

**Consultation on Energy
Efficiency Action Plan :
Making Scotland's Homes
More Energy Efficient**

Regional Workshops

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Structure

- Key drivers and dynamics
- Priorities and the gap
- Existing policies to move forward
- New policies : Role of regulation

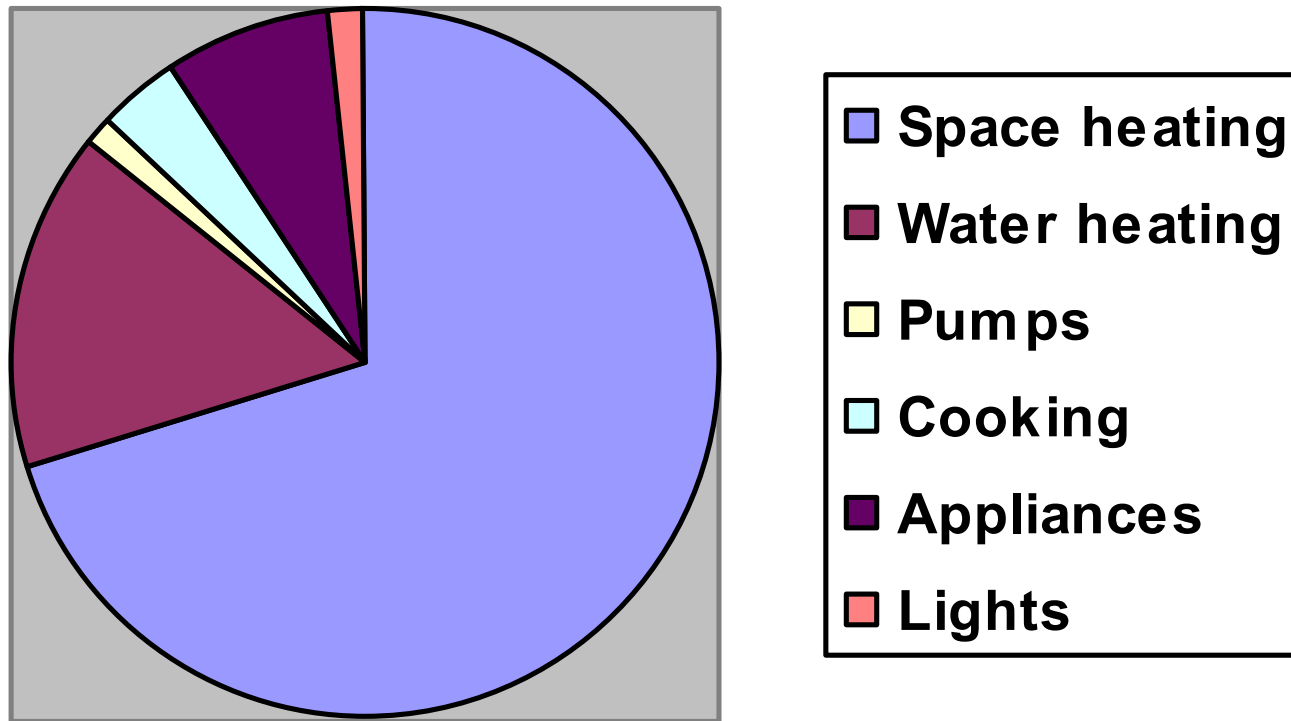
Key drivers and dynamics

Key drivers

- Reduce greenhouse gas emissions
 - 30% of all emissions derive from household energy use (UK regional data)
- Reduce the cost of household fuel bills
 - 29% of all energy consumed is in the domestic sector (UK regional data)
- Reduce fuel poverty
 - 543,000 households fuel poor in Scotland (SHCS, 2005/06)

Distribution of energy use

(Modelled 52,000 GWh in 2009)



Society dynamics

- More dwellings
- More single person households
- More older households (at home more)
- More comfort taking (turning thermostat up)
- More appliances – more energy efficient but more of them

Role of existing housing

- Building standards will drive up requirements for **new** housing
- Existing housing has improved but **step change** needed to meet emission targets.
- Modelling is complex

Broad consensus?

