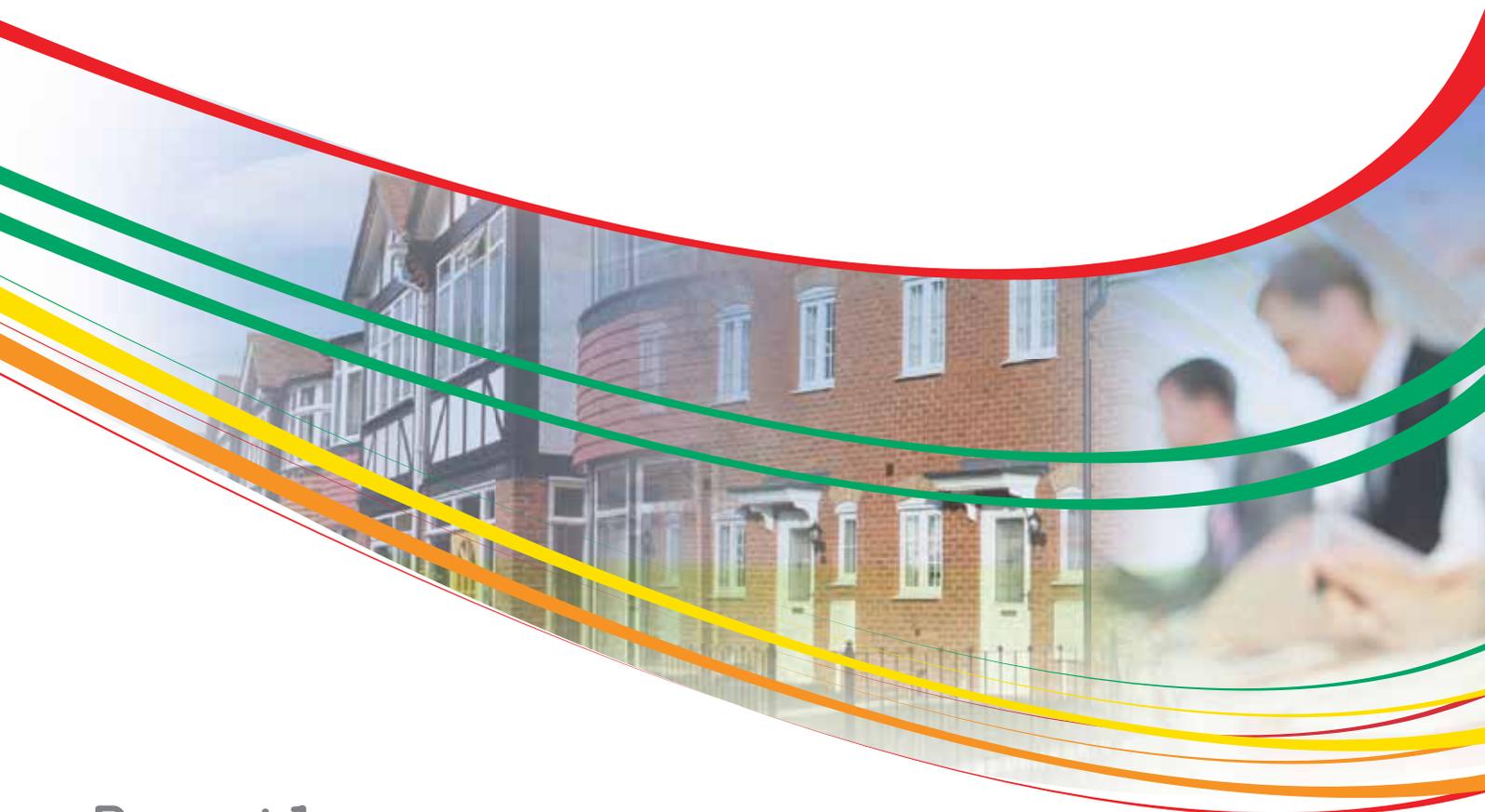




# Energy Performance Certificates

## Seizing the opportunity



## Report 1

Research into the potential impact and take up of energy efficiency improvements recommended in Energy Performance Certificates for private homes sold in England and Wales.

December 09





## Foreword

It is almost 20 years since the National Energy Foundation established the NHER scheme, Europe's first domestic energy labelling scheme. The scheme is now run by its subsidiary company, National Energy Services (NES).

The NHER was more than a simple label: it was tailored to the home's location and actual energy use, and it also included practical, costed advice on how householders could improve their energy efficiency.

