

Review and Strategy Formulation for Provision of Energy Saving Advice to Householders and Communities

A report prepared for the Energy Efficiency Partnership
for Homes

January, 2010

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1 Executive Summary

With emissions from the UK residential sector accounting for approximately 25 percent the UK total, it is clear that policy interventions to reduce emissions in households and communities have a key role to play in achieving the ambitious targets set for reducing UK greenhouse gas emissions by 80% by 2050. Achieving the Government's target of eradicating fuel poverty by 2016 will also require significant policy interventions targeted at households.

Providing energy-related advice to householders and communities has a critical role to play in ensuring the success of many of the policies and programmes associated with achieving these two interlinked objectives.

The landscape of energy advice provision is evolving in terms of the organisations involved and the technology and policy context. It is acknowledged that the advice delivery routes are now coupled with new methods, new providers, and new technologies. This is combined with indications of a gradual movement towards an increasingly energy-conscious public that is seeking to make informed decisions while many remain sceptical or unaware of the need for change.

The objective of this report was to assess the current state of energy advice, define the desired future state and identify and recommend strategic options for moving towards this. Bearing in mind the complexity of the landscape and the number of stakeholders involved, the project team used qualitative research techniques coupled with sample surveying of the views of stakeholders. The role of the document is to present a review of the current situation and propose a path forward that is linked to recommendations for the advice community.

The process included desktop literature survey and telephone interviews with members of a stakeholder list approved by the Energy Advice Providers Group (EAPG). This was followed by a workshop for selected stakeholders to gather further views and explore specific issues.

Section 4 in this report focuses on the outputs of the workshop sessions and interviews and draws out the common themes that the stakeholders raised. These issues were broken down further into specific headings that dealt with the concerns and challenges highlighted through the process. Section 5 presents the analysis of the project team, a result of mapping issues raised in the workshop with a review of Government strategies and other relevant literature as well as further inputs from the interviews. It reflects on all the inputs, ideas and ongoing engagement with stakeholders.

The recommendations are designed in order to deal with specific issues but with the spirit of the three uniting themes of synergy, quality, and consistency in mind.

Key recommendations can be summarised as:

- The development of a coordinated accreditation system
- A re-evaluation of skill requirements
- A national provider of resources and technical expertise
- Responding to the diversification of the advice delivery structure
- Building sub-regional linkages and knowledge sharing platforms

The recommendations are meant to be stepping stones for a comprehensive action plan, which if approved, should be followed and adopted by all the stakeholders, not just from within the EEPH structure but across the energy advice landscape.

It should be stressed here that this is a working document, with the aim of building on the good work that is currently taking place and should not be viewed in isolation to the other strategies and policies. It is also suggested that the strategy's recommendations are assigned to a task force from within the EEPH with the aim of engaging with the relevant Government departments to put in place the foundations for the way forward.

The project team would like to thank all the stakeholders who assisted the strategy with their time, effort and advice.

The project team from ICF International and Linden Consulting Partnership Ltd.

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2 Introduction

The UK residential sector accounts for approximately 25 percent (150 MtCO₂e) of the total UK greenhouse gas (GHG) inventory.¹ With the potential for emissions reductions in the order of 40 MtCO₂ it forms a vital component of the UK Government's carbon reduction strategy.²

In 2007 there were approximately 4 million people living in fuel poverty. The Government aims to reduce this to zero by 2018.³

The provision of energy advice to households and communities is seen as playing a key role in achieving these objectives and unlocking this emission reduction potential. Behaviour change has been recognised by the Committee on Climate Change as one of the most cost-effective ways of reducing emissions.⁴

As such, a broad landscape of strategies has developed to respond to the challenge of reducing domestic emissions as well as tackling fuel poverty. There are several major, and sometimes overlapping, schemes, administered by a number of Government departments and agencies. Concerns have been raised over their focus (e.g. with more focus on new buildings legislation rather than that of old housing stock) and, importantly, the type of delivery mechanism being used. This has created obstacles for policy and programme implementation, as confusion among industry stakeholders and the public has developed over which mitigation techniques, and which ways of providing energy advice, offer the best practical results.

2.1 Aims of this report

This report provides a detailed review of the existing diffuse sources of energy advice in the UK, with recommendations for defining the best way forward for all stakeholders associated with the provision of energy advice to householders and communities.

2.2 Approach

For this project, our broad approach involved three key phases: mapping the current landscape, gap analysis and identification of barriers and opportunities, and the strategy development phase (Figure 1).

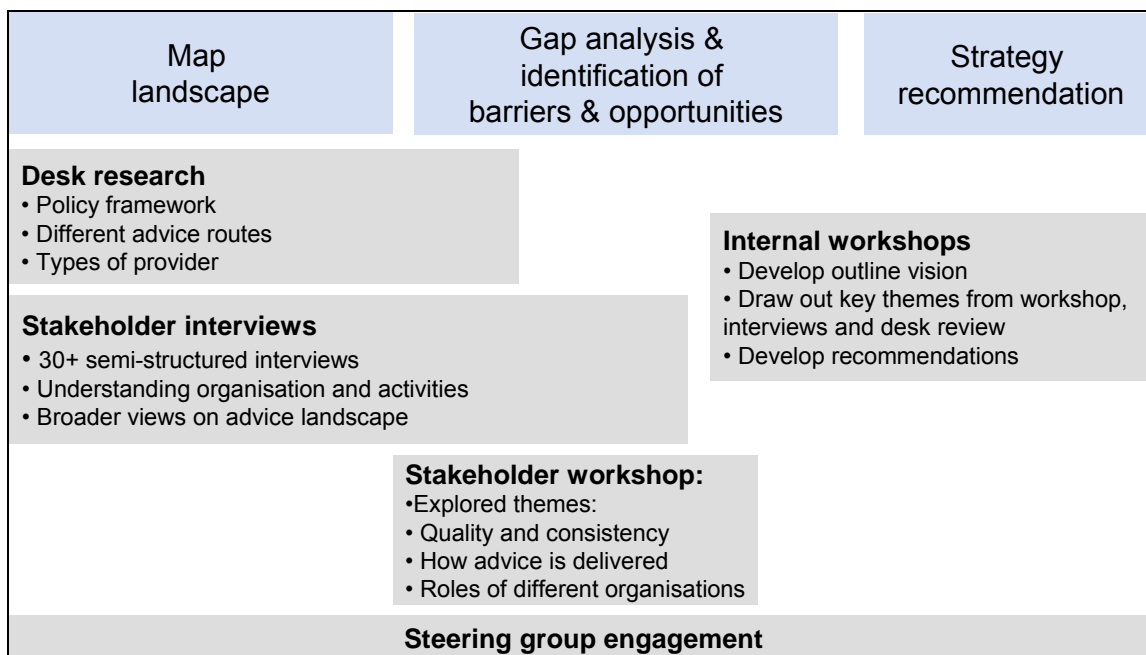
¹ Committee on Climate Change, *Building a Low Carbon Economy – The UK's Contribution to Tackling Climate Change*, 2008, <http://www.theccc.org.uk/reports>

² Committee on Climate Change 2008.

³ Department for Energy and Climate Change (DECC) *The UK Fuel Poverty Strategy, 7th Annual Progress Report 2009*

⁴ Committee on Climate Change, 2008

Figure 1: Approach and data collection



To support these steps a three-pronged approach was used, consisting of (1) desk research; (2) interviews with key stakeholders; and (3) a stakeholder workshop.

Below, our broad approach to these data collection techniques is presented.

- **Desk Research:** This activity was undertaken to gather and evaluate the current available information to feed directly into the project report, and to facilitate the planning and implementation of the stakeholder engagement process. As such, the team researched the policy framework and the different advice routes and types of provider of energy advice to households and communities. A structured approach was utilised, developing an evaluation matrix, as a means to compiling and assessing information identified through the document review. This stage provided the information to develop an initial set of parameters, issues and opportunities internally for each advice route identified, which informed the development of the stakeholder workshop and interview protocol.
- **Stakeholder Interviews:** Based on the issues raised by the initial desk research, a semi-structured interview protocol was developed (Annex I). The semi-structured interview format involved using a number of key questions or discussion points to initiate a conversation with stakeholders. The questions were approved by EEPH prior to them being sent to the relevant stakeholders. The interview process was initiated on 28 September 2009, when introductory emails were sent to targeted stakeholders by EEPH. In total, over 30 phone interviews were conducted. After each interview a brief summary of the key discussion points was produced to be fed into the evaluation, refining and prioritisation process. A number of interviewees were selected to attend the next stage; a workshop.
- **Stakeholder Workshop:** A one-day stakeholder workshop hosted by EEPH was conducted on 13 October 2009. The aims of the workshop were to gather the comments and perspectives of a selected group of relevant stakeholders and build an inclusive process of

strategy formulation. Invitations were prepared and then distributed via EEPH. The workshop was chaired by Jean Morrison of SCARF with the project team providing facilitation in the different workshop sessions.

Prior to the event, a short briefing paper was circulated with the aim of setting out the objectives and content of the workshop to all participants. The key focus themes identified for each session were:

1. Quality and consistency of message
2. Delivery routes – how advice is delivered (e.g. phone, face to face, web, etc)
3. Delivery routes – roles of different organisations

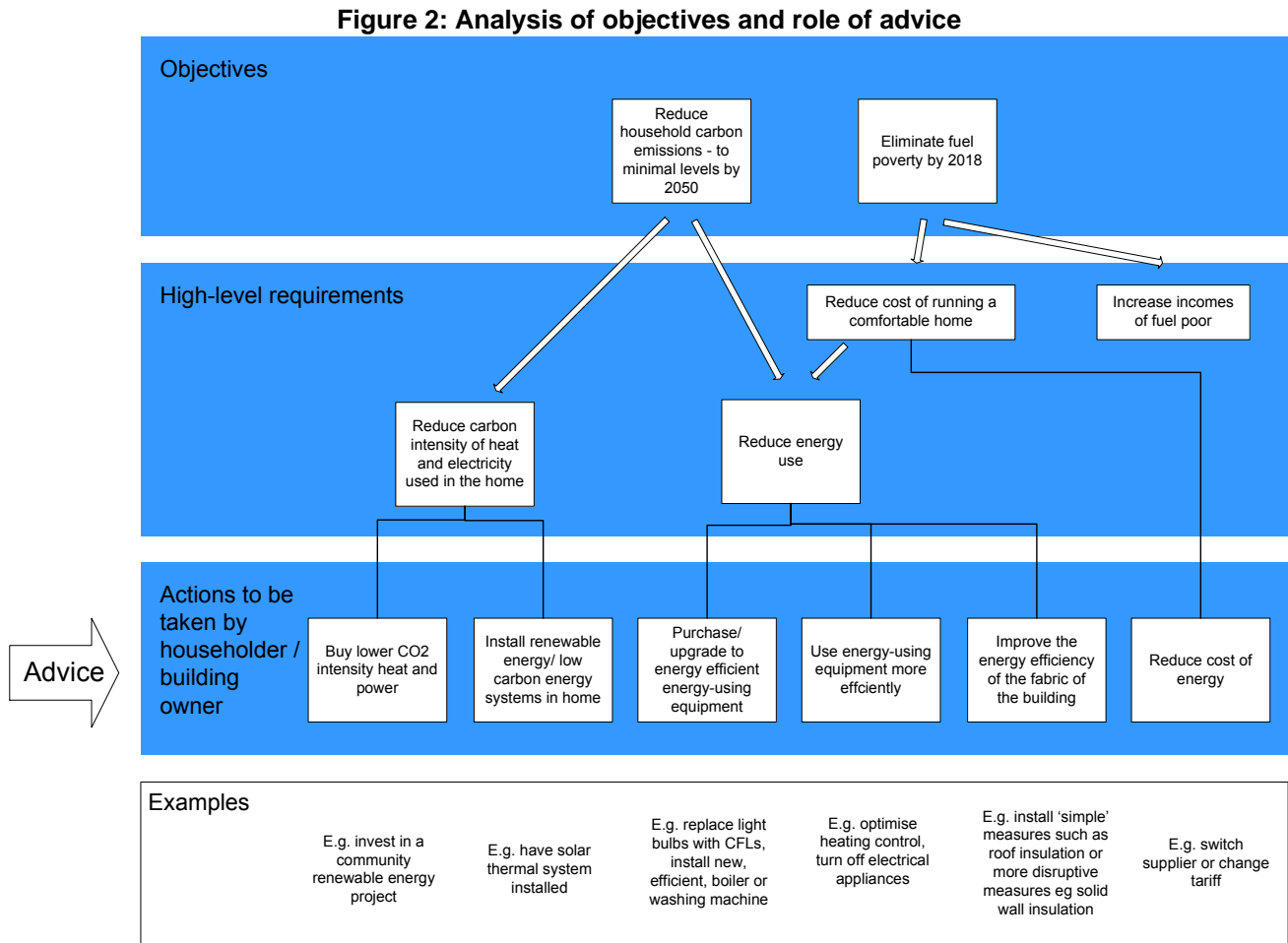
During the workshop, participants were encouraged to engage directly in small sessions to debate the relevant themes and also to record the discussion on the group on white boards. These documents were collected and analysed after the workshop.

After the workshop, a qualitative analysis of the workshop outputs was conducted as well as further internal prioritization sessions within the project team, so that a possible future pathway for each advice route could be developed.

3 Background and current context

3.1 Definition and role of advice

Figure 2 provides an overview of how the over-riding objectives of eliminating fuel poverty and tackling climate change filter down through high-level requirements, to groups of actions that need to be taken by the householder.



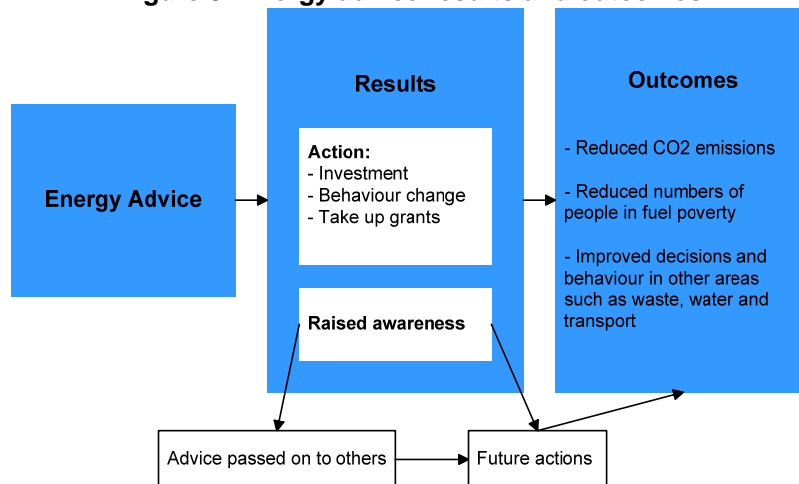
Ensuring that these actions are taken and the objectives are achieved will require a range of policy interventions. Advice to householders plays a key role in supporting these policy measures and ensuring they are effective.

Following direction from the EAPG, the focus of this study is on energy advice primarily for the purposes of reducing CO₂ emissions. However, it is acknowledged that there is significant overlap between the two objectives of reducing CO₂ emissions and eradicating fuel poverty and this issue is explored further in this report. It is also acknowledged that there can be a benefit to providing advice on water and waste and transport alongside energy as part of moving towards a more sustainable way of life. This issue is also explored further.

As described in Figure 3, the aim of supporting energy advice provision is that it leads to (i) informed investment decisions, which, through self-funded or sponsored implementation, would lead to a reduction in energy use and, hence, CO₂ emissions. Government also supports energy advice

with the aim of bringing about (ii) an overall change in behaviour of the population that would also result in a reduction in energy use and CO₂ emissions. Energy advice is also aimed at (iii) raising awareness of sustainable energy use which can result in messages being passed on to others and also lead to broader shifts towards more sustainable lifestyles by influencing behaviour and decisions in other areas such as transport, waste and water use.

Figure 3: Energy advice results and outcomes

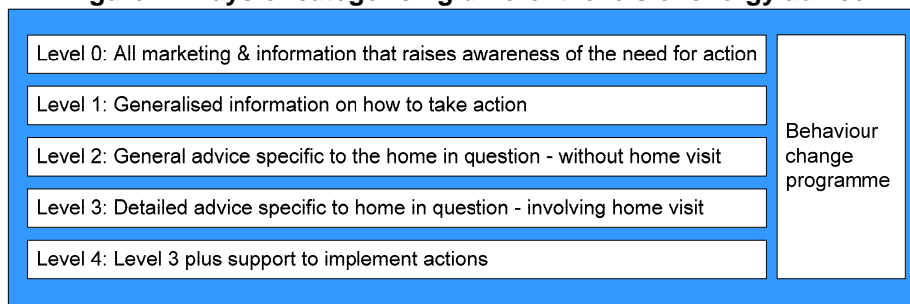


(Adapted from Energy Advice in Europe 2007)⁵

The definition of 'energy advice' developed by EAPG for the Domestic Energy Efficiency Advice Code of Practice (COP) and other past EEPH projects is that which is "*specific to individuals and their circumstances, and aims to improve energy efficiency and achieve affordable warmth*". It differs from 'information' which is largely considered general to all householders and more focused on raising awareness.

For the purposes of this project, a slightly broader framework for defining 'energy advice' has been adopted as described in Figure 4. The focus of the report concerns the EAPG definition of advice (with corresponds to levels 2 to 3 in Figure 4), as it is this that is broadly recognised as being the most effective. However, the framework described in Figure 4 is useful in order to help guide discussion and demonstrate that the different levels are part of a continuum of engagement with the householder. These levels will be referred to throughout this report. It should be recognised that all levels of advice should be a gateway to the whole-house approach. In Figure 4, behaviour change is seen to cut across the various levels of advice indicating that different approaches are recognised as being needed to achieve sustained changes in behaviour.

⁵ Severn Wye Energy Agency, SErENADE project, *Energy Advice in Europe 2007*, www.swea.co.uk

Figure 4: Ways of categorising different levels of energy advice

(Adapted from Severn Wye Energy Agency, 2009⁶)

A range of different 'customers' for energy advice exist, ranging from those that do not recognise that they have a need for advice to those seeking specific advice of a more technical nature so as to take a specific action. The needs of a particular householder will depend on their individual circumstances and their progress on their customer journey from unawareness through to implementation and follow-up. The householders can be also grouped into those unable to pay (e.g. people on benefits and the fuel poor) and those that are able to pay for energy efficiency improvements and potentially invest in small-scale renewable energy generation.

3.2 UK strategic context

A high-level overview of the key strategies influencing the provision of energy advice is provided below. For each strategy document, observations on the implications for advice provision are given.

Figure 5: Key Government strategy documents

3.2.1 Heat and Energy Saving Strategy

Overview:

The Government launched the Heat and Energy Saving Strategy in February 2009 to clarify its longer-term ambitions for how heat and energy use in homes and businesses can be transformed. The outcome of the strategy is to support the overall UK target of an 80% carbon emissions reduction by 2050, with a specific ambition for carbon emissions from existing buildings to approach zero by 2050.

