

The biggest challenge is decarbonising the heating sector, National Grid Scenarios 2016

Making Heat and Energy Efficiency Policy Effective: Chair's Advisory Report to UK CCC

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- **Remit** of Advisory Group to UKCCC on Heat and Energy Efficiency
- Final Advisory Group Report to be published Autumn 2016
- Advisory Group support UKCCC approach and policy proposals
 - Necessary step change most likely enabled by *integrated*, and more comprehensive, policies for energy efficient buildings and low carbon heat
 - Urgent action needed AND significant policy challenge
- BUT means to effective decision making and implementation lacking
- Report focuses on cross-sector, inclusive **governance process** to
 - Manage the changes needed by every building owner, and across all infrastructure networks and technologies
 - Build confidence and capacity
 - Ensure strategic piloting to stimulate strong supply chains, quality jobs and policy learning

Key Recommendation - White Paper to set 'Pathway to a Sustainable, Zero Carbon Building Stock'

- Means to achieve strategic focus across UK Governments & depts, and Treasury commitment, and to set out programme of work
- Progress on Heat & Energy Efficiency depends on governments providing clarity on objectives
 - Pre-2020, least regrets actions for energy efficiency retrofit, low carbon heat and near zero emissions from new buildings
 - Pre-2030, means to *whole* building low energy retrofit *and* decisions on decarbonised heat supply
- The latter includes necessary process for
 - Cross-sector appraisal of interdependencies and trade offs between low energy buildings and heat supply infrastructures
 - Negotiation of strategy and decision points for the multiple possible 2050 solutions

Essential Components of Strategy

- High-visibility **narrative**, or vision
 - Conveying scale & importance of opportunity and commitment to low energy buildings and low carbon heat supply
 - Focusing on ‘what people and organisations want’ from buildings and energy services, rather than supply-side focus alone
- **Incentives plus regulation** to make action a necessity
 - Directed to *ends not means* & refined over time
 - Used as instrument of cross sector working to set expectations, support dynamic markets, signalling new norms and standards
 - Based on **actual, not deemed, performance** of buildings, heating appliances and infrastructures
 - Setting a retrofit rate for renewables-compatible building stock by 2050 as benchmark for evaluating policy options
- Comprehensive, consistent **training/education programme** for high quality, cost-competitive, professional building and heating engineering trades

Strategy for Medium Term Governance and Decisions: A Heat Regulatory Authority

- Effective means to
 - Focus on low carbon network investment fundamentals, while minimising uneconomic duplication of infrastructure and disruption to the public realm
 - Coordinate resolution of uncertainties about low carbon heat supply, and inter-dependencies between gas, electricity and heat grids
- Decisions on specific powers and responsibilities devolved as appropriate to national governments of UK
- Powers may encompass for example
 - Efficiency & performance standards
 - Common standards of consumer protection across energy networks
 - Price control principles for network operators
 - Monitoring and transparency in business operation

In Summary

- White Paper to set Pathway to a Sustainable, Zero Carbon Building Stock
- Integrated low energy buildings and low carbon heat supply policies
 - Critical role of governance process in assessing best value investments, allocating risks and responsibilities, and achieving timely progress
 - Cost-effectiveness of regulatory standards
 - Need for whole building approach based on measured energy performance
 - Professionalisation of building and heat supply trades
 - Decision process for low carbon heat infrastructure contingencies & trade offs
- Creating a low energy, low carbon heat system is a significant opportunity, benefitting welfare of all
 - Carbon budgets, economic regeneration, jobs, health, business productivity...
- Realisation needs Government leadership and coordination to steer market development and investment