Since then, energy consumption in buildings – and its contribution to climate change – has steadily crept up the national and European agenda. We therefore welcomed the introduction in 2007 of Energy Performance Certificates (EPCs) as part of the UK's implementation of the EU Energy Performance of Buildings Directive.

NES set up one of the first accreditation schemes for energy assessors producing EPCs and is now one of the largest issuers of certificates for new and existing homes. EPCs do not have the full sophistication of the NHER energy label, but they do include practical recommendations for householders. They are currently the most commonly available and accessible source of advice to home sellers and buyers about the sorts of improvements that could help save both cash and carbon.

To identify what the impact would have been if this advice had been acted upon, we carried out a detailed analysis of more than 312,000 EPCs issued by the NHER scheme for homes marketed for sale in England and Wales. We looked at the wider context of how our findings might apply to all homes sold (not just the ones we had EPCs for). We also commissioned research to gauge people's awareness of the EPC, its recommendations, and of their reactions to them.

The research paints the first accurate picture of the opportunity which exists to reduce energy waste – an opportunity that is currently largely wasted.

Seizing the opportunity is not overly complex, but requires political will and leadership. This year the Government published its Low Carbon Transition Plan. It has ambitious targets, which are to be welcomed, but it makes limited use of the opportunities provided by EPCs. We fear that the targets for the household sector cannot be met with current plans.

Therefore our report makes seven proposals that would help. We are calling for a fundamental change in the role of the housing market in delivering the essential improvement of the UK's existing housing stock. If we are to stand any chance at all of cutting carbon emissions from our homes by 29% by 2020 (based on 2008 levels) or achieving the Government's longer term targets, substantive actions are required now. We cannot wait another 20 years.



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## Executive Summary

It is two years since the introduction of EPCs as part of the information provided to people buying and selling homes in England and Wales.

EPCs contain information on the energy efficiency of the property, its likely fuel costs and carbon dioxide (CO<sub>2</sub>) emissions, together with recommendations of possible improvement measures, the improved rating and the savings they could deliver.

The NHER scheme runs one of the largest accreditation schemes for Domestic Energy Assessors who are able to produce these EPCs.

We have analysed the data we hold on over 300,000 EPCs issued for homes marketed for sale in England and Wales during the period January 2008 to March 2009. This quantifies the potential reduction in energy waste and CO<sub>2</sub> emissions from the recommended measures.

We also commissioned consumer research among more than 300 buyers of homes for which we held the EPC data, to assess their reaction to the EPC and their willingness to act on the recommendations.

### Our key findings include:

- Implementing the recommendations in the EPC to bring homes up to their potential rating, would on average reduce each home's CO<sub>2</sub> emissions by 1.2 tonnes and cut its fuel bills by £182 a year.
- This equates to a cut in emissions of 22% - compared with the Government target for housing in the Low Carbon Transition Plan of a 29% reduction on 2008 emissions by 2020.
- With more than one million homes changing hands in a typical year, there is the potential to reduce our annual CO<sub>2</sub> emissions by some 1.36 million tonnes and reduce energy costs by £200 million in a single year.
- These savings come from familiar, cost-effective measures such as loft and cavity wall insulation and heating system improvements.
- Improvements to heating systems are recommended for more than two thirds of homes and contribute most to the total potential saving.

- If the Further Measures included in EPC were also implemented, the potential savings could be almost doubled.
- Just over half of homebuyers recalled reading their EPC, but approximately one third didn't recall ever receiving one.
- More than two thirds of homebuyers surveyed had made some form of improvement (energy efficiency and other) to their home in the months since buying it - with 39% making significant improvements.
- Roughly one third of those who had read the EPC had made some of the suggested energy efficiency improvements, with a further 9% intending to act on the recommendations in the near future.

## Proposals

There are some positive messages from this research. However, unless action is taken to ensure that home movers see and understand the EPC and implement the recommendations, this valuable opportunity will continue to be largely wasted and the Government's carbon-cutting targets are less likely to be met.

In order to take advantage of the opportunity, we propose that the Government implements a strategy that:

- Encourages vendors to implement measures prior to marketing;
- Ensures prospective homebuyers receive and understand the EPC;
- Incentivises and supports homebuyers to implement the recommended improvements;
- Extends support to existing homeowners planning any improvement activity; and
- Establishes a framework to enforce standards just in case a voluntary approach fails to achieve the necessary rate of improvements.