Objective:

The Strategy aims at:

1. Providing support to the UK public to use less energy and reduce their energy bills.
2. Reducing the UK's carbon emissions through the use of less energy, increased renewable energy, and the decarbonisation of the UK's heat supply.
3. Reducing the UK's reliance on imported fossil fuels, and maintaining energy security.
4. Ensuring that the economic opportunities offered by a low carbon economy are taken advantage of in the UK.

⁶ *Energy Advice in the UK – future needs and priorities, a discussion paper*, Catrin Maby, Severn Wye Energy Agency, October 2009

Targets:

Annual emissions reductions of 44 million tonnes CO₂ by 2020; equivalent to a 30% cut in household emissions (compared to 2006 levels).

Key features:

- By 2015, the majority of lofts and cavity walls will be insulated;
- By 2030 all homes are to receive a 'whole house' package, which includes cost-effective energy saving measures, renewable heat and electricity measures;
- A review of new mechanisms for financial support for home energy saving and renewable energy improvements;
- Information and advice will be made available to help people make changes to save energy and save money, this is to include home energy advice from accredited advisers.
- Evaluation of the need for a new delivery model to support a more coordinated approach to rolling out improvements to individual homes and entire communities;
- A focus on district heating in suitable communities, alongside removing barriers to their development;
- More encouragement of combined heat and power (CHP);
- A review of existing Building Regulations to assess the opportunity to include energy saving measures alongside certain types of building work.

Observations

- Fuel poverty provides a constant backdrop to the discussion.
- Advice should be independent and impartial regardless of its source, i.e. including that from energy companies, insulation and/or renewables installers.
- Individualised advice is likely the best approach to achieve behaviour change.
- Advice is needed from those parties that can follow the customer journey; also emphasis should be given to *advice on services and specific technologies*.
- Interest in communications being provided from a single co-ordinated source, ensuring consistency of information and access for all schemes.
- Interest in different levels of accreditation relevant to the type of advice given; and
- Emphasis on local authorities and communities as an important delivery vehicle for energy efficiency.

3.2.2 Low Carbon Transition Plan**Overview:**

The UK's carbon budgets for the periods 2008-2012, 2013-2017 and 2018-2022, as required by the Climate Change Act, commit the UK to cuts of 22%, 28% and 34%, compared to 1990 levels, respectively. The Low Carbon Transition Plan sets out the proposals and policies to meet these targets, through a balanced effort across the major sectors of the economy.

Objective:

A plan to support the transition of the UK into a low carbon country through cutting emissions, while maintaining secure energy supplies, maximising economic opportunities, and protecting the most vulnerable.

Target:

A reduction in UK emissions by 18% relative to 2008 levels by 2020 (or a 34% cut from 1990 levels)

Key Features:

- Installing smart meters in every home by the end of 2020;
- Encouraging the provision of smart displays for existing meters;

- Developing more proactive services from the Energy Saving Trust to provide households with information and advice at the right times;
- Introducing a community-based approach to deliver treatments to homes in low-income areas, through the Community Energy Saving Programme (CESP);
- Reviewing the delivery mechanisms that will best provide significant whole house energy saving treatments in the longer term.
- Piloting a move from upfront payment to “pay as you save” models of long term financing for energy saving;
- Introducing clean energy cash-back schemes, or feed-in tariffs, so that people and businesses will be paid if they use low carbon sources to generate heat or electricity.

Observations

- The strategy takes a broad approach to emissions reductions, with aspects of the strategy focusing on fuel efficiency, waste/soil/forest management, in addition to energy efficiency.
- The strategy recognised the importance of local authorities and communities in identifying and implementing low carbon solutions.
- The strategy refers clearly to the impact of overlapping policies, as each would claim the impact of advice in emission reduction, thus the relevant carbon credits. This is a common issue and concern for the national providers of Energy Advice (such as, Carbon Trust, Energy Saving Trust), when it comes to claiming carbon credit.

3.2.3 UK Fuel Poverty Strategy**Overview:**

The UK fuel poverty strategy was developed in November 2001, and between 1996 and 2006, the number of vulnerable UK households in fuel poverty went down by around 2.25 million. However, rising fuel prices have reversed this trend.

Objective:

A review of the policies and programmes to address the three main factors leading to fuel poverty: energy efficiency of a home; energy prices; and the level of household income.

Target:

By 2018, no household in the UK should live in fuel poverty.

Key features:

Programmes and measures to meet the strategy target by addressing the energy efficiency of households include Warm Front in England and equivalents in Scotland, Wales, and Northern Ireland, Carbon Emissions Reduction Target (CERT) and Decent Homes; as well as by increasing household incomes, include Winter Fuel and Cold Weather Payments.

Observations

- Advice to households is an ever growing element in the success of the strategy, and is supported by a number of organisations.
- The government acknowledges the negative impact of fluctuating energy prices on the overall performance of the strategy; hence additional funding through the Home Energy Saving Programme has been provided, and previous targets to end the fuel poverty in the UK have been revised.
- Improving energy efficiency of the fuel poor is a key component of the strategy.
- Several NGOs and major stakeholders providing delivery have raised concerns regarding the strategy, highlighting its failure to support several vulnerable sectors in the community, such as the disabled and the elderly⁷.

3.2.4 Energy Efficiency Action Plan 2007**Overview:**

The plan was established by DEFRA in 2007 to meet the requirements defined in Article 14 of the EU Energy End-Use Efficiency and Energy Services Directive to produce a National Energy Efficiency Action Plan for submission to the European Commission. The current plan provides an update to the Government's 2004 Energy Efficiency Action Plan reflecting policy developments arising from the 2006 Climate Change Programme, the 2006 Energy Policy Review and the 2007 Energy White Paper.

Objective:

The Energy Efficiency Action Plan (EEAP) sets out the package of policies and measures that have been put into place to deliver improvements in energy efficiency in the UK.

Target:

The achievement of an overall national indicative energy savings target of 9% over the period 2008 to 2016.

Key features:

- Revisions to UK Building Regulations to improve energy efficiency standards so new homes built in 2007 are 40% more energy efficient than those built in 2002;
- Introduction in England of a Code for Sustainable Homes to drive a step change in the building of new sustainable homes – with a 'star rating' for new homes depending on their efficiency;
- Proposition to ensure all new homes in England zero carbon by 2016;
- Accelerating technology which has not yet reached the market and assessing the impact of low-carbon heat and power generation; and
- Strengthen the Energy Efficiency Commitment, with the third phase of the scheme from 2008-2011, to be known as the Carbon Emissions Reduction Target;
- Introduction of various financial measures to incentivise energy efficiency, including a reduction on VAT for professionally installed energy saving materials;
- Launch of a cross-Government multi-media communication and marketing campaign to raise awareness of the contribution individuals make to CO₂ emissions reductions. The campaign branding is Act on CO₂; and
- Provide information on the energy efficiency of homes sold or rented through Energy Performance Certificates, indicating how to improve energy efficiency.

⁷ Age Concern, press release 04.02.09. See: <http://www.ageconcern.org.uk/AgeConcern/warmfront-ACHTA-release-040209.asp>

Observations

- One of the central measures to the strategy is the commitment to continue support the Energy Saving Trust and its mechanism for advice delivery. It also extends the number of traditional measures of assistance to include smart meters and visual display units into the household sector.
- The strategy speculates that 0.2MtC/yr could be saved from the household sector through giving advice on heating systems, including replacement of inefficient boilers.
- The strategy acknowledges the role of the local authorities in improving energy efficiency through the implementation of the Home Energy Conservation Act.
- An increase in the role of direct one-one advice is reported.
- A strong reference to the need to address the lack in information about energy efficiency is made. It goes on to suggest embedding the knowledge in multiple delivery tools including the education system and ensuring a supporting regulatory system is in place.
- The need to provide an end to end service that supports the customer journey from advising on EPC recommendations to sequential advice on approved local suppliers, technologies, and grants is recognised.
- The remit of advice is extended from the normal efficiency measures to more in depth knowledge on boilers, renewable measures, smart meters, etc.

3.2.5 UK Renewables Strategy**Overview:**

The strategy was launched in 2009 to provide the policy framework to enable the UK to meet its legally binding 2020 commitment for sourcing renewable energy.

Objective:

The strategy details the balance of fuels and technologies that are most likely to achieve the goal, and the specific actions the UK Government will take, including financial support and delivery mechanisms.

Target:

The UK has committed to sourcing 15% of its energy from renewable sources by 2020.

Key features:

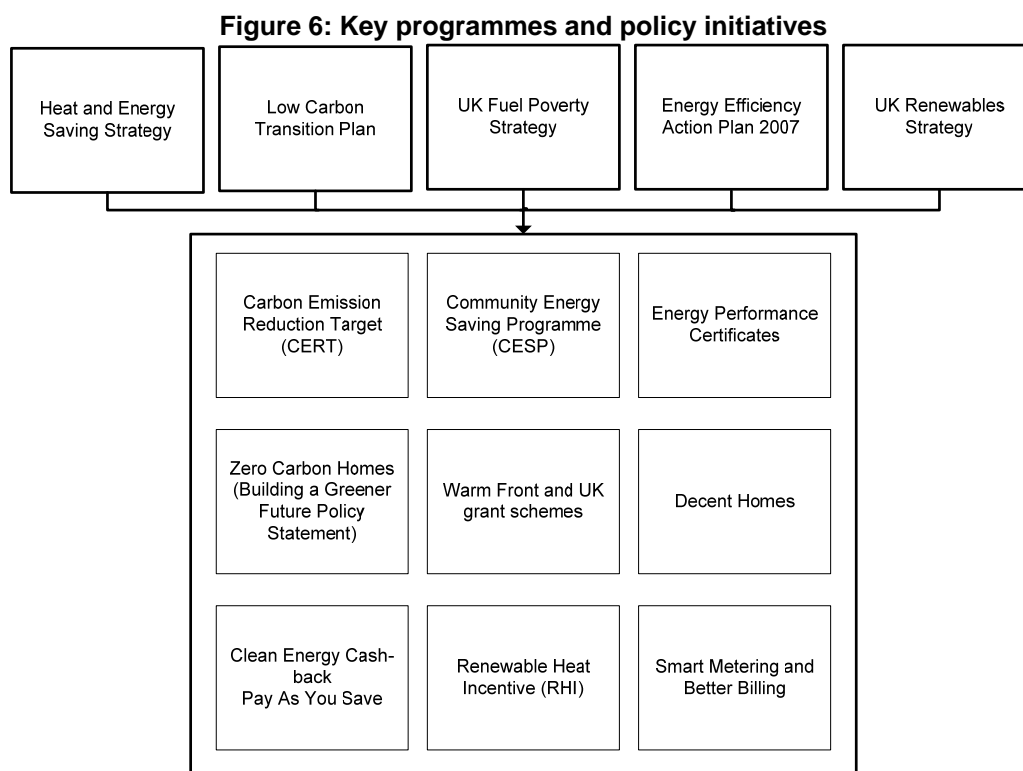
- Extra funding is to be provided to ensure that those who are unfamiliar with renewables get the advice they need in order to be able to generate their own energy.
- Guidance will be published on approaches that developers could take to share the benefits of large-scale projects with local communities.
- A great adoption of renewables in central government and the wider public sector will be encouraged.
- The Government will work with delivery partners and stakeholders to overcome some of the key issues that affect the deployment of renewable technology.
- The Government will provide assistance to households, communities and businesses who wish to install renewable generation by introducing new mechanisms for financial support, improved advice and ensuring industry standards are robust.

Observations

- The Strategy acknowledges that alongside the costs of renewable energy technologies, one of the constraints to wider deployment is a perceived lack of information and advice. More should be done to raise awareness of renewable heat by improving the availability of advice, particularly to individuals and local organisations. This requires investment in training and raising awareness among the general public. More is needed to help people through the process of becoming energy generators through clear and simple advice and information targeted at the non-expert audience.
- The Strategy also states that there is a need to bring all the threads together in one place, providing a road map of the end-to-end processes, information on relevant technologies, what people need to know about regulation, what financing options are available, and from whom people can get further advice and support.

3.3 UK Programmes and Initiatives

The UK Government has a number of key policies and programmes in place in order to achieve the objectives set out in the strategies outlined in Section 3.2. Below, the key policies and programmes that relate to the domestic sector energy efficiency are presented.

**3.3.1 Carbon Emissions Reduction Target (CERT) and Community Energy Saving Programme (CESP)**

The Government's key policy for reducing emissions in the domestic sector is the Carbon Emissions Reduction Target (CERT) introduced in 2008 to replace the previous Energy Efficiency Commitment (EEC) (2005-2008).⁸ The scheme, managed by Ofgem, applies to all gas and electricity companies with 50,000 or more domestic customers. Under CERT, following the consultation in the summer of

⁸ DECC, *Carbon Emissions Reduction Target (CERT)*, http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cert/cert.aspx

2009, energy suppliers are now obliged to undertake measures in order to meet an overall emission reduction target of 185MtCO₂ between April 2008 and March 2011. 40% of the energy or carbon savings have to come from the Priority Group (i.e. vulnerable and low-income households, including those in receipt of eligible benefits and pensioners over the age of 70). Under the scheme energy companies offer measures to consumers for free or at reduced rates, spreading the associated costs across their whole customer base. Ofgem sets out a list of measures that suppliers can use to meet their targets. Each measure has a pre-defined CO₂ saving attached to it. Every quarter, suppliers provide monitoring reports to Ofgem, which include the achieved savings broken down by consumer group and measure type (e.g. insulation, lighting, and heating). The extension of the programme until 2012 is under consultation.

In September 2008 the Community Energy Savings Programme (CESP) was announced and runs alongside CERT, as of 1 October 2009 to 31 December 2012, to reduce fuel poverty and CO₂ emissions.⁹ CESP, as with CERT, places an obligation on those energy suppliers with more than 50,000 domestic customers to meet an additional carbon emissions reduction target. It focuses on providing measures to households in specific areas with high levels of low incomes. Residents of the 'low income areas' will receive a whole house makeover. About 90,000 homes are expected to benefit from the programme. Through CESP, gas and electricity suppliers and electricity generators are required to deliver the overall savings of 19.25MtCO₂. Ofgem expects that the total cost to electricity and gas suppliers will be around £350 million. The programme specifies that only those measures with substantial potential of domestic emissions and fuel savings can account towards the target. Similarly to CERT, scheme participants will have to report on a quarterly basis, including data on emissions savings attributed to measures installed.

In terms of advice, both CERT and CESP now include energy advice as an eligible measure for achieving a proportion of their targets. The advice can be delivered through a home energy advice package which means:

- (a) a home energy survey;
- (b) home energy assistance which means information provided in person at the time of the home energy survey; and
- (c) a written report which contains:
 - (i) as appropriate, information provided during home energy assistance;
 - (ii) a list of applicable actions which will help the domestic energy user achieve energy savings;
 - (iii) the contact details for the Energy Saving Trust;and is provided to the domestic energy user within three months of the home energy assessment or survey.¹⁰

Under CERT, the use of real time displays (RTDs) is also now included as an eligible measure. Such measures (RTDs and home energy advice) aimed at engendering a change in behaviour can only be delivered if requested by the household. In order to address concerns that they could otherwise be promoted at the expense of other energy saving measures such as insulation they are capped at 2% of a supplier's carbon saving target.

⁹ Ofgem *Community Energy Saving Programme (CESP)*

<http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Pages/cesp.aspx>

¹⁰ Ofgem CESP 2009-2012 Generator and Supplier Guidance (Consultation August 2009). Available from:

<http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Documents1/CESP%20Generator%20and%20Supplier%20Guidance%201.pdf>

3.3.2 Feed in Tariff and Pay as You Save

Forming part of its Low Carbon Transition Plan, the Government plans to introduce two schemes to incentivise householders to reduce their emissions and save energy: Feed in Tariff and Pay as You Save.

The Feed in Tariff (sometimes referred to as the Clean Energy Cash-Back scheme) is an incentive scheme for small-scale renewable electricity generation that aims to help such systems contribute to 2% of Britain's electricity consumption by 2020. It involves the introduction of a Feed in Tariff for renewable electricity generating technologies up to 5MW, and for CHP, up to 50kW. Legislation will mean that renewable electricity generated from such systems which is fed into the national grid is purchased by energy companies at a fixed, premium rate. Energy companies are then obliged by the government to purchase the renewably generated electricity, with the additional costs being spread across every customer of each company. The fixed price paid by the energy companies is hoped to attract investment as it guarantees the investors a return over a long period. The rates will be placed under consultation next year.

Pay As You Save is a mechanism to pay for whole-house energy efficiency retrofits, the concept is based on spreading the cost of refurbishment for a property over a substantial period of time, where the repayments are less than the predicted savings made from installing measures and the repayment charge is linked to the property not the person. If successful it will remove one of the perceived barriers for householders the financial cost of more expensive energy efficiency measures, and the scheme is expected to contribute to the Government's target of having 7 million homes fully retrofitted by 2020. Pilots will be run during 2010.

Both these schemes have implications for advice provision, as in order for them to be successful householders will need to be aware of the schemes, understand how they can benefit, identify the appropriate measures for their own homes, and estimate costs and savings..

3.3.3 Renewable Heat Incentive

Following the Energy Act 2008, the Renewable Heat Incentive (RHI)¹¹ was set up to provide investors in renewable heat at all scales (domestic, communities and industry) with financial support. Through the RHI financial assistance will be available to all scale generators of renewable heat as well as producers of renewable biogas and biomethane across England, Scotland and Wales. The incentive will cover the following technologies: biomass, solar hot water, biomass CHP, air and ground source heat pumps, biogas from anaerobic digestion and biomethane. It is hoped that the RHI will be in place as of April 2011. As with renewable energy, renewable heat is often more expensive than the other forms of heat. The aim of the RHI is to make renewable heat more affordable to a wider range of people by expanding the market and consequently bringing the costs down. The scheme is designed to contribute to the UK's renewable target of 15% set by the European Union. Again, this scheme has implications for advice provision as its success is dependent on appropriate advice being made available to householders.

3.3.4 Smart metering and better billing

In December 2009, the Government confirmed that all homes in the UK will have smart meters installed by their supplier by 2020. Smart meters provide accurate and up-to-the-minute information

¹¹ DECC, *Renewable Heat Incentive (RHI)*

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/renewable_heat/incentive/incentive.aspx

on energy consumption with the associated cost. By clearly communicating the electricity consumption and the cost of daily actions, consumers are strongly encouraged to be more energy conscious and to cut their energy usage. Therefore, smart metering and better billing leads to behaviour change, as revealed in the EST publication *The smart way to display*.¹² The final details on the meters and the project timeline are yet to be finalised but trials are already being carried out by British Gas, for example, who are trialling meters in 50,000 homes and businesses. EDF, E.ON and Scottish Power are among the other major energy suppliers currently carrying out their own trials following financial backing from the government.

It is unknown exactly what levels of CO₂ savings can be expected through introducing smart metering. There have been few studies undertaken, showing that the potential is substantial. One research project run in Finland showed that consumers save 10.3% of energy on average by using only smart meters.¹³ In the UK, the estimates are in a range of 5-15%.