- That meeting climate change targets will impact:
 - virtually all dwellings
 - require millions of individual measures
 - total capital cost will be high
 - will create savings in fuel bills
 - many measures not cost effective within a 10 year period
 - dwellings are ‘living environments’ – people use energy – and behaviour needs to change
 - dwellings are ‘complex environments’

Priorities and Gaps

Priorities – where can we make the most difference?

- Pre 1980, private, semi and detached houses where energy consumption is highest
- Homes reliant on solid fuel and oil (52% homes in rural areas are off-gas grid)
- Social housing – SHQS, fuel poverty, role as innovator

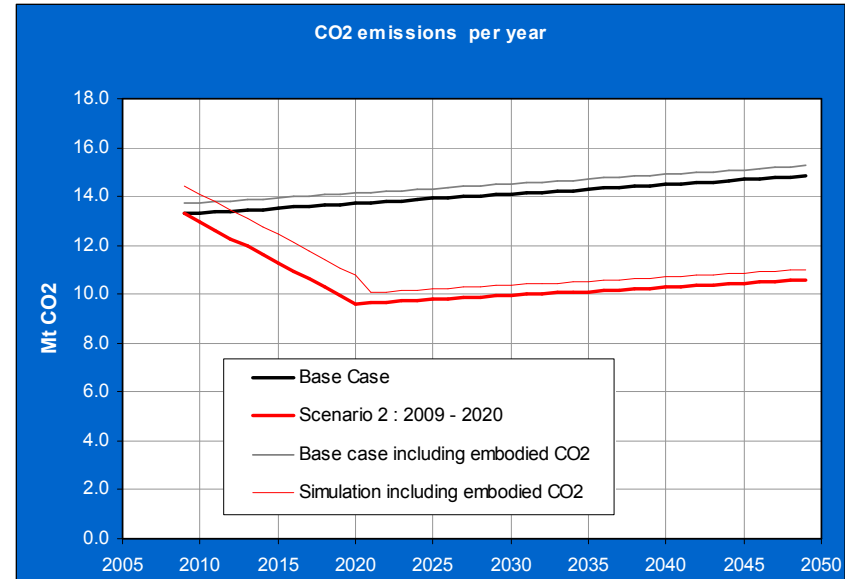
Identifying the gap

- Commissioned a carbon model from Cambridge Architectural Research Ltd, Roger Talbot Ltd, Alembic Research and Cambridge Econometrics to allow us to examine carbon and cost implications of policy change
- Open-code – report on web-site, model will be available soon.
- Working with EST to compare models
- No one right answer – need to pool knowledge

Meet 2020 climate change targets

42% cut direct emissions on 2005 baseline

- Different scenarios
- We went for lowest cost
- Compared a CERT baseline scenario with what would be required for a 42% cut



Measure	Realistic Potential (no. of homes - '000)	Percentage of estimated realistic potential installed under:	
		Scenario 1: Baseline (%)	Scenario 2: 42% - Direct emissions (%)
Cavity Wall	625	100	100
Loft Insulation	1,550	78	100
Solid wall insulation (internal or external)	460	5	44
Short term upgrade	2,235	8	100
Glazing	500		100
Boiler upgrade	1,588	32	100
Solar water heating	1,870		62
Biomass boilers	200		50
Air source heat	290		15
Ground source heat	30		15
Reduced energy behaviour	2,585	No	No

Costs and Benefits

42% cut in direct emissions by 2020

- Upgrade costs by 2020 - £16billion
- Reduction in annual energy consumption in GWh 37%
- Cumulative fuel bill savings by 2020 £4.4billion
- Cumulative fuel bill savings by 2030 £15billion
- Around £7,000 per household – but varies

Existing policies to move
forward

Current policies – advice, support, incentives

- Energy Saving Scotland [Advice Centres](#)
- [Smart meter](#) roll out by 2020
- [Energy Assistance Package](#) 4 stage package of advice and assistance for fuel poor
- Energy Saving Scotland [Home Loan](#) scheme
- [Council tax](#) discounts
- Energy Efficiency Design Awards

Current policies – legal requirements and standards

- **Building standards** - new homes – plus extensions.
- **SHQS** : 2015 target.
- **Landlord accreditation scheme** (PRS).
- **Tolerable Standard**.
- **Regulating minimum efficiency** of energy-using products (minimum standards agreed at EU level)
- **Energy Performance Certificates** – provide energy rating, but no requirement to act on recommendations.