We also believe that the Government must start planning ahead for the higher cost, non-standard improvement measures, some of which are considered as Further Measures in the EPC. These will be essential if the overall target for emission reductions is to be met. We need a route map for accurately incorporating these technologies into the EPC assessment and recommendations process, including the additional training and knowledge required of Domestic Energy Assessors.



## We make the following seven specific proposals:

(for full details see page 29 of the main report)

### 1. Include the key improvements from the EPC on all estate agent particulars

Current regulations require the inclusion of the A-G label in some estate agents' marketing materials. Proposals are being discussed in Europe to require the inclusion of the energy efficiency rating in all marketing materials. We recommend that this is extended to include a requirement that home sellers and their estate agents list all the costed recommendations identified in the EPC on the marketing particulars for a property for sale. This would ensure prospective homebuyers were aware of the recommended improvements, whilst undoubtedly encouraging a proportion of vendors to upgrade their homes before it was put up for sale.

### 2. Introduce a heating system 'scrappage' scheme

There are too many old, inefficient boilers wasting fuel, money and producing excessive emissions. We wholeheartedly support the Reheat Britain campaign (see [www.reheatbritain.org.uk](http://www.reheatbritain.org.uk)) and its petition to Government to introduce a boiler 'scrappage' scheme, similar to that introduced this year to replace old cars. This scheme would encourage more people to replace an old boiler with a new A-rated boiler.

### 3. Introduce a refundable energy inefficiency surcharge on Stamp Duty

Stamp Duty provides a simple mechanism to promote the installation of recommended improvements in higher value properties (currently those over £175,000). We propose that for any property that is sold in its 'unimproved state' – that is, without first being upgraded in line with the costed improvements identified in the EPC – the Stamp Duty should be increased by the notional cost of these improvements. In effect, this creates an energy inefficiency surcharge. The buyer would be able to reclaim the surcharge in full within the first 12 months after purchase by installing the recommended measures and lodging an updated EPC as proof. Such a scheme would be cost neutral to the Treasury and would ensure that the recommended improvements occurred in most instances.

### 4. Plan ahead for mandatory improvements

There are some very difficult choices facing us for the years ahead. We recommend that work begins immediately on the dialogue and planning needed for the future. We need to start now to design and evaluate an effective and equitable approach to the implementation of mandatory emission standards for homes being sold, with a view to implementation within three to five years depending on the rate at which the energy efficiency of the housing stock is improving compared with the target.

### 5. Fund Domestic Energy Assessors to provide professional support to home improvers

There is a genuine need for professional support for homebuyers. They need access to professionals able to advise them in detail about what needs doing, and the benefits it will deliver. They also need support identifying the specific products suitable for their home, selecting a supplier, accessing grants and coordinating the actual work. We propose that adequate funding must be available to enable Domestic Energy Assessors to provide this service, initially to homebuyers during the critical first three months of moving to their new home.

### 6. Develop the skills path for assessors to meet the future needs

In future we will need EPC software to deal with more new renewable energy technologies and non-standard measures. The Government must work with the energy efficiency industry to develop a route map to an assessment methodology that will meet future needs in the same way that the current RDSAP methodology meets today's requirements. And the route map must include time and resource to support the development of Domestic Energy Assessors' skills.

### 7. Improve the energy use calculation in the EPC

The RDSAP methodology for calculating the energy use in the EPC is a simplified version of the methodology used by the NHER energy rating first introduced almost 20 years ago. This simplification was considered necessary in order to make EPCs efficient and cost effective to produce. We propose that EPCs should be enhanced to take into account the energy used by appliances, and the geographical location of the home (both of which have a big impact on likely fuel bills). This is a quick win: all of the work has been done. It was funded by the Government and is in the public domain.

We believe that prompt action on these proposals will enable the full potential benefits arising from the introduction of EPCs to be realised – improving the energy efficiency of our homes, reducing our CO<sub>2</sub> emissions, cutting our fuel bills, reducing our vulnerability to fuel price increases and improving our energy security.

All that is needed is the will and determination to seize the opportunity...

## Want to know more?

The data analysis of EPCs registered by the NHER accreditation scheme has resulted in much additional information regarding the frequency and impact of different home improvement recommendations, as well as breakdowns by region, age of property, tenure and other factors.

Not all of this analysis is published here, but to discuss this report, the data analysis of EPCs or to learn more about the NHER scheme's consultancy services, please contact Mark Sreeves on 01908 672787.

**To read the full report,  
visit [www.nher.co.uk/opportunity](http://www.nher.co.uk/opportunity)**