3.3.5 Zero carbon homes

In July 2007 the government announced in the *Building a Greener Future* policy statement that, from 2016, all new homes would be zero carbon. The report estimates that improvements in new builds will bring annual savings of 2.7MtCO₂ by 2020¹⁴. The definition of zero carbon home was developed based on energy efficiency, on-site carbon reduction measures, and a list of allowable solutions for dealing with the remaining emissions. The Government hopes that zero carbon homes, by being cheaper to run, will assist its strategy to reduce fuel poverty. A 2016 Taskforce was established to identify the barriers to the successful implementation of this objective and put measures in place to overcome these barriers. The concept of zero carbon new-build homes will be an important stimulus for providing energy advice and implementing energy efficiency in the domestic sector.

3.3.6 Warm Front and UK grant schemes

A number of different energy efficiency grant schemes with an element of advice provision operate across the UK. In England, Warm Front is a Government-funded scheme managed by eaga. It is one of DECC's key programmes to tackle fuel poverty, and follows the Warm Homes and Energy Conservation Act 2000 and the UK Fuel Poverty Strategy 2001. Similar schemes operate in Scotland (the Energy Assistance Package), Wales (Home Energy Efficiency Scheme) and Northern Ireland (Warm Homes). The broad concept is common to all schemes, with funding available for domestic properties in the form of insulation and heating measures. Across the different schemes the specific details and eligibility criteria vary slightly. The Warm Front scheme is used as an example and is described in more detail.

In England, the Warm Front scheme covers measures up to the value of £3,500. Where oil, low carbon or renewable technologies are recommended the value increases to £6,000. This is available to homeowners as well as those living in privately rented properties. The scheme is targeted at vulnerable households; over 60s, households with children under 16, pregnant mothers who are in receipt of means tested benefits and households in receipt of disability benefits. Successful applicants receive a home visit from a trained assessor who determines the full requirements of each property. Additional support is available for the over 60's in the form of a £300 rebate. Warm Front provides online information on simple energy saving measures and also an advice package is

¹² Energy Saving Trust, *The smart way to display*, <http://www.energysavingtrust.org.uk/corporate/Global-Data/Publications/The-smart-way-to-display>

¹³ Smartmeters.com, *Finland leads Europe in smart grid development*, 16.01.09. <http://www.smartmeters.com/the-news/425-finland-leads-europe-in-smart-grid-development.html>

¹⁴ Communities and Local Government, *Building a Greener Future: policy statement*, <http://www.communities.gov.uk/publications/planningandbuilding/building-a-greener>

given by a qualified assessor to eligible households. The focus of advice provided by the energy assessor is on energy efficiency technology. Some behaviour-related advice is also provided. However, advice is restricted to measures that are eligible for Warm Front funding, which does not include all renewable energy technology or double-glazing. Certain renewable energy technologies are being trialled in certain areas. For other enquiries, householders are referred to EST.

In England last year, eaga's assessors visited, assessed and provided an advice package to 233,000 households, and 2 million in total since Warm Front began in 2002. Considering the impact of the technology installed, these numbers translate into total annual savings of 1.4 tonnes of CO₂ per year for an average home that has been improved by the scheme.¹⁵ It is not possible to disaggregate the impact on emissions of the behaviour-related advice that households may have received.

3.3.7 Decent homes

This scheme, launched in 2001, aims to reduce the number of non-decent homes in the social housing sector by over 95% by 2010.¹⁶ The government challenged all councils and housing associations to meet the decent homes standard. The Government defines a decent home as "one which is wind and weather tight, warm and has modern facilities". Three funding options were made available to achieve this target: (i) devolving management to an arm's-length management organisation, (ii) using a Private Finance Incentive to encourage private sector investment, and (iii) transferring some or all stock to a Registered Social Landlord. Significant attention is paid to the improvement of bathrooms, kitchens and heating systems. The Government perceives the delivery of decent homes as a contribution to wider objectives, i.e. by improving the standard of living and making a house more energy efficient, decent homes help tackle fuel poverty.

3.3.8 Energy Performance Certificates (EPCs)

Energy Performance Certificates (EPCs), have been introduced by the Government to help improve the energy efficiency of buildings in England and Wales (in 2008 EPCs came into effect also in Northern Ireland and Scotland). In England and Wales, EPCs have been phased in for different types of building since August 2007. Since October 2008 all properties - homes, commercial and public buildings - when sold, built or rented require an EPC. When buildings are sold the EPC forms part of the Home Information Pack (HIP), while, when buildings are rented EPCs are stand-alone.

An EPC provides an A-G energy efficiency rating of the property (with A being the most energy efficient), an environmental impact rating in terms of CO₂ emissions and a recommendations report giving advice about how to improve energy efficiency. The purpose of an EPC is to give people information about the energy performance of a property. Since 1 October 2008 buildings over 1,000m² that are occupied by a public authority and are frequently visited by the public must display a Display Energy Certificate (DEC). The purpose of displaying a DEC is to raise public awareness of energy use and inform visitors to public buildings about the energy use of the building.

These requirements are part of the Energy Performance of Buildings Directive (EPBD) which is European Legislation that was adopted by Member States in 2002. The legislation also covers air conditioning inspections, by 4 January 2009 all existing air-conditioning systems over 250 kW had to be inspected and all remaining air conditioning systems over 12 kW must be inspected by the same time in 2011.

¹⁵ DECC, eaga (2009), *The Warm Front Scheme Annual Report 2008/9*

¹⁶ Communities and Local Authorities, *Decent homes and council housing finance*,
<http://www.communities.gov.uk/housing/decenthomes/>

EPCs are produced by accredited energy assessors, i.e. Domestic Energy Assessors and Home Inspectors. The latter can produce also Home Condition Reports. To become an energy assessor it is necessary to belong to an approved accreditation scheme (the list is published on a Government website¹⁷), which is in place to control the quality of energy assessment and to ensure the competency and qualifications of an energy assessor. The public can search for an accredited assessor on the 'Energy Performance Certificate and Home Condition Report Register' website¹⁸, run by Landmark on behalf of the government. The Landmark website also contains information that can only be accessed by EST and enforcement officers. This can provide information that could be used to target advice to specific households.

The IDEAL-EPBD project, co-funded by the European Union under the Intelligent Energy Europe Programme, was set up by a consortium coordinated by the Energy Research Centre of the Netherlands (ECN) in 2008 with the aim of investigating reports that EPCs have had a limited impact on buyer behaviour or on the homeowner's motivation to take up energy efficiency measures, understanding the reasons for this and the barriers that are hindering the effectiveness of the scheme¹⁹. The IDEAL EPBD project will run until 2011, and recommendations for improvements for the EU and national governments can be expected to come from the project.

As part of its Second Strategic Energy Review in November 2008, the European Commission proposed a recast of the original 2002 directive. Subject to the European Parliament's approval in 2010, it is looking likely that the recast of EPBD will require that EPC ratings are displayed on adverts for properties marketed for private rent. This is already a requirement for properties that are marketed for sale.

¹⁷ Communities and Local Authorities, *Accreditation*, <http://www.communities.gov.uk/planningandbuilding/theenvironment/energyperformance/energyassessment/accreditation/>

¹⁸ The Energy Performance Certificate and Home Condition Report Registers. <https://www.hcrregister.com/>

¹⁹ European Union, *IDEAL-EPBD – A European project on consumer response to energy labels in buildings*, www.ideal-epbd.eu

3.4 Overview of current energy advice provision landscape

The UK advice provision landscape can be broadly categorised into two distinct groups (Figure 7). The first group can be defined as advice providers with national coverage. The second is formed of advice providers operating at a local or regional level. These organisations have a range of different models for advice delivery. The different types of model used by each group are described below along with an overview of the market share, the cost of advice provision, the CO₂ savings achieved or expected, and the different monitoring and reporting protocols used. This data was gathered through semi-structured stakeholder interviews and supplemented with additional desk research.

Figure 7: Overview of current energy advice provision landscape



3.4.1 Advice providers with national coverage

This loose category encompasses advice providers with national coverage. They are characterised by their organisational structure that incorporates a national 'centre' that enables the coordination of a consistent set of messages and activities to be delivered across regionally and locally distributed centres.

The principle actors are the Energy Saving Trust Advice Centres (ESTACs) and energy supply companies. Large retailers, such as Asda and Tesco, and national trade associations for energy efficiency and renewable energy equipment are also becoming actively involved in delivering energy advice. In addition, there are a number of other national organisations which can be classed as indirect advice providers, as they provide advice principally through referrals. These include organisations such as Citizens Advice Bureau, and Primary Care Trusts. The activities of these different organisations are described briefly below.

3.4.1.1 Energy Saving Trust

The Energy Saving Trust (EST) is a not-for-profit organisation established with the objective of tackling climate change by promoting a reduction in energy consumption that leads to a cut in

carbon emissions. It is funded primarily by the UK Government and devolved governments as well as the private sector. Its mission is to lead 60 million people to act on climate change. To achieve it, the EST works in partnership with businesses, energy suppliers, local authorities, communities, and householders. The recently developed EST strategy for 2009-2014 places energy efficient homes as one of its top priorities, recognising its significant carbon reduction potential (37% of expected annual UK savings by 2020).²⁰ The primary advice delivery routes available to individual householders include a website and helpline (levels 1 and 2). Advice concerns efficient use of energy at home and installation of energy saving measures. More recently, advice on renewable energy, transport choices, waste reduction and water conservation has been introduced. The EST also offers Home Energy Checks (HECs) (level 2) which involve a set of questions that are completed by the home owner (either online or through a paper-based questionnaire) and result in an impartial written report on how energy use and carbon emissions can be reduced in the home.

The EST has established a network of advice centres that stem from a previous system of Energy Efficiency Advice Centres. Since October 2008, 21 centres, acting as one-stop shops, have been in operation: 5 in Scotland (known as Energy Saving Scotland Advice Centres - ESSACs), 1 in Wales, 1 in Northern Ireland, and the remainder in England, in total employing over 500 staff. The Energy Saving Trust contracts organisations, typically non-profit organisations based within the territories served by the ESTAC, to run the advice centres and to provide advice services in different geographic locations across the UK. The Welsh centre is managed by the EST directly. All are fully funded by government.

The key routes through which ESTACs provide advice are a telephone helpline, and email enquiry service, as well as some face to face advice and outreach events (e.g. marketing campaigns, attending events). Home visit services are relatively time-consuming and hence relatively high cost per household. This approach is not specifically encouraged through EST funding and reporting mechanisms, and as such some contractors have sourced separate funding for a home visits, typically at a more local level and targeted towards particular households.²¹ Advice provided by the different ESTACs comes mainly from non-face-to-face advice services, which account for about 70% of all contacts made, with the remainder relating to outreach activities.²² The figures refer to advice given up to the level 3, as defined in section 3.1.

The resources made available on the EST website are also used by other advice providers and NGOs such as Groundwork and GAP. Other indirect advice providers often refer customers on to the EST website for further information and advice.

EST monitors and evaluates the progress of its activities on the annual basis. In terms of quantifying the results, the EST gathers and publishes data on *inter alia* CO₂ savings associated with its activities as well as energy and cost savings. These indicators are developed per audience group. The consumer (household) audience includes consumer marketing, the ESTACs, ESSACs, and consumer website activity. The advice given through various routes is converted into CO₂ savings, using a set of conversion factors. These factors are based on research studies, the EST's Home Energy Efficiency Database containing information about the UK's housing stock, and interviews with clients.²³

²⁰ Energy Saving Trust, *Achieving our mission – the Energy Saving Trust strategy 2009-2014*, www.energysavingtrust.org.uk/corporate/Global-Data/Publications/Achieving-our-mission-the-Energy-Saving-Trust-strategy-2009-2014

²¹ Severn Wye Energy Agency, SErENADE project, *Energy Advice in Europe 2007*, www.swea.co.uk

²² EEPH *Overview of energy efficiency advice provision in the UK*, February 2009

²³ Energy Saving Trust, *The Energy Saving Trust: working with you to save CO₂*, <http://www.energysavingtrust.org.uk/corporate/Corporate-and-media-site/Library/Publications-and-reports/The-Energy-Saving-Trust-working-with-you-to-save-CO2>

Over the last decade, over 7 million customers in total have received advice from ESTACs, which translates into 12MtCO₂ saved over the lifetime of the suggested actions.²⁴

Market share: Over 2 million consumers were reached in 2007/2008 through the advice network and the website combined. The EST reports to talk to over 1 million people a year through the local advice centres alone.²³ Over 7 million customers have been served through the network of Energy Saving Trust Advice Centres during the last 10 years.

Cost of advice provision: The advice is given for free to customers. The EST reported to spend £18.7million on energy efficiency consumer advice in 2007/08.²⁵ Data on costs of specific activities is not available.

CO₂ savings achieved/expected: The energy efficiency advice given to the consumer audience was estimated to have stimulated 770,000tCO₂ savings annually and 10.9MtCO₂ of lifetime savings in 2007/08 (similar figures are expected for lifetime savings in 2009/10, but to increase in 20013/14 to 33MtCO₂.^{26,27} These figures refer to combined EST strategic themes of homes and behaviour).

Monitoring and reporting: The EST monitors and reports on the number of contacts made/households reached, measures recommended and their associated CO₂ and energy savings. The results are demonstrated in annual reports posted on the EST website. Based on these indicators, the evaluation of various advice routes, including the ESTACs, is assessed and the funding is allocated accordingly.

3.4.1.2 Energy suppliers

Energy suppliers are currently providing a range of energy advice services both to the customers they supply with electricity and gas as well as to other households. They have been driven mainly by the terms of their licence conditions, as well as by their social obligation. More recently, legislation in the form of the CERT/CESP obligations has become a key driver. In addition, climate change and the broader sustainability agenda are increasingly being seen by energy suppliers as opportunities to attract new customers and increase market share.

Energy companies take different approaches to the provision of energy advice. In 2005, the six main electricity and gas suppliers and the Energy Retail Association (ERA) established the Home Heat Helpline. The service provides householders with a free-phone number offering practical energy advice. From early 2009, customers have been able to send emails with information requests to the Home Heat Helpline via a website (level 1 and 2).²⁸ In addition, home energy surveys (level 3) and face to face advice services are being undertaken in some areas (e.g. Scottish Power's Community Liaison Officers and Npower's Energy Efficiency Home Advisors) and this is widely expected to increase, particularly under the CERT obligations.^{29 30} Energy efficiency advice is also part of

²⁴ Energy Saving Trust www.energysavingtrust.org.uk/Help-support/Local-energy-saving-advice/About-the-local-advice-centres

²⁵ Energy Saving Trust, Annual Review 2007-8, www.energysavingtrust.org.uk/corporate/Global-Data/Publications/Annual-Review-2007-2008

²⁶ Energy Saving Trust, *Annual Review 2007-8*,

²⁷ Energy Saving Trust, *Achieving our mission. The Energy Saving Trust Strategy 2009-2014*, www.energysavingtrust.org.uk/corporate/Global-Data/Publications/Achieving-our-mission-the-Energy-Saving-Trust-strategy-2009-2014

²⁸ Home Heat Helpline website, <http://www.homeheathelpline.org.uk/>

²⁹ Scottish Power, *Corporate Social Responsibility 2008*, www.scottishpowercsrannualreview.com/p9.php

broader social programmes, which energy suppliers have introduced under their social obligations (e.g. British Gas's Essentials Advance, SSE's Energyplus care, E.ON's Warm Assist, ScottishPower's Fresh Start and Carefree plus, and Npower's Spreading Warmth).³¹ Suppliers have also entered into a range of partnerships to provide energy efficiency advice to fuel poor and vulnerable social groups, e.g. British Gas's Here to Help Programme, and EDF Energy's funding for WRVS and the Safe Warm & Well winter risk campaign.³²

As described in section 3.2.2., the UK Low Carbon Transition Plan, published in June 2009, outlined proposals to extend the CERT obligations to include Real Time Displays (RTDs) and home energy advice packages (HEA). The Community Energy Saving Programme (CESP) described earlier, places a further requirement on energy suppliers to reduce emissions in low-income households, with an emphasis on the 'whole house approach'.

The combined market share of all energy providers is potentially nation-wide, as virtually every home has a supply contract. Given this very extensive reach, they play a potentially important role in improving access to good quality energy advice. Energy suppliers argue that due to the nature of their relationship with customers, they are well placed to promote energy efficiency effectively. However, as pointed out by a couple of interviewees, there is perhaps still an element of common public mistrust to overcome, i.e. individuals perceive energy suppliers as profit-driven companies, therefore, they might consider advice obtained as biased. Some customers may prefer not to phone their energy supplier, which is one reason why the Home Heat Helpline was set up by the ERA.

Market share: In 2008, the Home Heat Helpline received almost 25,000 calls.³³ The same year, energy retailers have provided energy efficiency advice to more than 221,000 customers and referred more than 6,600 customers to government schemes.³⁴ In terms of individual initiatives, the market share depends on the individual energy provider. For example, in 2008, Scottish Power's liaison officers made over 9,400 home visits, out of which almost 3,000 concerned energy efficiency, while Npower made around 2,600 home visits.³⁵

Cost of advice provision: Eligible customers obtain the advice for free. In 2008-09, suppliers' collective expenditure on the Home Heat Helpline and the eaga pilot totalled £0.9 million.³⁶ Under CERT, DECC assessed that home energy advice would cost energy suppliers almost £45 per household, which equates to £67 per lifetime tonne CO₂ saved.³⁷ Individual figures depend on the specific energy provider. For example, in 2008-09 Npower have spent over £300,000 on providing home visits to give energy efficiency advice, which equates to around £115 per home visit.³⁸ This is supported by the figure of £100 per home visit, suggested at the workshop hosted by the EEPH in

³⁰ Ofgem, *Monitoring Suppliers Social Spend*, 2008/9. The 2009 report mentions the eaga pilot project – it involved contacting a sample of customers and verifying if they are on the most appropriate tariff.

³¹ Ofgem, *Monitoring Suppliers Social Spend*, 2008/9.

³² Ofgem, *Monitoring Suppliers Social Spend*, 2008/9.

³³ Scottish Power, Corporate Social Responsibility 2008, www.scottishpowercsrannualreview.com/p9.php

³⁴ Ofgem, *Monitoring Suppliers Social Spend*, 2008/9.

³⁵ Npower, *Helping people in their own homes*,

www.npower.com/rwennpowercr/5_responsible_business/5_4_customers/5_4_2_1_1_spreading_warmth_in_action.html

³⁶ Ofgem, *Monitoring Suppliers Social Spend*, 2008/9.