Current policies – area-based programmes

- **Community Energy Savings Programme (CESP)** 3 year scheme starting in 2010 aimed at low income areas
- **Climate Challenge Fund** – community-led energy and insulation
- **Home Insulation Scheme** Area based scheme for all households offering advice and subsidised measures.

New policies : Role of regulation

Context – why regulation needs to be considered

- Climate Change (Scotland) Act 2009 - reduce emissions by 42% by 2020 and 80% by 2050.
- Current programmes based on incentives have produced significant progress.
- Step-change required to meet emission targets.
- Incentives alone not likely to be enough.
- New enabling powers in Climate Change (Scotland) Act
- EEAP consultation explores the form regulation might take & circumstances and timescales in which applied.
- Meanwhile, will continue to strive to meet targets through voluntary action.

Section 64 – enabling framework

- Broad enabling powers for regulation of energy efficiency standards in existing homes introduced at Stage 3.
 - Powers to make regulations providing for assessment of energy performance and emissions.
 - Powers to make regulations requiring owners to take steps to improve energy performance based on these assessments.

Regulations can cover

- Types of accommodation covered.
- Persons required to obtain assessments.
- Methodologies for assessing energy performance
- Persons to carry out assessments
- Form of recommendations
- Manner and periods for taking action
- Enforcement authorities
- Enforcement of the regulations

Which homes ?

- All homes from set date ?
- Trigger activity : Applied when homes put up for rent or sale.
- Exemptions ?
- Targeted : Area-based programmes.
- Should the private rented sector be tackled first ?

Alternative approach for social rented sector ?

- Social sector is **different** – history of regulation, standard setting (e.g. SHQS).
- opportunity to act on large numbers of houses simultaneously? could be a trailblazer for the private sector?
- **Must complete SHQS first**: energy efficiency elements provides a basis to start with.
- Will develop guidance on targeted approach.
- SCR Learning Network also provide support
- Climate change is of a different scale : Is a new 'standard' needed?
- SG committed to developing policy with stakeholders – taking account of responses to Action Plan consultation.

What standards ?

- Measures based.
- Recommendations for cost-effective improvements.
- Set performance level (eg, EPC rating)
- Can be updated.

When ?

- Ministerial report within 12 months of commencement on how powers are to be used.
- Lead in time to allow owners and landlords and enforcement body to prepare.
- Further consultation on definite proposal.
- Would encourage voluntary action in advance of regulation.
- Link to investment under CERT scheme.

Support

- Advice, trusted traders, etc.
- Links to support under Housing (Scotland) Act 2006.
- Any financial support likely to prioritise fuel poor.
- Most owners & landlords need to invest or borrow to undertake required works.



Berkeley Residential Energy Ordinance

- Applies at sale/transfer, renovation or up-take of funding for renewables
- Measures include :
 - Ceiling insulation
 - Insulation of water pipes
 - Water use reduction measures
 - Low energy lighting
 - Exterior door draught proofing
- Spending limits – 0.75% of sale price
- \$100 inspection cost
- Can transfer responsibility to buyer – only once

Conclusion

- Regulation part of the picture alongside advice, incentives and other schemes.
- Prospect of regulation may encourage up-take.
- Need to prepare Ministerial report within 12 months of commencement.
- Range of issues to be considered.
- Your views welcome !

Questions

- If Scottish Government were to prioritise the expansion of any individual programme, what should it be, and why?
- What is the right balance of funding between Government, landlords and individual households?
- How should we take forward regulation?