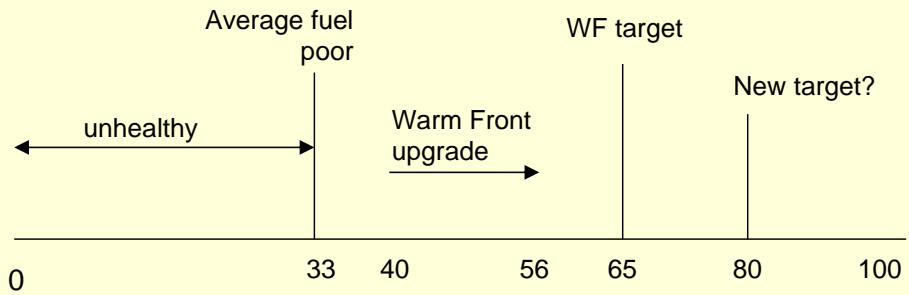
- Mandatory minimum standards
- Low-interest loans
 - If upgrade two bands
- Stamp duty rebates – existing homes
 - If achieve potential
- Low Carbon Zones – concentrated fuel poverty, all homes, one per local authority, SAP 80 (?) by 2012

Turnover

Residence	Tenure			Average
	Owner	Social sector	Renter	
<1 years	5%	9%	38%	10%
20+ years	32%	21%	6%	27%
Median (years)	11.8	7.7	1.6	9.0
Properties (m)	14.5	3.9	2.5	20.9
Housing stock	69%	19%	12%	

Present method of collating data = too slow

Energy efficiency and SAP



SAP 2005

Explain SAP

Warm front, max of 16 points. Jan-March 2007, was about 10 points.

Link to HHSRS

England only

New 'HECA'

- Address-specific database, from EPC, complete by 2012
- Essential for fuel poverty eradication
- EPC from all transactions, eg Building Regulations approval, remortgage, Warm Front
- Local authorities complete the gaps
- Publicly available from now

Monitoring exercise, base for policy, NOT policy

Link to NI 187

Remaining problems

- EPC – still using theoretical, partial energy use in RdSAP
- Can only update as new EPC provided to council
- Doesn't deal with demolitions

Cost to do database, vs cost of NI 187 surveys