³⁷ DECC, *Technical Analysis of New Measures in CERT*, amended 2 March 2009

³⁸ Ofgem, *Monitoring Suppliers Social Spend*, 2008/9

February 2009.³⁹ Under the social obligation, part of which involves providing advice, all suppliers have committed to meet the target of £2.10 per customer account for 2008-2009.⁴⁰

CO₂ savings achieved/expected: The Government estimated that the advice given under CERT, including a face-to-face visit, would account for almost 0.7tCO₂ per household over a lifetime of 7.5 years (NB: DECC has attributed higher carbon savings for 'harder' measures, encouraging energy suppliers using such measures to meet their CO₂ saving targets rather than the new "softer" measures).³⁷ Measures implemented through CERT achieved 106MtCO₂ savings achieved as of August 2009 (185MtCO₂ targeted over the three years of the scheme).⁴¹

Monitoring and reporting: Under CERT, energy suppliers report to Ofgem the number of measures delivered and their associated CO₂ savings (NB: the CO₂ figures are 'nominal' savings allocated per measure, taking no account of the actual savings made per property. No follow-up or monitoring takes place to confirm the savings have been achieved in practice), while under licence and social obligations, the number of customers covered and the type of advice provided is reported.

3.4.1.3 Large retailers

Large retailers have been increasingly involved in enhancing domestic energy efficiency. There are several drivers behind this activity, including the commercial perspective of selling more products and increasing market share as well as corporate social responsibility and brand enhancement drivers.

So far, large retailers have focused on offering energy efficiency products or services, often supporting it with awareness raising campaigns (level 0-1 advice in Figure 4). An example of this is the offer of discounted or free-of-charge energy-efficient light bulbs, in collaboration with energy companies under their CERT obligations or in support of the voluntary commitment of major UK retailers to phase out sales of incandescent bulbs by 2011.⁴² Recently, Asda offered energy efficient bulbs at a promotional price, in support to the Energy Saving Trust's Energy Saving Week 2009. Other actions include Tesco's Home Insulation Service offering eligible customers insulation of their properties for a discounted price, and for free for people over 70 or on benefit. The offer is subject to a free property survey. A similar offer is given by B&Q in partnership with British Gas, as part of their wider awareness raising campaign on energy conservation.

Awareness raising initiatives, focused around levels 0-1, have been undertaken by Asda and Co-operative. Asda, through its own service Energy Switch & Save, promotes green tariffs as a way of cutting household's carbon footprint. It also uses its own blog, *Your Asda*, to introduce energy saving ideas to its customers, by referring to ongoing energy efficiency campaigns or to energy efficiency advice providers.⁴³ Moreover, Asda will launch the Bright Ideas site in 2010, allowing its customers to share ideas that can save money. Interestingly, the retailer will offer a financial reward for everyone whose advice is put into practice. Based on the comments already made by some

³⁹ EEPH, *Developing energy efficiency advice provision in the UK*, www.eeph.org.uk/uploads/documents/partnership/EEPH%20Advice%20Workshop%2026-02-2009%20final%20report1.pdf

⁴⁰ Metering.com, *Social tariff drive in U.K. doubles uptake*, 30.12. 08
www.metering.com/Social/tariff/drive/UK/doubles/uptake

⁴¹ Ofgem, *Carbon Emissions Reduction Target Update 05 – August 2009*, www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=5&refer=Sustainability/Environment/EnergyEff/CU

⁴² Note: CFLs are no longer allowed to be distributed under CERT due to energy suppliers' over-reliance on this measure to meet their targets.

⁴³ Your Asda Blog. Accessible from <http://your.asda.com/>

customers, it is very likely that energy efficiency advice will form a big part of the knowledge sharing experience. Similarly, the Co-operative has developed an online platform, where customers can learn about and engage in local community initiatives on social inclusion and energy efficiency, local households and environment impact, community energy renewables, and carbon neutral communities.

Recently, retailers have started supporting advice provision too; mainly through the partnerships with energy suppliers who have CERT/CESP targets to meet; for example Sainsbury with EDF Energy and M&S with Scottish and Southern Energy (SSE). Such partnerships include advice given through website, phone or free online home survey. The latter two are delivered by energy suppliers. On the website, a customer can use an interactive house, or read general energy saving tips. To obtain a free home survey, a customer needs to complete an online questionnaire, and in return they receive a report with specific energy saving recommendations (level 2 advice).

As a stand-alone initiative, Tesco has recently announced that it is launching a Home Energy and Emissions Service that aims to support its clients in improving their house energy efficiency as well as to advise them on employing renewable energy sources. No detailed information on this initiative has been published yet.

In general, advice provision is a very new market for large retailers. There is therefore a lack of specific information on issues listed below. However, large retailers could reach out to a large proportion of the UK population with energy advice services. For example, with approximately 1 in every 8 pounds spent in UK shops being spent in Tesco, the extent of their reach into the everyday lives of the general public is significant.⁴⁴

Market share: There is no available information on how many customers large retailers contacted through their advice and awareness raising activities. As it concerns hard measures, for example Tesco aspires to insulate half a million UK homes in 2009-2012.

Cost of advice provision: The advice is provided to customers for free. No information is available on the cost to the retailers.

CO₂ savings achieved/expected: There is limited and patchy data on the savings resulting from advice and information provided. Based on what is available, information rather reflects the CO₂ savings attributed to hard measures (i.e. sales of energy efficient products and offers). For example, Tesco reported that its January promotion on energy saving light bulbs resulted in 4.5 million energy saving bulbs sold, which they estimated will save potentially 50,000tCO₂ annually. As noted earlier, such activity is no longer eligible for credit under CERT. EDF Energy reported that more than 16,500 low energy light bulbs were sold in Sainsbury's stores in 2006.⁴⁵ Tesco's Home Insulation Service aims to deliver 5MtCO₂ cut over three years.

Monitoring and reporting: Supermarkets do monitor the sale of energy-efficient products, but they do not publish these figures in a consistent way. On the other hand, energy suppliers, who partner with retailers to deliver energy efficiency advice, collect data on the number of home surveys made or telephone advice given, but tend to report them in bulk without giving the break-down into the retailer's individual contribution.

⁴⁴ Guardian, *Tesco results add to UK economic gloom*, 13.01.09. www.guardian.co.uk/business/2009/jan/13/recession-tesco

⁴⁵ EDF Energy, *Energy for everyone: Energy Efficiency Commitment Annual Report 2006-2007*, www.sainsburysenergy.com/sainsburys-energy/downloads/EEC%20Report%202006-2007.pdf

3.4.1.4 National trade associations for energy efficiency and renewable energy technologies

National trade associations for energy efficiency and renewable energy technology engage to a limited extent in advice provision to households. These are voluntary initiatives with the principal focus of such activity being to increase understanding and develop new business opportunities for the industry they represent. This activity is primarily done through web-based information and general advice (level 1). Organisations such as the Solar Trade Association and the British Wind Energy Association (BWEA) have information on their websites relating to the technologies they represent, their costs, approved suppliers and funding support options.

Market share: It is estimated that the market share of national trade associations for energy efficiency and renewable energy technologies is relatively small due to the limited scope of their advice provision activities.

Cost of advice provision: Online advice/information is free to customers.

CO₂ savings achieved/expected: No information is available.

Monitoring and reporting: The BWEA reports on the installed capacity of small scale technologies and associated CO₂ savings (NB: small scale technology is not limited to the domestic sector), but no monitoring of the impact of advice is undertaken.

3.4.1.5 Domestic Energy Assessors and Home Inspectors

The Energy Performance Certificate (EPC) is delivered by accredited and suitably qualified Domestic Energy Assessors (DEA) or Home Inspectors (HI). The EPC in its current shape applies only to homes on sale or for rent.

The tasks of DEA/HI are to accumulate the information on the asset surveyed and input them into the approved software, provided via the accreditation scheme. The software produces a certificate, which includes a rating of the asset and recommendations for improving its energy efficiency. These suggested measures are complemented with information on estimated CO₂ and cost savings. The DEA/HI then needs to interpret whether software-generated recommendations are suitable to a particular client. The DEA/HI can provide further advice (level 3), yet it is currently limited to interpreting the recommended actions. A DEA/HI is not allowed to refer a client to specific service installers. Other limitations of the EPC system include: (1) focus on building rating, resulting in ignoring the way householders use the building; and (2) lack of a supporting framework to retain a high quality advice service.

The recent consultation on the Heat and Energy Saving Strategy takes into account the issues described above. DECC acknowledges that while the EPC is a good vehicle to deliver the Government's ambitions in making substantial reduction in emissions through pushing the market towards more sustainable homes, it highlights that energy assessors will need to receive funding to cover the cost of additional training enabling them to provide energy advice.⁴⁶

Market share: Over 2 million domestic EPCs for new-builds, homes for sale and rentals have been issued from August 2007 to November 2009 (NB: the HCR Register figure is higher by about 1m).

⁴⁶ Hipview.co.uk, 12.02.09. Part of comments made through on the consultation process for the Heat and Energy Saving Strategy, www.hipview.co.uk/blog/category/energy-performance-certificate/

The discrepancy likely results from the difference in the coverage of reported EPCs).⁴⁷ According to the Department for Communities and Local Government (CLG), the number of households in England is projected to increase by 6.3 million (29%) in 2031 over the 2006 estimate, or by 252,000 households per year.⁴⁸ These new-builds will be required to obtain the EPC. Based on historic data, around 1 million housing transactions take place in England and Wales every year – each transaction has to include the EPC issuance.⁴⁹

Cost of advice provision: Cost of an EPC varies among the accredited organisations that issue it. On average, the price paid by the client for an EPC is currently around £50.⁵⁰

CO₂ savings achieved/expected: According to NHER (the National Home Energy Rating scheme), if the EPC recommendations are applied, a household in England and Wales could save 1.2tCO₂ annually (1.36MtCO₂ potentially to be saved from all England and Wales properties sold during a typical year).⁵¹

Monitoring and reporting: DEAs are monitored by the accreditation organisations, which in turn, report to CLG on an annual basis.

3.4.1.6 Indirect providers

As already mentioned above, there is a group of organisations that can be classed as indirect providers with national coverage. These organisations offer indirect advice by referring the householder to further sources of more detailed advice, such as the ESTACs and agencies managing governmental schemes such as eaga. Organisations in this group have some form of national coordination and therefore have the potential to roll-out a coordinated energy advice referral service across the country.

One example of an indirect provider is the Citizens Advice Bureau (CAB), a network of charities providing free information and advice on various issues including housing, debt and health, among others. Currently, energy efficiency and climate change are not embedded as core issues in the CAB service offering. As such, individual CABs, distributed across the country as autonomous units, offer varying levels of energy advice. The standard approach is to refer inquirers to specialist organisations, such as EST, Consumer Focus, and eaga, through the following mix of means: online information, one-to-one advice given in a CAB, telephone-based advice, training sessions, and outreach events. Most of the inquiries and advice given accordingly relate to fuel debt and fuel poverty. Moreover, individual Bureaux have partnered with other entities, including local authorities, energy suppliers, and large out-sourcing companies (such as eaga) in order to go beyond their usual referral role and support the delivery of energy-related programmes. For example, through the partnership with the Luton Borough Council, the local CAB staff benefit from the free energy awareness training to assist the Council in delivering their Affordable Warmth programme. Since last year, CAB staff have been trained by Ofgem in advising low-income customers on switching an energy supplier under the Energy Best Deal campaign. The network is funded by local authorities. On top, those bureaux with agreements with other organisations receive additional funding, e.g. for

⁴⁷ energy-performance-certificates.org, 26.11.09 *Domestic Energy Performance Certificates lodged*, www.energy-performance-certificates.org/blog/epcs-logged-monthly-since-august-2007

⁴⁸ CLG, *Household projections to 2031, England*, 2009.

www.communities.gov.uk/publications/corporate/statistics/2031households0309

⁴⁹ Telegraph, *Financial Outlook 2008*, 17.12.07. www.telegraph.co.uk/finance/4676644/FINANCIAL-OUTLOOK-2008.html

⁵⁰ Linn Rafferty JTec Energy Performance, Personal Communication, December 2009.

⁵¹ NHER, *Seizing the Opportunity*, 2009 www.nher.co.uk/documents/conference2009/opportunity.pdf

assisting eaga in hosting a series of public facing rural road shows on energy efficiency and available grants under Warm Front.

Similarly to CAB, larger charities (e.g. Help the Aged and Age Concern) and consumer bodies (e.g. Consumer Direct, Consumer Focus) do not provide energy efficiency advice as a core service. Through their website, they provide general information on energy efficiency measures, grants and schemes. They also periodically send out information on how to keep warm during the winter and what the available support is and where to find it. Being not-for-profit organisations often means that such organisations set up partnerships, through which funding can be channelled for energy efficiency-related actions (e.g. the British Gas-Help the Aged partnership, and Age Concern's collaboration with E.ON).

Organisations in the health sector also fall under this category of indirect providers; however their involvement is very limited and inconsistent across the UK. Yet, their future role has been recognised by the Climate and Health Council which proposes greater involvement of GPs and nurses in providing advice to patients on reducing their carbon footprint.⁵² So far, there have been one-off projects undertaken to better employ health service staff in energy efficiency information and advice delivery, for example Energy Champions Scheme by the National Energy Agency and Primary Care Trust, and Fuel Poverty and Health Toolkit produced by the consortium made of the National Heart Forum, eaga Partnership Charitable Trust, Faculty of Public Health, Help the Aged and the Met Office.⁵³

Market share: The market share depends on the particular organisation. For example, CAB annually serves around 2 million clients, primarily from social classes S2 (skilled working class), D (working class), and E (individuals at the lowest levels of subsistence). CAB received 47,000 enquiries on billing and 69,000 enquiries on fuel debt in 2007-08. Age Concern received 14,500 calls related to energy efficiency.⁵⁴

Cost of advice provision: The advice is generally provided by indirect providers for free. The cost borne by an organisation to provide advice varies for each organisation. By way of example, CAB allocated over £10m for providing information and advice in 2009, and this includes addressing energy-related enquiries.⁵⁵

CO₂ savings achieved/expected: There are no specific targets attached, as these organisations play only a referral role.

Monitoring and reporting: In the case of CAB, each inquiry is tagged in the CAB system (CASE recording system), making it possible to retrieve data on, for example, the kind of enquiries received (fuel debt etc.) or energy efficiency advice provided by housing type i.e. Local Authority Housing, Housing Association, Private Sector Rented or Owner Occupied.

⁵² Telegraph, *GPs should offer climate change advice to patients*, 29.11.09.
www.telegraph.co.uk/earth/environment/climatechange/6683770/GPs-should-offer-climate-change-advice-to-patients.html

⁵³ National Heart Forum, *Fuel poverty and health toolkit*, Available from:
www.heartforum.org.uk/Publications_NHFreports_FuelpovertyToolkit.aspx

⁵⁴ EEPH, *Overview of energy efficiency advice provision in the UK*, 2009

⁵⁵ CAB, *Annual Report 2008/2009*, 2009. www.citizensadvice.org.uk/index/publications/annualreports/ar_09.htm

3.4.2 Providers with regional/local coverage

The second group is formed of advice providers operating at a local or regional level and includes local authorities, local and regional non-for-profit organisations, housing associations, small-scale local initiatives and tradesmen.

3.4.2.1 Local authorities

Local authorities can play an instrumental role in fighting climate change. A range of national policies and measures, as well as voluntary initiatives have been developed to help local authorities to take an active role in disseminating energy efficiency in the domestic sector. These include the Home Energy Conservation Act (HECA), Energy Review, Climate Change Act, National Indicators 186 and 187, and the Nottingham Declaration.⁵⁶

So far, local authorities have reached out to householders on the topic of energy efficiency mainly through disseminating general information through county and borough council websites, mail shots and local papers (levels 0 to 1). The information includes general energy saving tips, details on available grants/discounts, and directions on where to seek specialist energy advice. With regards to grants, some local authorities not only channel outside funds but also provide renewable energy and/or energy efficiency grants or discounts to individuals on benefits and pensions themselves.⁵⁷ For example, Kirklees Council provides free loans to homeowners to install low carbon technologies on their properties (RE-Charge Scheme), and grants for loft and cavity wall insulation (Warm Zone).⁵⁸

Yet, increasingly, local authorities are going further and engaging in energy advice provision, either directly or through funding specific initiatives. Examples include Energy Efficiency Officers, Private Housing Section by Charnwood Borough Council, and the Energy Efficiency Team of the Rotherham Metropolitan Borough Council.^{59,60} In such examples, the advice given can be via phone, email, and home visit (up to level 3 or 4). The Derby Home Energy Advice Service is a good example of a comprehensive and advanced approach. As well as running awareness-raising campaigns on available grants and schemes, and online information with general energy saving tips, the service organises drop-in advice surgeries at venues around the city, home visits and addresses residents' queries during their visits in council premises. Energy efficiency services are promoted through local radio and press, as well as through the yearly Home Energy Bulletin sent to every household.⁶¹

Increasingly, local authorities employ established links with non-profit organisations, businesses or energy-related agencies to offer energy advice to their constituents. For example, under the WISE Homes programme run in partnership with Severn Wye Energy Agency (SWEA), Cotswold District Council and Stroud District Council developed an advice service to deliver a "Home Energy Action Plan" covering energy efficiency and renewable energy measures tailored to hard to treat homes.⁶²

⁵⁶ Defra, *Analysis to support climate change indicators for local authorities*, 2008

www.defra.gov.uk/corporate/about/what/localgovindicators/documents/ni186-report-2008.pdf

⁵⁷ Directgov, *Energy efficiency grants*,

www.direct.gov.uk/en/MoneyTaxAndBenefits/BenefitsTaxCreditsAndOtherSupport/On_a_low_income/DG_10018946

⁵⁸ Kirklees Council, *Grants and energy initiatives*, <http://kirklees.gov.uk/community/environment/environment.shtml#e2>

⁵⁹ Charnwood Borough Council, *Private Housing Section*,

www.charnwood.gov.uk/files/documents/private_housing_section/factsheet-privatehousingsection.pdf

⁶⁰ Rotherham Metropolitan Borough Council, *Help in finding a home to rent or buy*,

⁶¹ Derby City Council, *Home Energy – about Derby Home Energy Advice Service*,

www.derby.gov.uk/Housing/Derby+Home+Energy+Advice+Service

⁶² Energy Saving Trust, *Innovative projects*, www.energysavingtrust.org.uk/business/Business/Local-Authorities/Getting-Help-And-Advice/Innovative-projects

Building on this experience Stroud District Council later worked with SWEA to develop the Target 2050 project, which provides in-depth advice and support using an NHER-based whole-house energy audit to advise households on how to achieve deep carbon emission cuts in existing homes. 183 homes have had advice reports to date, and 23 were selected to become exemplars across a range of built forms and types. This approach complements the Gloucestershire Warm and Well project, also developed by SWEA, and run on behalf of a partnership of 7 local authorities and 2 health authorities, aiming to improve energy efficiency through raising awareness of the health benefits, and providing tailored advice and measures. Another example involves Sheffield First Partnership, which considers advice provision instrumental in achieving most of the objectives set in its Carbon Reduction Framework.⁶³ There are also examples of smaller-scale partnerships. Similarly, the Domestic Environmental Management in Action (DEMIA) programme targeted homes in each of the four participating areas (Southwark, Redbridge, Tower Hamlets and Herefordshire) and households were offered a free survey and personalised action plan.⁶⁴

Local authorities have been also encouraged to develop Affordable Warmth Strategies, in cooperation with their partners (such as those involved in social housing provision, regeneration, health and social care, and Local Strategic Partnerships). These strategies aim to alleviate fuel poverty, while also reducing carbon emissions. The means of achieving the objectives of the strategies include enhancing advice provision directly or through partners (such as the Affordable Warmth Strategy developed in partnership between SWEA, Gloucestershire Primary Care Trust and several councils of Gloucestershire and South Gloucestershire).⁶⁵

There is still limited coordination of actions across different local authorities, thus councils vary in the level of knowledge and engagement in energy advice delivery. It also appears that local authorities have focused more on enhancing building energy efficiency of their housing stock, than on encouraging householders to reduce energy consumption.

Market share: The market share depends on the coverage of the local authority and on the design and scope of the particular project. For example, in terms of the projects developed as partnerships with other organisations, the Warm and Well project in Gloucestershire provided advice to 27,000 residents over approximately five years. In each of the four participating areas (Southwark, Redbridge, Tower Hamlets and Herefordshire), about 500 homes are targeted by the Domestic Environmental Management in Action programme (DEMIA). In the first year, 744 surveys were carried out in the four communities.⁶⁶ In terms of the initiatives undertaken by local authorities themselves, the Derby City Home Energy Advice Service addressed over 24,000 enquiries since October 2000; whereas the Rotherham Metropolitan Borough Council reported to make over 3,000 referrals to various other schemes/projects such as Warmfront as well as local schemes over a 5 year period.

Cost of advice provision: No specific figures on the budget for advice provision are provided by individual councils across the UK. However, the cost of measures supported is better documented. For example, the Kirklees Council's Warm Zone programme has provided support of over £20 million over a 3 year period.

CO₂ savings achieved/expected: Limited data is available. The CO₂ savings achieved or estimated are generally linked to the package of actions undertaken by local authorities and targeted at householders (i.e. energy efficiency measures, retrofits, advice, microgeneration, etc.). Sheffield City

⁶³ Sheffield First Partnership, *Sheffield Carbon Reduction Framework - Draft Action Plan version (i)*, www.sheffieldfirst.com/EasySite/lib/serveDocument.asp?doc=178541&pgid=139695

⁶⁴ SWEA, *Sustainability at home*, www.swea.co.uk/projects.shtml

⁶⁵ Action for Affordable Warmth, www.swea.co.uk/AffordableWarmth/downloads/AffStrat.pdf

Council assessed that there is potential of 190,000tCO₂ saved by 2020 in homes ^[63], The DEMIA programme resulted in the 182tCO₂ saved.⁶⁴

Monitoring and reporting: The impact of advice on CO₂ savings is not generally monitored. It is usually included within the impact of 'hard measures'. DECC gathers information on the local and regional GHG emissions estimates per constituent, per capita, and sector (so-called National Indicators 185 and 186).⁶⁷ The EST has recently developed the TrACE tool for local authorities, where they are required to specify, *inter alia*, actions, campaigns, grants, and measures aimed at CO₂ reduction in the domestic sector, associated CO₂ savings achieved/predicted, partnership working on domestic energy efficiency.⁶⁸ The tool includes a specific question on how many households have received detailed advice.

3.4.2.2 Local – regional not-for-profit organisations

On the regional and local level, energy efficiency advice is also provided by not-for-profit organisations, such as registered charities or charitable companies. These organisations generally operate at local or sub regional level and focus on developing strong local partnerships with other local organisations such as community groups, local authorities and local services and agencies. Such organisations also often place an emphasis on face-to-face advice (but through a variety of routes sometimes offer advice from level 0 to level 4 including specific behavioural change related activities).

The Centre for Sustainable Energy (CSE), Save Cash and Reduce Fuel (SCARF), and Severn Wye Energy Agency (SWEA) are examples of such organisations with the main focus on promoting sustainable use of energy and affordable warmth. Thus, they deliver energy efficiency advice along with other objectives such as dissemination of low-carbon technologies and reduction of fuel poverty in their areas. A number of such organisations partner with the EST to run regional ESTACs, and provide ESTAC services such as helpline, email support and outreach activities.

Many local and regional not-for-profit organisations offer home visits (level 3 advice) to individual households and provide a range of different levels of support. Advice can concern how to use electrical appliances and heating devices more efficiently, how to interpret energy bills, how to tackle damp and condensation, and how to switch energy supplier, among many other issues. Examples of such initiatives include the Warmer Improved Somerset Homes by the CSE, and the Energy Advice Team from SCARF that operates in five local councils. These organisations maximise their outreach by participating in local events such as mobile library service, exhibitions, trade shows and "green days", as well as by developing specific projects. Examples include CSE's 100 Ideas Home, SWEA's Energy Neighbourhoods, and SCARF's Star Community.

Under the former, CSE set up a life-size kitchen and living room to demonstrate how small and easy-to-implement energy saving measures can be fitted in a modern house. SCARF organises regular Star Community events, where householders can receive general energy efficiency advice and arrange a home visit. The Energy Agency's initiatives in South West Scotland include three area-based projects sponsored by Scottish and Southern Electric (SSE) included surveys, advice, and offer of free measures.⁶⁹ Energy Neighbourhood is an energy saving competition based on

⁶⁷ DECC, *National Indicators 185 and 186*,

www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/loc_reg_dev/ni185_186/ni185_186.aspx

⁶⁸ Energy Saving Trust, *TrACE – Tracking action on carbon emissions*,

www.energysavingtrust.org.uk/business/Business/Local-Authorities/TrACE-Tracking-action-on-carbon-emissions

⁶⁹ WWF Scotland and Energy Agency, *Achieving our potential: an analysis of area-based approaches to improving energy efficiency in Scotland's homes*. Available from: http://assets.wwf.org.uk/downloads/report_v_5.pdf

neighbourhood teams, and is a replicable model developed from a Belgian prototype by a partnership of European energy agencies.

These face-to-face actions are complimented by online information on energy efficiency measures, relevant grants and schemes.

Within this group of local advice providers, there are also environmental, regeneration and social organisations, such as Groundwork and Global Action Plan (GAP). They promote sustainable ways of living, of which energy efficiency house improvements and more efficient use of energy is just one component. Their face-to-face activities can range from offering individual home visits (e.g. Groundwork's Green Doctor Initiative) to supporting team-based actions (e.g. GAP's EcoTeams). These direct interactions are promoted on their websites and through outreach activities and partnerships with other organisations.

These local non-for-profit organisations rely on various sources of funding, including local authorities, (e.g. such as Service Level Agreements between five local councils and SCARF), government and EU agencies (e.g. SWEA's pilot projects) and private partners. Being not-for-profit does help to build a certain level of trust with households. Yet, being dependent on external and limited funding often hinders the continuity and consistency of energy efficiency advice provision.

Market share: It depends on the particular organisation. For example, in 2006-07, CSE provided support to over 7,500 people in fuel poverty, that included Warm Front referrals, direct installations through Warm & Well, and households provided with benefits claims assistance. For 2009, they have a target of reaching 10,000 a year.⁷⁰ In 2007-8, SCARF dealt with 22,700 energy efficiency related enquiries and SWEA assesses that typically it reaches 15,000 households a year. The combined number of households that received advice and information through the SSE-sponsored projects was over 4,000, and out of that number more about one quarter received a personalised survey and report.⁷¹ Groundwork has about 10 Green Doctors who cover 250-350 households a year and 3,600 households have participated in the GAP EcoTeams programme by April 2008.⁷²

Cost of advice provision: Due to the large number of different organisations in this group and the large variety in the types of initiatives they undertake it is not possible to assess the combined costs of advice provision. The experienced NGOs involved are likely to be able to give a more accurate assessment of the costs of different forms of delivery, but this study was not designed to go into this level of detail.

CO₂ savings achieved/expected: Again, CO₂ savings depend on the organisation and its particular service or project. For example, in 2006-7 CSE's projects (including energy advice, energy efficiency and renewable energy installations) were estimated to result in 255,000 'lifetime' tCO₂.⁷⁰ It has not been possible to disaggregate the advice component of this saving. SCARF does not have CO₂ targets associated with project-based activities. It is estimated that the SSE-sponsored projects save each household at least 1.3tCO₂ annually (almost 2,500tCO₂ saved from all projects). Groundwork assesses that through each Green Doctor 250tCO₂ is saved annually. GAP claims that, through EcoTeams, households have reduced CO₂ emissions by an average of 17%.

Monitoring and reporting: Organisations that run the ESTACs need to report in line with the EST requirements (e.g. number of clients advised, number of installations implemented, value of

⁷⁰ Centre for Sustainable Energy, *Annual Review 2007*,
<http://www.cse.org.uk/downloads/file/annual%20review%202007.pdf>

⁷¹ Centre for Sustainable Energy, *Annual Review 2007*

⁷² Global Action Plan, *EcoTeams Evaluation Report*, 2008

improvement works, estimated annual and lifetime CO₂ savings). Yet, these monitoring and reporting indicators tend to be utilised by other organisations when describing the performance of their actions (e.g. Groundwork).⁷³ Some other indicators include: increased warmth and comfort (e.g. SWEA), energy and money saved.

3.4.2.3 Housing Associations

Housing associations generally have direct control over the improving the fabric of their own buildings so the focus of advice efforts among their tenants lies primarily in engendering changes in householder behaviour rather than encouraging particular investment decisions.

The primary driver is on reducing fuel poverty, with the focus being on low income properties and areas.

Housing associations develop energy efficiency initiatives on their own and in partnerships with other organisations. They also sometimes support activity in the wider community beyond their own tenants. For example, the Family Housing Association works in collaboration with Groundwork UK to offer a Green Doctor home energy advisor service targeted at vulnerable households across the community. The Family Housing Association also works with local youth workers through its EcoFactor project to raise awareness of energy issues among young people.

Some associations (e.g. the Wrekin Housing Trust for Telford and Wrekin) provide free materials, either in hard copy format or downloadable from their websites, that give clear and easy to interpret information about saving energy. Because housing associations are linked strategically with social housing and are likely to include the fuel poor, themed advice is easier to distribute and gain significant results from (e.g. a save energy week with specific focuses for each day, opportunities for funding from energy companies or even from area authorities targeted mail campaigns).⁷⁴

In 2008, the Housing Corporation, the government agency that funds and regulate Registered Social Landlords (including housing associations), has developed a retrofit manual, *Fit for the future*, including the information on how to improve the performance of their housing stock. The guide targets landlords who are responsible for five million homes throughout the UK (1/5 of all households). Among suggested actions is providing advice and awareness-raising information to tenants to induce changes in behaviour around energy use.⁷⁵

Market share: It depends on the particular housing association. There are over 1200 housing associations in the UK, from those representing entire counties to individual not-for-profit organisations representing a relatively small number of tenants.

Cost of advice provision: This is similar to local authorities, housing associations have a certain budget and the cost of provision is factored into this, usually as part of another service (e.g. the website).

CO₂ savings achieved/expected: The available information on CO₂ savings for housing associations relate to hard measures undertaken only with no disaggregation of the advice

⁷³ Groundwork, *Groundwork's Green Doctors to prescribe energy efficiency for low-income homes*, Press Release 09.04.09

⁷⁴ Funding Boost To Help Tackle Fuel Poverty, *Build Scotland online industry newsletter* 23/10/2009, http://www.buildscotland.co.uk/construction_news.asp?newsid=101594

⁷⁵ Housing Corporation, *Fit for the future – the green homes retrofit manual*, www.housingcorp.gov.uk/server/show/ConWebDoc.14312/changeNav/440

component. For example, the action of EDF Energy, eaga, and Housing Corporation is expected to save 1.14MtCO₂ over a 10-year period.⁷⁶

Monitoring and reporting: The Housing Corporation sets performance indicators related to decent home standard and the SAP rating of the dwelling. There are no specific CO₂ emissions related performance indicators. The requirement to produce EPCs for social housing does not imply any statutory requirement to update the assets to a certain standard.⁷⁷

3.4.2.4 Small-scale local initiatives

These small-scale local initiatives are the most diverse in terms of service provision methodologies and can include, but are not limited to: helplines, face to face advice, group/action forums, committee meetings, community events, awareness days, mail shots, websites, email advice, fund raising events, newsletters and redirection to local/national advice services.

The dimensions for such initiatives, in terms of size, objectives and impacts are also diverse. They can take various forms, including social clubs, networks of individuals, a panel of the parish council, charity or Community Interest Company (CIC). They can range from covering a particular street, or area of a village, to a whole town or even region. They largely rely on volunteers whose numbers varies from several individuals to more than a hundred. Some can start as pilot schemes, e.g. Old Homes Super Homes, set up by charities or individuals that are able to give it the necessary thrust before re-branding it with a national or regional provider of service.⁷⁸ Others continue to operate on a small scale. One example is a web-based organisation, Cool the World, set up by mothers concerned about climate change that provides energy efficiency advice for parents and aims to reach out to schools and educate children on energy efficiency and climate change from a young age all over the country.⁷⁹ Another example is the Caithness Energy Advice Project. Its primary objective is to provide free energy advice to any household in the Caithness area. To achieve it, it partners with other local organisations, but mainly it relies on word-of-mouth. It offers home visits and advice on wide range of energy topics, such as insulation, behavioural change, interpretation of bills, and micro-renewables.

These small-scale organisations often introduce energy efficiency as part of their advice on climate change or sustainable living. For example, Household Energy Service (HES) helps people cut carbon emissions, improve energy efficiency and reduce fuel bills.⁸⁰ They offer free energy saving advice in the following forms; energy surveys, carbon footprints and household energy reports, assistance with finding grants, supplier services, discounts etc. and a technical advice line.

As most of those initiatives start on a local level, they are mainly dependent on local funding (e.g. local authorities, businesses, regional assemblies, charitable organisations, and trusts), relevant central government funding, or awards such as the Ashden Awards or NESTA's Big Green Challenge.^{81,82} The local political, business and public support helps an initiative to get the momentum and backing to be able to grow. Yet, there are still many entities that have no funding

⁷⁶ Housing Corporation, *Environmental retrofit manual to tackle household CO₂ emissions launched*, 10.06.08
www.housingcorp.gov.uk/server/show/ConWebDoc.14333/changeNav/431

⁷⁷ Impact Assessment of a suite of measures to widen access to energy performance certificate registers, see:
www.ialibrary.berr.gov.uk/ImpactAssessment/?IAID=d7e157fb161c4f30b952e9f7eee65059

⁷⁸ The Sustainable Energy Academy. www.sustainable-energyacademy.org.uk/

⁷⁹ Cool the World, <http://www.cooltheworld.com>

⁸⁰ Household Energy Service, www.h-e-s.org/

⁸¹ Community Energy Scotland, www.communityenergyscotland.org.uk/about-us.asp

⁸² Ashden Awards, www.ashdenawards.org/

(particularly when just starting out) that have set up websites and committees with friends and other interested parties for no profit and with no funding.

Market share: This depends in principal on the initiative but individually this will be small, unless the initiative enters into partnerships with more established organisations. In such cases, the market share would grow in relation to the level of support provided. HES report that its volunteers performed 1000 surveys since 2006 (NB: a survey includes a home visit, report and recommendations).

Cost of advice provision: The cost to a householder is generally free of charge. The budget of small scale initiative to provide advice depends on the initiative and this information is often not formally reported or readily available. However, indicative costs of a survey provided by HES are £100.

CO₂ savings achieved/expected: The CO₂ savings expected or achieved are often not reported for such initiatives. However, HES do report that on average 3,900tCO₂ is saved per year by improving the building energy efficiency as well as by changing behaviour. It is not possible to disaggregate the specific savings resulting from the advice component. Occasionally, organisations that finance projects may place requirements on small initiatives to report on the CO₂ savings in order to assess project performance.

Monitoring and reporting: Without a formal reporting mechanism there are limited opportunities to monitor the actual savings achieved and emissions reduced. Monitoring and reporting would mainly take place if the source of funding is responsible for collating the impacts of different funded initiatives, as a mandatory requirement to receive/ continue the funding contract.

3.4.2.5 Installers, builders and tradesmen

Considering that the Government aims to enhance more in-home, tailored one-to-one advice, the role of installers of energy efficiency measures and builders is likely to expand. There is a great potential for using these groups to provide energy advice, since they enter into direct and sometimes relatively long-term relationships with householders that have work done on their property. Already 81% of plumbers and 73% of electricians claim to share with customers their opinions when it comes to energy efficiency.⁸³

Yet, to effectively engage installers, builders and tradesman in energy advice provision, it will be necessary to address the issue of trust, since the advice given may not be perceived as independent and impartial. The recent poll carried out by the EST demonstrated that only one in six British households would trust the advice received via such a route.⁸⁴ Another issue faced is ensuring that the information and advice provided by installers, builders and tradesmen is accurate and of high quality and that they receive proper training and have access to information.^{83, 84}

Since the advice provision is not part of their core business, they do not have any CO₂ targets attached, no specific budget allocated to the advice provision. There are no requirements for monitoring the impact of advice given.

⁸³ Edie, *Tradespeople want to give trustworthy energy efficiency advice*, 01.07.09.

www.edie.net/news/news_story.asp?id=16645

⁸⁴ Energy in Building & Industry, *Widespread mistrust leads Energy Saving Trust to call for new standards and training on energy efficiency*, July 2009, p. 12

4 Presentation of key issues

A workshop organised by EEPH was held on 13 October 2009, where stakeholders worked in breakout sessions to discuss three broad themes related to the provision of energy advice. The first theme looked at issues associated with the quality of advice and ensuring consistency across the range of different advice providers. The second theme discussed the different ways in which advice is delivered and what the balance should be between telephone-based, in-home, face-to-face, online advice etc. The third theme focused on the roles played by the different organisations involved in advice provision and how coordination can be improved.

In addition, semi-structured interviews with over 30 stakeholders covered specific questions designed to gather views on the broader advice delivery landscape. Stakeholders were asked what they saw as the key barriers inhibiting the provision of energy advice and what could be done to overcome these. Stakeholders were also asked their views on the most effective areas of the current advice provision landscape. The full interview protocol can be found in Annex I.

Through the interviews and workshop the following key themes emerged. These themes are discussed below and then analysed in more depth in section 5.

4.1 Overlap and competition and the role of different stakeholders

Currently, there is a common perception that one of the main obstacles for successful advice provision is the lack of coordination and integration between existing initiatives and programmes, which sometimes leads to competition between different advice providers. From a householder perspective this can create confusion around who to turn to for advice as well as uncertainty around the impartiality of the service given. Although no clear consensus has emerged on what exactly the role of the different stakeholders should be, the main points often raised by stakeholders in the context of the coordination and integration issues are presented below.

4.1.1 Role of Energy Saving Trust Advice Centres (ESTACs)

As described in section 3.4, the Energy Saving Trust manages a system of 21 advice centres (ESTACs). Different organisations are contracted to provide advice services in different geographic locations across the UK and act as the primary point of contact for advice.

Many stakeholders felt that the EST is fundamental to the success of the process. However, stakeholders had mixed views about the effectiveness of the ESTAC approach. Stakeholders were concerned that the Government's primary funding route for advice is through the centres which operate within a relatively rigid framework of advice provision. A couple of participants in the workshop felt that focusing funding through this route restricted the development of other approaches to advice provision and the involvement of, and engagement with, other types of advice provider. The relatively inflexible funding criteria established to assess suitability for Government funding push other players to try and align their activities in order to be eligible for funding. This is felt to hinder the process of supporting new, innovative, approaches to advice provision and supporting behaviour change and restrict the dissemination of energy advice more broadly, particularly through organisations that operate at a more community-focused level.

In addition there is felt to be a lack of continuity between the scope of services provided by ESTACs and those provided by other actors, such as frontline home assessors. This is particularly noticeable when it comes to the stage of completing the customer journey and actually helping to get measures

implemented. The strict impartiality of ESTACs has a downside in that they are unable to take customers forward to this next stage and support the implementation process by, for example, recommending particular installers.

4.1.2 Conflict of interest and the impact of commercialism on impartial services

It is widely recognised that the advice provision landscape is becoming more complex as an increasingly diverse set of organisations provide energy related information and advice.

As described in section 3.4, some organisations that provide energy advice and information are commercial organisations which provide advice as only one component of their overall business. Energy companies provide advice as part of their licence or CERT obligation but are also competing for customers and stakeholders reported that some use the energy efficiency and climate change message as a way of defining their brand to gain market share. Similarly, some stakeholders highlighted that there is increasing evidence that businesses and major retailers are targeting the household market for the purposes of making profit from the current high profile of climate change and the high market demand from more energy / environmentally conscious customers.

The stakeholders identified a plethora of branding for energy advice services. Many, particularly representatives of smaller scale, or community level, organisations, reported that this is leading to increasing levels of confusion among the public in terms of who to trust and who to turn to for impartial advice and how different schemes fit together. For example, energy companies are not restricted to their individual customer bases when undertaking activities to meet their CERT obligation, which can mean that households are targeted by more than one company, which could lead to confusion. Stakeholders reported that distrust can also ensue when advice is seen as direct marketing tool rather than an impartial service.

There was also some concern that current partnerships between retailers and utility companies tend to try to sell a specific package of services (e.g. energy tariffs and energy efficiency measures) as if they complement each other. Concerns were also raised over the role of some service providers who are using the central funding to build commercial entities, e.g. setting up cavity insulation services on the back of energy efficiency advice. This assessment should not undermine several retailers who are investing in the process out of genuine commitment to sustainability and cutting carbon.⁸⁵

Stakeholders raised five issues in association with this theme:

- If the advice is linked to efforts to increase sales of particular products, questions must be asked of the quality of the advice provided and its impartiality.
- The profit driver is not necessarily a bad thing so long as consumers understand that the advice they are receiving may not be impartial. For example, people generally understand the difference between a financial advisor that may be tied to a particular financial organisation or group of products and an independent advisor who is not.
- Advice linked to the sale of products often supports single measures rather than whole house approach. Opportunities to undertake other measures may be missed.
- This commercial marketing activity can be utilised to raise awareness and expand the audience for more detailed energy advice and energy efficiency measures.
- The quality of advice provided by commercial entities can be improved through independent accreditation and monitoring.

⁸⁵ The Mintel report, *Ethical and Green Retailing*, UK, September 2009.

4.1.3 Role of the local initiatives

There are an increasing number of small projects and local initiatives that are currently providing good face-to-face and one-to-many advice services on a small scale through a range of different delivery tools. The advice delivered by such organisations can range from basic awareness raising (level 0 and 1) up to more detailed (level 4) advice depending on the skills and resources of the individuals involved. It was felt that local initiatives can play a particularly effective role in helping engender behaviour changes. However, stakeholders felt that their potential contribution is hindered by the lack of coordination and integration with the major and national service providers, which is limiting their potential outreach. In addition, limited financial resources sometimes does not allow them to maintain momentum after providing the first level of advice and ensure the long term sustainability of the project.

4.1.4 Overlapping services

Most stakeholders felt that there is currently relatively little in the way of overlapping services. Many stakeholders agreed that as long as the message was consistent across different advice providers then, in general, overlap is not a significant issue.

However, two particular areas of overlapping services were noted. Firstly, there is clearly some overlap between the advice provided by energy companies as part of their CERT and licence obligations and that provided through the EST. It was noted that the ESTACs are a key source of referrals into CERT. One stakeholder noted that there is perhaps scope for consolidation of the two phone line services offered by EST and the Home Heat Helpline established by the Energy Retail Association in 2005 in order to avoid confusion.

Secondly, a stakeholder noted that the existence of the Home Energy Check, a free tool (offering level 2 advice) provided by the EST and promoted as an 'indicative rating' for a property could confuse householders as it is presented in a similar way to EPCs that are produced by Domestic Energy Assessors/Home Inspectors and involve a home visit (level 3). It was felt that that clearer presentation of the limitations of the HEC and some other online energy reports provided by energy suppliers (i.e. that they are based on data provided by the householder, rather than by a building expert undertaking an in-home inspection) could help avoid confusion.

Analysis of the broad type of advice provided by the different types of organisation described in section 3.4 indicates that the focus of current advice provision is on levels 1 and 2 (as described in Figure 4). There are fewer groups providing more detailed level 3 and 4 advice. This is supported by comments from stakeholders noting that an overlap of services is less critical than plugging the gaps that currently exist.

4.2 Definition and focus – fuel poverty and CO₂ reduction

The various policies described in Section 3.3 are designed either to tackle fuel poverty, CO₂ emissions, or both.

Stakeholders recognised that there were clearly many synergies between the two objectives and that in many cases initiatives designed to tackle fuel poverty would also lead to a reduction in CO₂ emissions. Government, in its Fuel Poverty Strategy, recognises this and it is one reason why the key focus of residential climate change policy is focused on improving energy efficiency rather than directly targeting new taxes on the domestic use of fuel to increase its cost.

Concern was expressed by at least two stakeholders that in certain circumstances climate change policies did not necessarily have a positive impact on reducing fuel poverty. The example was given of anecdotal evidence that real time displays (RTDs) can unintentionally cause certain vulnerable citizens to further reduce energy use due to their increased awareness of the cost. This demonstrates the risk that particular CO₂ emission reduction initiatives could lead to an increased risk (in terms of health and safety) in some circumstances.

It was felt by most stakeholders that, in terms of energy advice provision, both fuel poverty reduction and cutting CO₂ emissions should be tackled together and that evidence of fuel poverty, particularly when it is observed by a health or social professional or other responsible visitor to the home should trigger energy advice and support. Linked to this, stakeholders noted there is still some confusion surrounding the definition of 'fuel poverty' with variations in the definition across the UK, which has an impact on how progress towards Government targets is measured.

4.3 Quality and consistency of advice and delivery routes

Linked to the above is the broad issue of the quality and consistency of advice being issued. A risk identified by stakeholders was that inaccurate or poor quality advice could lead to poor investment decisions or ineffective behaviour changes that are not sustained. This could lead to the Government's overarching objectives of reducing emissions and eradicating fuel poverty not being met (or not being met quickly enough or in the most cost-effective way).

Conflicting advice from different sources was widely highlighted as an important issue to address, particularly with the growing number of players providing advice. While it was recognised that eliminating conflicting advice completely was an unrealistic objective, it was felt that there were practical steps that could be taken to reduce it. This issue and options proposed by stakeholders for tackling it are described below.

4.3.1 Level of expectation and customer journey

A number of stakeholders felt that householder expectations from energy advice services are rising. This is being seen through anecdotal evidence of an increase in demand for more detailed technical advice as householders themselves become more knowledgeable and seek advice that goes beyond the basics. As such, it was felt that advisors increasingly need to be able to answer more complex technical questions, or at least be in a position to make a rapid referral to a suitable expert, in order to meet those expectations. It was emphasised that advisors need to manage expectations carefully as, if expectations are not met, customers will not return.

However, while expectations and demand is rising in certain sections of the population, it was widely felt that householder apathy and lack of awareness was still a critical problem that needed to be overcome and that there was still a need for 'lower level' advice and awareness-raising (levels 0-1). This was seen to be the case particular in areas of high fuel poverty (so-called red areas in the local authority fuel poverty index) where a considerable number of households still need the basic level of information, and where apathy stems primarily from lack of knowledge and access to information.

Linked to the issue of managing expectations is the importance of assisting the customer through the whole journey. Stakeholders referred to the current gap in advice delivery services where the remit of ESTACs ends. It was felt that there was little support for householders who, once they have actually decided to install a particular measure, needed help finding suppliers and installers who can undertake the work required.

When discussing the key barriers to effective advice provision, a common theme was that maintaining momentum is a key issue and that follow-up and ongoing support are needed to ensure that measures are implemented and behavioural changes are sustained. One-off advice is not sufficient and, therefore, ongoing relationships between advisors and consumers are needed.

4.3.2 Methodology for giving advice

Advice is delivered in many different ways, as described in section 3.1. It was felt that people respond a lot better to specific advice that is tailored to the individual. EEPH research has shown that face to face advice in the home has the greatest impact.⁸⁶ However, the stakeholders all agreed that each of the delivery vehicles had a role to play if as many people as possible were to be reached within budgetary constraints. When asked if the funding for any particular form of advice should be reduced in order to increase another, there were no specific suggestions offered by any stakeholder.

4.3.2.1 Media

The different mediums for advice might be broken down into the following: TV, internet, radio and SMS, printed and verbal. While some of these could be interpreted as 'information' advice needs to be seen as part of a continuum of engagement with the householder. Where this line is less clearly defined, it is noted in the text below.

TV, Internet, radio and SMS

The TV, internet, radio and SMS were identified by many as having enormous potential for raising awareness and improving the delivery of services. However, stakeholders did question the overall balance between information-oriented awareness raising activities, such as high profile campaigns on TV and radio (levels 0 and 1), and detailed advice (levels 3 and 4), as defined for the purposes of this report. Many of the stakeholders at the workshop felt that the money could have been better spent funding focused advice provision. There is a strong concern from stakeholders that finding relevant information and advice on the internet is quite difficult in two ways. Firstly, people looking for specific information on technologies and potential savings can find it difficult to locate, with stakeholders themselves even finding this to be the case. The EST website was also recognised by many stakeholders as not being very user friendly, although EST representatives did note that feedback received from website users was generally good.

Carbon calculators are becoming more widely available on the internet and are often accompanied by advice tailored to the individual on the basis of the data users provide. However, the advice provided can vary depending on the website being used. Online carbon calculators are also accompanied by more general information as well. As recognised data sources become more widely used then the numerical results provided by carbon calculators may converge. Examples of similar online tools include the EST Home Energy Check (described above) and T-Zero, a free online tool developed by a partnership of housing and energy efficiency organisations.⁸⁷ T Zero provides independent sustainable refurbishment advice by identifying low-carbon solutions based on data supplied by the user on a specific property. The tool also provides a database of suppliers and installers for different measures. One concern raised about such online tools was that confusion can result from the lack of consistency between different systems. For example, the details of the same property can be put into two or more different advice systems and get different results and also different recommendations. It was felt that there should be a standard set of input assumptions for these systems, just as there is a standard set defined for an EPC for an existing home (i.e. RDSAP).

⁸⁶ EEPH, *Benefits of Energy Advice - Report on a Survey*, March 2002

⁸⁷ T-Zero. www.tzero.org.uk/

It was also noted that the section of society that currently has limited access to internet should be considered. In September 2008, Gordon Brown set targets of delivering internet access to all children living in the UK. At the time 1.4 million children did not have internet access at home. Add the number of adult only households without internet access and this equals a substantial proportion of the population that cannot access online energy advice at their ease and leisure.

Printed

Written material is often used as a means of raising awareness and such material is often used by the private sector. Newspapers, leaflets, written reports and posters can offer general advice to many or be used in more targeted campaigns, for example to homes in areas most likely to need cavity wall insulation. Concerns were raised regarding the quality and consistency of the proliferation of written 'top tips' given by commercial organisations and retailers, which could simply be classed as information. Written advice can also take the form of reports that are specific to a particular property or householder, including modelled energy consumption, costs and emissions, and the potential savings from different measures.

Verbal

Verbal advice can include face to face advice either in the home or outside the home. It can also include telephone advice. It was strongly argued by many stakeholders that although verbal one to one advice is recognised as the most effective at ensuring implementation, it can be strengthened further when combined with written advice, particularly when that advice is tailored to the individual property.

4.3.2.2 Advice routes

The main categories of giving the advice are categorised as either: in the home, non face to face, face to face not in home, installation, and point of sale; with the current providers of advice falling under one or more of these categories depending on their size, market share, target audience, funding and delivery tools of advice.⁸⁸

The stakeholders saw that while the current landscape of advice is enriched by many providers, which can be labelled as either advice providers with national coverage or advice providers with regional/local coverage as described in section 3, it is evident that collectively there are a lot of mixed messages, overlap of delivery for the same level of advice or same audience, and a lack of knowledge of other local initiatives that can be drawn on to support the customer journey.

It was felt that the effectiveness of advice given can be enriched if a follow up process is carried out to ensure that the customer is provided with sufficient assistance so as to be able to make an informed decision and move forward and implement the recommended energy efficiency improvements.

Some stakeholders highlighted areas of good practice, which included online energy efficiency and community forums and programmes. For example, community energy efficiency groups once setup can apply for funding through the Community Sustainable Energy Program run by the BRE in partnership with the Big Lottery Fund.⁸⁹

⁸⁸ Domestic Energy Efficiency Advice Code of Practice, <http://www.goodenergyadvice.org.uk/>

⁸⁹ Arun, *Energy Efficiency for Community Groups*, <http://www.arun.gov.uk/cgi-bin/buildpage.pl?mysql=1829#CSEP>

Aside from concerns around the continuity and quality of advice provided through such initiatives, it was suggested by stakeholders that the community forums are a trusted form of communication associated with high rates of implementation.

Local authorities were deemed to be an underused resource, especially on a local and sub-regional level. It was believed that with the local authority already having an established and relatively trusted brand, it could be utilised more when providing advice directly to homeowners. Stakeholders from NGOs noted that existing partnerships with local authorities do exist, partly as a result of the old system of energy efficiency advice centres (EEACs), which, by operating at a local level, were well placed to develop these relationships. Many of these relationships developed out of the old Local Authority Support Programme (LASP). It was felt that these links could be built on and strengthened further. The EST now focuses its support for local authorities through the Practical Help and Local Authority One-to-One support programmes which act as a one-stop-shop to respond to enquiries from local authorities and help authorities move forward with sustainable energy initiatives. Through this, EST reports that it has interacted with over 90% of local authorities.

Builders and tradesmen were also mentioned as potential providers of additional advice on energy saving initiatives. With building regulations already in place to guide building practices this is an area that may already have sufficient infrastructure in place to ensure best practice is employed if good communication and coordination is encouraged and the issues described in section 3.4.2.5 can be overcome.

Primary Care Trusts already have direct access to householders through initiatives, e.g. meals on wheels and home help schemes. Since face to face advice is deemed most effective, especially when it comes from a trusted source, the PCT services could be better utilised in disseminating domestic energy efficiency.

It was also felt that more use could be made of schools and the workplace as conduits to providing advice to householders.

4.3.3 Central framework for knowledge provision

It is broadly recognised that there is a need for an impartial and independent organisation to provide a framework for knowledge provision to support advice delivery and act as a resource that is free to all.

The key role suggested for this entity was that of a technical reference. It was felt that an independent source of technical information would help achieve consistency across advice providers around the cost and energy savings associated with different measures and technologies and help reduce misinformation.

Stakeholders felt that there was no widely recognised impartial reference point for what energy measures can actually deliver in practice. It was reported that householders receive conflicting information from various sources on what different measures could deliver in terms of cost and CO₂ savings in practice.

The BRE Domestic Energy Model (BREDEM) is a method for estimating the energy consumption in dwellings and underpins much of the existing knowledge of energy, carbon and cost savings from installing measures. Versions of BREDEM are used to form the basis of SAP and RDSAP, the Government's Standard Assessment Procedure for producing an energy rating. A higher level version of BREDEM underpins the NHER rating which is used by some advisers (for example, the Stroud District Council / SWEA project as described in section 3.4.2.1).

However, other models and sets of assumptions are being used. For example, with a number of online home energy checks or carbon calculators, stakeholders noted that it is possible to put information on the same house into two or more different systems and receive different outputs in terms of results and recommendations. It was felt that efforts should be made to standardise the set of assumptions defined for these systems (as there is a standard set defined for an EPC for an existing home (i.e. RDSAP)).

It was suggested that the central entity could play a role in testing, and setting standards for new technologies such as air source heat pumps and roof mounted domestic turbines. In addition, it was proposed that this entity could also play a role in setting training standards and requirements.

Further issues raised were that this national body would need to be supported by local, horizontal, delivery. There was some concern that a single centralised body would struggle to keep up with the pace of change and could restrict innovation. It was also noted that the body would face particularly strong lobbying from equipment manufacturers and trade associations questioning the performance data for their particular technology.

Following this, the issue of where this role should sit was discussed. Some felt that the Government was already playing this role while others felt that an independent organisation would be more appropriate in order to gain acceptance from the public and also from the existing advice provision community. There were concerns from within the advice provision community that the EST could not play this role because it is too closely linked to the flow of funding for energy efficiency organisations and its ESTACs. However, despite the public perceiving a link to the Government, it was felt that the EST is generally seen (by the public at least) as independent and impartial. Organisations such as CIBSE were suggested but it was noted by a stakeholder that its accreditation scheme for energy assessors compromised its independence.

4.4 Skills and training

Three key issues were raised by stakeholders through discussion of skills and training: (1) the standard, or basic, qualifications expected; (2) the need for ongoing skill development; and (3) the importance of monitoring and ongoing accreditation.

4.4.1 The standard, or basic, qualifications expected

There is no universal accreditation framework in place across the range of organisations involved in energy advice provision. Many stakeholders felt that this was needed, especially given the ambition of the Heat and Energy Saving Strategy consultation.

The Domestic Energy Efficiency Advice Code of Practice (COP) provides a clear description of what constitutes good quality formal advice delivery. It states that a broad set of skills is required for advice to be delivered effectively and have the greatest impact.⁹⁰ These include sufficient technical understanding to be able to give good advice and also a broad set of interpersonal and communication skills. It is possible for some elements of the skills package to be aligned to accreditation systems. However, for others, particularly the 'softer' elements (including communication, persuasion, and converting enquiry into positive action) this is harder to achieve.

According to the 2006 Strategic Review of Training for Energy Efficiency Advice Providers, there is no one course or qualification which completely satisfies all the requirements of the COP. Of the

⁹⁰ Domestic Energy Efficiency Advice Code of Practice, <http://www.goodenergyadvice.org.uk/>

different qualifications listed in the COP, stakeholders reported that the City and Guilds 6176 was seen as the most widely used qualification for energy advisors. The City and Guilds 6176 qualification is usually based on a three-day course on domestic energy efficiency with a further day for written and practical exams. The use of NVQ 6049: (Provide Energy Efficiency Services), a work based assessment of skills, was also reported by advice agencies.

The new 'energy assessor' role under CERT and CESP can be undertaken by a person with any of the following qualifications: (a) City and Guilds 6176 in Energy Awareness; (b) Level 3 of the National Vocational Qualification 6049-03 (Provide Energy Efficiency Services); (c) an approved qualification based on units one to five of the National Occupational Standard for Housing and Community Energy Advisers; (d) an equivalent qualification that is recognised by a member State of the European Union, an EEA State or Turkey.^{91, 92}

Organisations managing ESTACs are required to use City and Guilds 6176 qualified advisors as part of their contract with the EST. While the City and Guilds 6176 qualification is highly regarded, widely used and in high demand, no other advice provider is actually obliged to use this, or any other minimum qualification, for their advisors. However, energy suppliers and other advice agencies reported that they also use this qualification for their advice teams. Many stakeholders perceived it as the standard minimum qualification that could be built upon depending on the specific requirements of the individual's role. Therefore, often additional training is provided to supplement this. While recognising its value as a building block, a couple of advice providers raised the issue that perhaps City and Guilds 6176 does not go quite far enough and that a slightly more advanced qualification could be developed and become recognised as the basic minimum.

In addition, many stakeholders noted that a one-off qualification does not keep up with the changing advice demands and levels of public expectation. It was also noted that there is currently little incentive to become more skilled as an advice provider and there is little in the way of a defined career progression pathway.

4.4.2 Ongoing skill development

A key challenge for advisors that was identified through the workshop and interviews was the pace of technology development and the rapidly changing policy landscape. It was felt that there was a need for an advisor's knowledge base to be continuously developed in order to keep up to date with market advancements. As noted in the 2006 Strategic Review of Training for Energy Efficiency Advice Providers, advice providers stated that more continuous training in renewable energy and in other technological developments in the domestic energy field is needed.⁹³

In addition to technology development, new policies, such as the Feed in Tariff scheme and the renewable heat incentive (RHI), will have an impact on householders and it was felt that relevant guidance or training on these policies and their impact needs to be incorporated into the knowledge base of all advice providers.

Stakeholders agreed that there is a need for ongoing skill development. Currently, this is largely done in an informal manner across the different organisations involved. The EST has its own systems for ongoing skill development across its advice centres (ESTACs), which include a core set

⁹¹ Ofgem, *Community Energy Saving Programme (CESP) 2009-2012 Generator and Supplier Guidance Consultation Document*, 2009

⁹² S.I. 2009/1904, *The Electricity and Gas (Carbon Emissions Reduction) (Amendment) Order 2009*

⁹³ EEPH, *Strategic Review of Training for Energy Efficiency Advice Providers*, 2006

of training materials as well as systems in place to provide the ESTACs with necessary information and technology and policy updates.

It was felt by stakeholders that more benefit could be gained from these materials if they were rolled out further to a broader audience, such as the non-EST advice centres, as this would help the continued professional development (CPD) of those in smaller-scale organisations and help them deliver better advice at minimal additional cost.

4.4.3 The importance of monitoring and ongoing accreditation

Many stakeholders stated that there was a need for independent monitoring and evaluation system across the advice delivery landscape, whether private, non-profit, or public sector players, in order to ensure that standards are maintained. While this does occur in some areas through the use of EST's mystery shopper surveys of the ESTACs and through Ofgem's monitoring of energy suppliers, some felt that there should be a universal system that is common across these different advice providers and others that are currently operating outside such systems.

Also, stakeholders added that an accreditation system which was independently monitored could also ensure that accredited advisors undertake continued professional development (CPD) and demonstrate an ongoing maintenance of standards and result in higher quality advice being delivered and increased confidence in the advice provider.

It was proposed by some stakeholders that the EST systems of monitoring ESTACs could be rolled out further to non-EST advice centres, which would help the quality assurance process in smaller-scale organisations. It was suggested that this could be something that organisations may be prepared to pay for, if the benefits of it were made clear.

Stakeholders saw small scale community-based organisations as key sources of innovative initiatives that have the potential to deliver significant, and sustained, savings and behaviour change if they are supported correctly and given help to replicate or scale up their activities. It was stressed that whatever systems are introduced to improve standards in the larger advice-providing organisations, the needs of small-scale initiatives must be considered and the introduction of unnecessary burdens or bureaucracy should be avoided.

4.4.4 Proposals

The stakeholders provided the following suggestions to improve the basic skill set and ensure the necessary ongoing skill development.

Work has been undertaken by Asset Skills, at the request of the Government, to provide a suite of National Occupational Standards (NOS) for Home and Community Energy Advisors.⁹⁴ These standards define the competencies required by the Energy Advisors proposed in the Heat and Energy Saving Strategy. A full set of suitably approved qualifications and training systems still needs to be developed to support it but qualifications based on these NOS could provide such an advanced 'basic' qualification.

It was suggested that a points-based training and accreditation mechanism would allow the advisor to demonstrate their level of ability and experience. It was suggested that lessons could be learned from the new Qualification Credit Framework (QCF).

⁹⁴ Asset Skills, *NOS for Home and Community Energy Advisors*,
<http://www.assetskills.org/nmsruntime/saveasdialog.asp?IID=1087&sID=439>

It was felt that there could be a role for an accreditation system for individuals (rather than, or as well as, for organisations). This approach was thought to be particularly applicable for smaller scale operators and individuals. Such a system could be supported by employers and encourage continued training.

Using accreditation as a pre-requisite for access to public funding was raised as an option for creating the incentive to advisors (individuals or organisations) to seek accreditation. However, the risk that this would inhibit smaller players and therefore restrict support for new innovative activities was seen as significant.

It was felt that such an accreditation system could potentially work under a paid-for arrangement. However, it was noted that such a system would require something to be given in return such as continued professional development support or some kind of understanding that the accreditation would likely lead to more work.

There was broad agreement that the current Domestic Energy Efficiency Advice Code of Practice (COP) needs to be overhauled and updated. Stakeholders felt that it lacks visibility due to its lack of a 'badge' or sign of endorsement and so is not recognised by the householder. This limits the value to organisations considering signing up. It was felt that the COP was not suitable for straddling the full breadth of advice providers from energy suppliers and ESTACS to regional and local organisations and individuals such as tradesmen. Additionally, particularly at the smaller end of the scale, it is individuals that require some kind of certification rather than organisations and, currently, the COP is an organisation based code. It was noted that the current COP framework and much of the content could be useful if building an individual-based COP or accreditation system.

4.5 Evaluating success / progress

Several stakeholder views coalesced around supporting a more diverse model of advice delivery that would be able to develop different routes of providing advice without relying on more traditional methods. Also, stakeholders described the need for a more prioritised approach (with clear direction from the top). This is required if more than one model of advice delivery is to develop and if they are to be able to integrate into the funding system. Collectively the views concentrated on the following areas.

4.5.1 Quantifying success

Stakeholders commented that there is a need for a reassessment of the method used to deem whether a project has been successful or not. It was felt that currently the emphasis is on projects that reach a large number of people with nominal savings per customer, while perhaps the emphasis should be on face to face approaches that are possibly more expensive but would deliver considerable reduction in emissions.

It was felt that each approach would have its merits depending on where it is operated and if the audience sector targeted would respond to it. This is naturally related to other factors that would fall out of the influence of advice but still affect delivery, e.g. average income of the audience, geographical location, etc.

4.5.2 Method of reporting

It was also noted that to maintain a coordinated approach to the customer journey a unified method

of reporting is needed with the same, or similar, assessment of the actual final result to ensure that the journey's output is measured.

4.5.3 Operational coordination

For organisations that receive funding from a range of different sources, it was felt that there were significant opportunities to improve the operational efficiency of reporting systems. For example, smaller scale organisations in particular often need to report in different ways, using different KPIs, to the different organisations that are providing funding for a particular activity. This is a very time consuming activity and it was felt that there is scope for massive efficiencies if common reporting requirements were agreed.

5 Analysis

Through analysis of the information gathered during the interviews, workshop and literature review, the following themes were identified.

- The need for clarity around objectives, reporting and quantification methods
- The need for coordination and integration
- The need for consistency and quality of advice delivery
- The need for uniform evaluation criteria

This analysis was used to derive recommendations presented in section 6.

5.1 Need for clarity around objectives, reporting and quantification methods

- **Objectives:** There are currently two clear strategic objectives for the Government: climate change and fuel poverty. They are interlinked, yet, if both are to be met, the design of advice provision services must take into consideration the needs and perspectives of both agendas. In situations where the focus is solely on reducing carbon emissions, fuel poverty objectives may not be achieved or perhaps even undermined. Advice systems need to be designed and assessed on the basis of their collective impact on both sets of targets.

The nature of high-level targets for reducing carbon emissions or fuel poverty clearly has an impact upon the design and delivery of publicly funded or regulatory-driven services. The terms used in these targets need to be clearly defined in order to ensure that progress towards achieving them can be measured. The definitions of terms such as 'zero carbon homes' and 'fuel poverty' need to be common across government departments and other organisations.

- **Reporting:** When measuring progress towards such closely linked objectives, the use of a consistent set of units reduces confusion and improves the reporting of specific activities and their impact on achieving the objectives. For example, the use of a single unit only for emissions reductions such as CO₂ (rather than both C and CO₂) across all government departments, agencies and programmes will introduce consistency into reporting. Moreover, a common set of reporting requirements will lead to significant administrative efficiencies, particularly for organisations that receive funding from a range of different sources, which is particularly common for smaller scale organisations. In the end, common reporting rules make it easier to compare and assess individual, as well as combined, effects of activities undertaken through various schemes. It will be especially important if energy advice is to be linked to parallel objectives (see Section 5.2).
- **Quantification:** Behaviour change has been recognised as a key part of reducing domestic emissions, with the Committee on Climate Change identifying changes to routine behaviour as one of the most cost-effective ways of reducing emissions.⁹⁵ Traditional advice provision has focused on improving householder investment decisions and the uptake of grants. While the need for a 'whole house' approach, as defined in the Heat and Energy Saving Strategy and the first annual report of the Committee on Climate Change⁹⁶, has been recognised as

⁹⁵ Committee on Climate Change, *Building a Low Carbon Economy – The UK's Contribution to Tackling Climate Change*, <http://www.theccc.org.uk/reports>

⁹⁶ Committee on Climate Change, *Meeting Carbon Budgets - the need for a step change, Progress report to Parliament* Committee on Climate Change, <http://www.theccc.org.uk/reports/progress-reports>

the best way forward for installing energy efficiency measures, perhaps a 'whole lifestyle' approach to behaviour change is required to achieve sustained changes in behaviour. Traditional approaches to advice are unlikely to deliver the sustained changes in behaviour.⁹⁷ Research has shown that interventions can be most effective when tailored to the needs of target groups and when a combination of measures, including social interaction through groups, is employed.^{98,99}

Currently there is little agreement around how the impact of behaviour change measures can be quantified and it does not often fit within the quantification systems of traditional funding mechanisms. Developing systems of measuring and reporting the impact of such activities in a way that is recognised by funding bodies will help address this.

- **Defining 'advice':** The current definition of advice, as used to frame this study, refers to that which is *"specific to individuals and their circumstances, and aims to improve energy efficiency and achieve affordable warmth"*. While this strict interpretation helps ensure that more in-depth advice does not get overlooked, the design of advice provision programmes does need to be aligned to some extent with awareness raising and marketing 'information'. This will help to ensure a successful transition along the customer journey from awareness, through to implementation. Many householders do not recognise that they have a need for advice, therefore some marketing and awareness raising activity, which includes general information, is needed to build up such a demand and this has to be integrated with advice provision in order to ensure consistency. In addition, the types of service that are seen to be included within 'advice provision' could be reassessed in order to include actions that could enhance the current advice process. For example, formal follow-up and project management of the implementation of measures could be added to the advice service.

5.2 Need for coordination and integration

- **Increasing diversity of advice providers:** Although legislation and corporate social responsibility may have started the expansion of advice provision from the public sector to energy companies and utility providers, the broader private sector, particularly in the form of retailers, is now rapidly becoming involved in promoting energy efficiency and climate change mitigation to the public. They provide both information and advice.

While this brings many advantages in terms of reaching out to significant numbers of people and increasing their awareness, providing a variety of options and open market choice for customers, it does have a risk of causing confusion and dilution of messages and potentially diluting climate change and energy efficiency into a marketing exercise. Already the phrase 'Green-Wash' has entered into the public psyche and the associated scepticism towards big business could limit the potential benefits that large companies can offer. Hence, there needs to be greater coordination and potentially more intervention from Government to ensure that advantages are fully exploited, consistency and quality of advice are maintained, and the actual improvement of energy efficiency, not profit making, remains the ultimate objective.

⁹⁷ Energy Efficiency Partnership for Homes, *Developing energy efficiency advice provision in the UK. Report on the advice workshop "Developing energy efficiency advice provision in the UK and transforming attitudes and actions"* http://www.eeph.org.uk/resource/events/index.cfm?mode=view&category_id=9

⁹⁸ Ibid.

⁹⁹ Staats, H., et al, Effecting Durable Change: A Team Approach to Improve Environmental Behavior in the Household, *Environment And Behavior*, Vol. 36 No. 3, May 2004 341-367

- **Coordination with parallel objectives:** As noted above, the nature of high-level targets for reducing carbon emissions or reducing fuel poverty has an impact upon the efficient delivery of services. Separating energy advice from other kinds of sustainable living advice (such as water and waste) risks missing opportunities to reduce emissions associated with these other areas. While the EST has recently incorporated water, waste and transport to its remit, this approach can be taken further to other advice providers. However, the risks of overwhelming the householder with advice do need to be considered so as not to weaken the impact. Prioritising the measures related to different areas (i.e. energy, water, waste etc.) according to cost and potential savings could minimise these risks (NB: such prioritisation would need to be done per household).
- **Integration of paid-for services:** There were recent pilot trials for the EST to enter the market for one-to-one special paid-for advice services through its Home Action Plan (HAP). The HAP service provides a detailed environmental audit of the home involving a home visit followed by a detailed report and action plan (level 4 advice). The service aims to support the entire customer journey through the selection of the energy efficiency or renewable energy products and their implementation. A similar concept, also offering level 4 advice, known as Green Homes Concierge was piloted in London in partnership with the London Development Agency. The impact and cost effectiveness of these schemes is still being fully evaluated so it is not possible to establish if an effective market exists for paid-for advice services. However, should the evaluations prove that there is a viable market then it will need to be audited and regulated to ensure a high-quality and impartial delivery.
- **Underused resources:** As noted in section 4, many stakeholders felt that local authorities are an underused resource. This sentiment is echoed in the first annual report of the Committee on Climate Change which has proposed a neighbourhood-focused approach to energy efficiency, under which Local Authorities would play a key role.¹⁰⁰ Given their significant local knowledge and trusted position in the local community, they have an opportunity to work in partnership with other organisations and initiatives to act as delivery partners and target specific areas or groups. Other indicated underused resources are health sector professionals and builders, but their role would mainly be one of identification and referral.
- **Referral systems and delivery gaps:** There is a need to create a common referral system for all types of advice provider. Without the knowledge on existing grants/schemes, local initiatives, and specialists operating in a given area, opportunities can easily be missed. For example, Ofgem found *inter alia* that a number of energy suppliers, when providing advice, failed to ask questions about whether a customer could be in fuel poverty or eligible for grants.¹⁰¹ During interviews, some stakeholders indeed pointed out that although they acknowledge that a lot of initiatives are out there, they are poorly communicated to each other. A good and comprehensive referral system is needed particularly for indirect energy advice providers, such as Citizens Advice, that do not have detailed in-house expertise. Having such a system in place would help to bridge the gap in assisting a customer through the whole journey (i.e. awareness → decision → options/prioritisation → implementation → monitoring and evaluation).

¹⁰⁰ Committee on Climate Change, *Meeting Carbon Budgets - the need for a step change, Progress report to Parliament* Committee on Climate Change, 2009, <http://www.theccc.org.uk/reports/progress-reports>

¹⁰¹ Ofgem, *Good practice in the provision of energy efficiency advice and Report on the quality of energy efficiency advice from electricity and gas suppliers*, www.ofgem.gov.uk

- **A protocol for all players:** In order to ensure that the information being delivered to homeowners is not diluted or distorted there could be a recognised protocol between organisations and a regulated market to ensure that the information being provided is accurate, transparent and not repeated unnecessarily. Such protocol should introduce the clear distinction in merits and expertise of various advice providers. This protocol could be expanded to include manufacturers, trade associations and other organisations looking to promote products as energy efficient.

5.3 Need for consistency and quality of advice

As noted above, in an increasingly complex landscape of advice providers, with a growing number of private sector advice initiatives, systems for ensuring the consistency and quality of the advice provided are needed.

- **An accreditation system:** As discussed in section 4.4, the Domestic Energy Efficiency Advice Code of Practice (COP) does have shortcomings, which are detailed in the 2006 Strategic Review of Training for Energy Efficiency Advice Providers.¹⁰²

It is clear that any future COP or accreditation system would need to provide a mechanism for encouraging continued skill and knowledge development in order to take account of the continually evolving policy landscape. For example, knowledge of the operation and opportunities presented by the Feed-in Tariff proposals outlined in the Government's Low Carbon Transition Plan will need to be integrated into the advisors' knowledge base. In addition to the changing policy context, all advisors need to have an understanding of the impacts of the continually evolving technological landscape. This is particularly important given indications of how householder expectations of advice provision appear to be rising. Specific qualifications and processes for continued professional development that meet these needs can be set down as criteria within an accreditation system. This is discussed further below.

In addition, a future accreditation system will need to incorporate independent monitoring and auditing of the quality of advice being given in order to ensure that the accreditation system has the credibility required among advice providers and the public. A voluntary self certification system, in the form of the COP, has been shown to be unable to ensure the standards and levels of adoption that are needed, with few providers outside EEPH having adopted the COP.

The COP in its current form is felt to be unable to straddle the full width of the organisations giving advice. As such, different systems for ensuring quality will need to be developed for different types of organisation. A parallel system, focused at an individual level rather than an organisational level, would also enable small scale organisations or tradesmen to sign up. The Carbon Trust offers a model whereby both organisations and individuals can achieve accreditation status.¹⁰³ Individuals or organisations can seek accreditation to deliver different 'products'. In terms of energy advice for households, a similar system could be developed whereby accreditation is sought in order to deliver the different levels of advice outlined in section 2.

¹⁰² EEPH, *Strategic Review of Training for Energy Efficiency Advice Providers*, 2006
<http://www.eeph.org.uk/uploads/documents/partnership/Review%20of%20Training%20for%20Advice%20Providers%2006%20-%20Exec%20Summary.pdf>

¹⁰³ Carbon Trust, *An Introduction to Carbon Trust Accreditation Scheme*, 2009. Available from:
<http://www.carbontrust.co.uk/about/Jobs/consultants.htm>

- **Qualifications:** As noted above, the qualification requirements enshrined within the COP do not meet the rapidly evolving needs of the policy or technology landscapes or the demands of the public. Based on consideration of the views of stakeholders and previous research done in this area, it is clear that a future accreditation system would need to have the following components:
 - Independent and impartial monitoring and auditing of skills and knowledge to ensure that standards are maintained.
 - A graduated set of qualifications, such as a points-based system, that distinguishes between advisors qualified to provide basic advice and those with the training and skills to offer more in-depth technical support through to those who could be 'project managers' supporting the processes of implementing measures. This should be complemented with a badge or kite mark, which would clearly communicate the qualifications of a given advice provider to a customer.
 - Ongoing skills and knowledge development system such as annual exams.
- **Knowledge base and technical reference:** Individual organisations currently have their own systems for maintaining their internal knowledge base. There is little coordination around knowledge dissemination. A coordinated approach across different advice providers would increase the efficiency of maintaining and developing advisors' core knowledge. There appear to be opportunities for the EST to share knowledge resources more freely with other advice providers. This would also help improve the consistency of advice across different providers.

It is clear that different organisations use different sources of data when providing advice on what particular measures could cost and what impact that could have in terms of cost saving and CO₂ reduction. BREDEM exists as a well established modelling platform and data set. However, it is not universally used across different advice providers. Thus there seems to be a need for a widely recognised central dataset and information resource that is free to all. The BREDEM appears to be in a position to support this role.

5.4 Need for uniform evaluation criteria

In the current domestic energy efficiency landscape, a range of factors and KPIs are used to evaluate an advice provision activity, and to allocate public funding accordingly, if applicable. For organisations that depend on public funding (e.g. from bodies such as EST), or need to comply with particular legislation (e.g. energy suppliers under CERT), criteria for assessing performance are determined by the relevant government body.

Each ESTAC has annual targets set by the EST. These include: the number of written reports produced, the number of calls received, and number and type of measures implemented, among others.¹⁰⁴ These are converted into annual and lifetime carbon (C) savings. For example, advice actions have an associated carbon value, which are added together to form carbon targets. Written advice (in the form of a Home Energy Check), for example, has an assumed carbon saving of 1tC, and verbal advice to new customers, 2tC. The target for customer advice contacts are determined by reference to ESTAC territory size, and the target for carbon savings derived from the previous year's evaluation of the ESTAC network.¹⁰⁵ Note that these targets are expressed in tonnes of carbon (C) rather than carbon dioxide CO₂, which is now the more common unit for other

¹⁰⁴ EST, *Sustainable Energy Network Pilot Project*,

<http://www.energysavingtrust.org.uk/content/download/180027/442153/version/1/file/SEN>

¹⁰⁵ Severn Wye Energy Agency, SERENADE project, *Energy Advice in Europe 2007*, www.swea.co.uk.

Government programmes and international schemes. In terms of the quality of advice, this is checked through periodic audits, and the “mystery shopper programme”, while the impact of advice given is verified through telephone interviews with selected ESTAC customers.

Energy suppliers are already required to periodically report the number and type of measures delivered under CERT (and similar requirements are to be incorporated within CESP).¹⁰⁶ These numbers are converted into carbon dioxide (CO₂) savings, which provide the basis to track the progress against CO₂ targets set by the schemes. The use of different units to other energy efficiency programmes can only cause confusion and unnecessary administrative burden, particularly among advice providers servicing clients under both systems. Similarly, under their social obligation, energy suppliers are mandated to record and report the number of customers benefiting from particular social initiatives (e.g. social tariffs, fund trusts) and how much money was saved by households.¹⁰⁷ The audits are performed on a sample of energy suppliers and generators.

Based on the above examples, as well as on analysis of publicly available data of other advice providers, it is notable that there is a tendency to concentrate on the installation of physical measures, which are easily quantifiable. The use of such quantification systems is very likely to prioritise approaches to advice provision that can deliver high volumes. This brings the risk of marginalising small-scale initiatives, as well as those focused on behavioural change, water and waste efficiency, which bring smaller and less easily identifiable energy savings. The SeRENADe project echoed these concerns, with stakeholders noting that the evaluation method is too focused on quantity, and does not evaluate quality.

There is therefore a need to link the performance of advice initiatives to a more diverse set of assessment criteria. The comprehensive list needs to include factors that will ensure initiatives of all scale and type to be recognised and supported. This is particularly important for small-scale initiatives which struggle to compete for government funding as they are unable to individually deliver the volume of carbon savings compared to hard measures. Moreover, it is crucial to establish a systematic and unified way for reporting and evaluating the efforts of all advice providers, so that comparisons would be easy to make. This would enable the integration of results of actions that tackle fuel poverty, carbon reduction or both.

Along with performance indicators already in use, additional indicators could include, for example, analysis of energy consumption data held by Defra and energy suppliers, better use of the available data of the landmark register of EPCs, NHS-related indicators on reduction of fuel poverty related illness as well as more qualitative assessments.

¹⁰⁶ Ofgem, *CESP 2009-2012 Generator and Supplier Guidance*,
<http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Documents1/CESP%20Generator%20and%20Supplier%20Guidance%201.pdf>

¹⁰⁷ Ofgem, *Monitoring Suppliers' Social Programmes 2007-08*,
<http://www.ofgem.gov.uk/Sustainability/SocAction/Suppliers/CSR/Documents1/Monitoring%20Suppliers%20Social%20Spend%20171.08.pdf>

6 Recommendations

Building on our analysis of the current advice delivery landscape, a broad vision of the UK energy advice landscape is presented. This is followed by a set of recommendations designed to help the UK move from the current position, outlined in section 3.4 towards this possible future state.

6.1 Vision

The key features of future energy advice provision to households and communities are outlined below.

- Regardless of the source of advice, the message is consistent and of high quality.
- There are incentives in place (such as tiered accreditation systems) for advice providers to continuously raise qualifications and skills.
- Advice providers have clearly defined roles and scopes of operation, dictated by their level of accreditation.
- There is a knowledge base from which advice providers of all scales and types can learn without restriction.
- Advice providers are monitored and audited in an independent way, so that quality and consistency is ensured.
- Advice providers report their progress on achieving the goals in a comprehensive, clear, and uniform way; so that comparison and evaluation are simpler to make.
- Small scale initiatives are supported and recognised as sources of effective and innovative advice.
- Good models of advice delivery are replicated or scaled up.
- The targets used across all Government strategies; policies and programmes are clear and consistent. All the competing issues between fuel poverty and emissions reduction are addressed/eliminated.
- The system recognises the different levels of advice provision and, crucially, the limitations of lower level advice are made clear to recipients, so they attach more value to advice provided at the higher level.

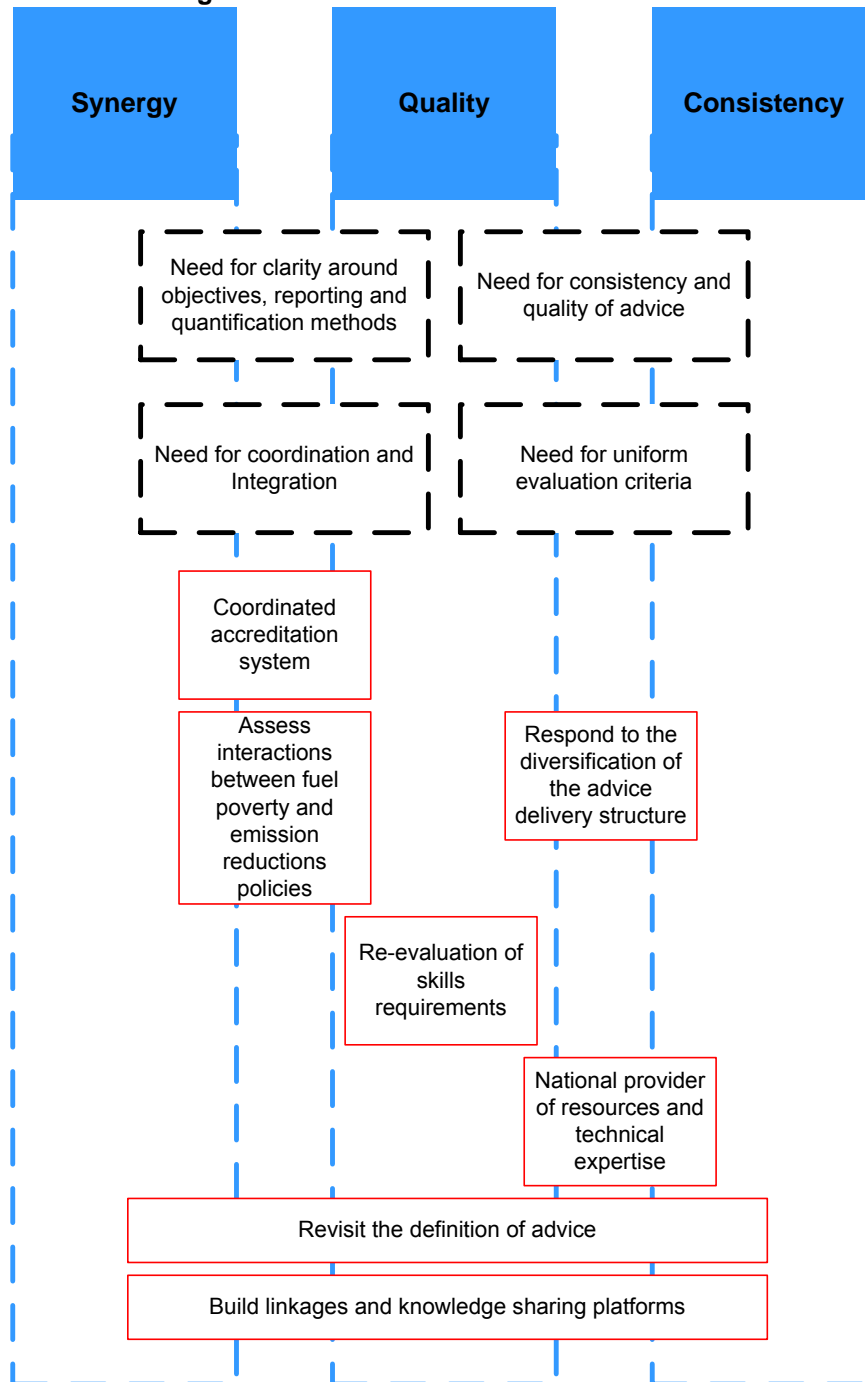
6.2 Recommendations

Figure 5, below, provides a framework from which our recommendations have been developed. Our analysis in Section 5 covered: the need for clarity around the objectives, reporting and quantification methods; the need for more coordination and integration between bodies; the need for consistent and high quality advice; and the need for an effective system to evaluate success.

From the analysis of these issues three overriding and interlinked themes have emerged:

- **Synergy:** Interaction and cooperation between organisations.
- **Quality:** Accuracy of advice and the manner in which it is delivered.
- **Continuity:** Supporting effective actions.

Figure 8: Framework for recommendations



The key recommendations are outlined below.

6.2.1 A coordinated accreditation system

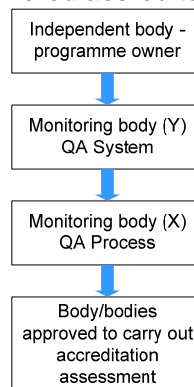
There is an urgent need to review the role of the current Domestic Energy Efficiency Advice Code of Practice (COP). The current COP deals with the quality of advice and information, training and development, customer access, quality assurance and service improvements. It sets up parameters of good practice for the different stakeholders, relevant to the type of advice that is given. Despite the limitations of the COP discussed in section 5, the strengths of the existing system can be built on to create an accreditation system that is more applicable to the current and future landscape. The revised accreditation system will need to encompass the following components:

- Organisation-specific and individual-specific accreditation options.
- Adopting the accreditation system is mandatory or, alternatively, incentives for participation are needed. However, small scale organisations or individuals should not be hindered from participating at an appropriate level.
- A kite mark or badge in order to provide recognition to those who adopt the system and to demonstrate to households that the advisor will deliver advice effectively.
- Tied to a qualification system that demands continued professional development in order to ensure that those seeking the accreditation system are suitably qualified and encouraged to continually maintain and develop their skills over time.
- Quality control and monitoring procedures through an external auditor to ensure standards are maintained.
- In-built procedures for ongoing review and enhancement – in order to ensure it continues to meet the needs of the energy advice provision landscape.
- Inclusion of new technology areas such as renewables so as to reflect the Government's current policy objectives.
- Links to existing codes of practice such as the Microgeneration Certification Scheme (MCS) to accelerate uptake.

Finally, a future accreditation system should be owned by an impartial organisation in order to give it the independence and endorsement it would need in order to be widely recognised and applied.

The different levels of advice outlined in Figure 4 could be used to develop the basis for different services or 'products' for which organisations or individuals can seek accreditation.

A tiered system of monitoring will ensure that the process is robust and transparent. Under such a model (as described in Figure 9) there will be two different monitoring entities that are able to audit each other thus avoiding the possibility of the accreditation systems impartiality being called into question.

Figure 9: Tiered accreditation model

6.2.2 Re-evaluation of skills requirements

The current system of qualifications for providing energy advice should be reviewed. It is recommended that a points-based system (such as the QCF) be developed that will clearly distinguish between different levels of expertise. In order to maintain the credibility of the qualification in an environment where legislation and technologies change rapidly, continuous professional development, potentially in the form of an exam, should be required if individuals are to maintain the highest level of recognition. A system built around a licence to practice which is based on initial qualification followed by continued skills/knowledge development is recommended. It is also recommended that the entry level qualification include a module on communicating effectively to help ensure any guidance offered has the best chance of being implemented.

Such a model will require a central system to independently monitor if qualifications are awarded properly.

6.2.3 National provider of resources and technical expertise

It is recommended that a national provider of resources and technical expertise be established. Such a body will play two key roles:

- The first role will be that of a common technical resource on the impact of energy measures in terms of energy and CO₂ savings and their cost. This will incorporate product testing and standard setting role for new technologies. This should be undertaken in conjunction with the environmental technology verification (ETV) activities of the European Commission's Environmental Technologies Action Plan (ETAP). The BRE Domestic Energy Model (BREDEM) currently plays a key role in developing understanding in this area. The suitability of the existing BREDEM platform should be evaluated as a starting point for informing the national provider and the options for incorporating new technology options should be investigated.
- The second key role will be that of a resource provider to maintain the knowledge base of advice providers. The national provider will take a coordinated approach across the advice provision landscape to share knowledge resources more freely with other advice providers.

It is felt that EST could be well placed to play such a role. However, it is also recognised that the technical resource role, particularly in terms of 'owning' the performance of different technology options, will be a difficult area on which to generate consensus. As such the data will need to be developed in collaboration with a range of organisations and jointly owned by them. It is also important for the achievement of consistency and outreach that the resources be made generally available and accessible. Any potential concerns regarding a national body providing both direct advice and resources would need to be thought through.

6.2.4 Respond to the diversification of the advice delivery structure

In order to develop a more diverse advice community whereby innovative and locally specific initiatives have greater access to funding resources, a more flexible approach to funding and assessing performance is needed.

It is recommended that the criteria for assessing eligibility for publicly controlled funding (be it direct public money or regulation-driven expenditure such as CERT) be re-evaluated. There is a need to have a clearly defined and updated set of Key Performance Indicators (KPIs) that can be utilised by all organisations capable of providing advice services. Such KPIs need to distinguish between the advice provided and the impact of that advice and recognise the difference between, and relative merits of, both hard (technological) and soft (behavioural) measures. In addition, in order to ensure that quality is maintained, recipients of funding will need to demonstrate suitable levels of accreditation (see recommendation 6.2.1).

Currently there is little agreement around how the impact of behaviour change measures can be quantified and it does not often fit within the quantification systems of traditional funding mechanisms. Developing systems of measuring and reporting the impact of such activities in a way that is recognised by funding bodies will help this process.

A revised set of KPIs will allow smaller scale initiatives and behavioural change programmes that have demonstrated success to scale-up or be replicated.

Additionally, in order to support innovative and potentially effective small scale initiatives that have no track record against which they can be judged, it is recommended that an area of publicly controlled funding be assigned specifically for the support of innovative small-scale initiatives and small-scale behaviour change programmes. Such small pockets of funding will enable innovative concepts to be tested at a small scale and given the opportunity to prove their effectiveness.

6.2.5 Build linkages and knowledge sharing platforms

The dialogue between different local-scale organisations, as well as between them and national and regional activities, should be strengthened through the development of sub-regional platforms for knowledge sharing and coordination. The existence of suitable platforms across the UK is patchy, so bodies such as local authorities, ESTACs or NGOs could play a role. Such knowledge sharing platforms would gather various stakeholders together to contribute to an area-specific common referral system and knowledge base as well as working to identify potential synergies and develop and support new ideas and projects. Strengthening local and sub-regional referral networks is needed both to help indirect advice providers make effective referrals and also to help advisers support householders as they move from the decision making stage through to implementation of measures.

6.2.6 Revisit the definition of advice

It is recommended that EEPH consider revisiting its definition of 'energy advice' in order to ensure that it reflects the broad range of players now entering the energy advice landscape as well as the new opportunities presented by the online environment. The types of service included within 'advice provision' should also be reassessed and potentially broadened in order to include actions that could enhance the current advice process such as formal follow-up and project management of the implementation of measures.

6.2.7 Assess interactions between fuel poverty and emission reductions policies

It is recommended that EEPH undertake a study to determine precisely where policies and programmes designed to tackle greenhouse gas emissions are having a significant negative impact on efforts to tackle fuel poverty and vice versa. The study could also identify the possible role of advice for mitigating these risks. The outcome of the study would be a set of recommendations for the Government to inform future policy development.

Annex I: Interview Protocol

Provision of Energy Saving Advice to Households and Communities for the purposes of reducing GHG emissions

Interview Framework

1. Understanding your organisation (for stakeholders representing advice agencies only)

- a) What is your model for the delivery of advice? (Online, one-to-one, one-to-many etc)
- b) What is the focus of the advice you deliver? (e.g. energy efficiency technology, behaviour change, renewable energy generation)
- c) What is your target audience?
- d) Please provide an indication of your 'market share' (e.g. number of individuals/ buildings covered). How do you see this changing in the future?
- e) What is the indicative budget for the provision of energy advice through your organisation?
- f) What are the key sources of funding for this activity?
- g) What level of energy/ CO₂ savings are do you expect your advice to deliver?
- h) What indicators of success are used by your organisation? For example, what key performance indicators (KPIs) are used, if any, in terms of the provision of energy advice?
- i) What skill / accreditation requirements does your organisation have?
- j) Who, if anyone, do you partner with to deliver your service?
- k) What are the key problems/issues that you face?
- l) What solutions do you think would help overcome these problems?

2. Views on overall advice provision landscape (all stakeholders)

- a) Overall, what do you see as the top three barriers to providing high-quality, timely, energy advice to households and communities?
- b) What solutions do you think are needed to overcome these issues?
- c) In your view what are the most effective areas of the current energy advice provision landscape?
- d) Are you aware of any small-scale community-level initiatives using innovative approaches to advice provision? Do these have the potential for scaling up?
- e) Where do you perceive the major areas of programme duplication to be in the current landscape for energy advice?