energy retail association

Business Council for Sustainable Energy UK

UKBCSE and ERA response to the Government's consultation on a Heat and Energy Saving Strategy (HESS)

Introduction

The UK Business Council for Sustainable Energy (UKBCSE) brings together the key players[1] in the energy sector to develop an effective dialogue with Government that can help strengthen the UK's strategic agenda for sustainable energy.

The Energy Retail Association (ERA) represents domestic energy suppliers in Great Britain with membership encompassing all the main electricity and gas retailers.

The UKBCSE and ERA believe that a rapid transition to a low carbon economy is essential to mitigate climate change. We welcome the high level of ambition set out in this consultation, which is in keeping with the Government's targets of 80% emissions reduction by 2050 and 15% of energy from renewable sources by 2020.

We support the Government's focus on energy efficiency, which can play a key role in terms of carbon abatement, reducing consumer bills and in some cases can be a cost effective alternative to new energy infrastructure. We also agree that renewable heat and distributed generation, in combination with decarbonisation of the electricity grid, can make an important contribution to delivering secure and low-carbon energy supplies in the UK.

To date, through the Carbon Emissions Reduction Target (CERT) energy suppliers have delivered a reduction of 75.8 Mt CO_2 and installed over 800,000 insulation measures, 10,000 heating measures, 400 heat pumps, 180 solar water heating units and 120 million CFLs[2]. Energy companies have played a significant role in helping householders, communities, businesses and the public sector, use energy more efficiently and generate energy at a small scale, and they are keen to continue this work in the future.

[1] Members of the Council include Centrica, EDF Energy, E.ON UK, National Grid, RWE npower, Scottish and Southern Energy, and Scottish Power.
[2] Ofgem Carbon Emissions Reduction Target update, February 2009. Installations relate to the period April 2008 to February 2009

Key points

- *Pathway to meet ambitious targets* – the Government needs to set out the means to meet its ambitious targets for carbon reduction in the UK. The HESS should contribute to this by outlining a coherent, long term policy framework with key milestones for energy efficiency, renewable heat and microgeneration.
- *Clear policy objectives* – it is difficult to meet multiple objectives optimally with one policy instrument. We therefore suggest that the Government provides clarity on which objective is the priority for the HESS – we believe this should be carbon abatement.
- *Driving consumer demand* – it is vital to consider how consumer appetite for measures will be stimulated and how the process for taking action can be made as simple, and trouble free, as possible.
- *More coordinated communications* – the Government should set out a coherent communications strategy to ensure that marketing and support from central, regional and local government and other key consumer organisations is targeted and consistent. Companies are also keen to assist and to build on existing partnerships to ensure greater coordination.
- *Developing energy saving loans* – long term loans could help consumers with the upfront cost of measures and enable them to fund repayments through savings on their bills. We believe that the market will deliver such loans if there is consumer appetite, however, the Government could lead the way by offering low interest loans, which might be linked to a property via local authorities.
- *Providing financial support* – we see significant potential for using fiscal incentives, such as stamp duty, council tax, capital gains tax and VAT to increase consumer interest in the energy performance of their homes. We also recognise that grants, subsidies and/or incentives may be required to improve the economics and take-up of certain measures.
- *Ensuring effective delivery* – a post 2012 framework should deliver cost effective carbon savings, with the flexibility to incorporate different measures, approaches, delivery bodies and considerable scope for innovation. The existing supplier obligation has proved to be a cost effective delivery mechanism, however, we believe it may be right to adapt this model or explore the benefits of alternative options in order to meet new challenges post 2012.
- *Valuing energy performance* – there is scope for stronger utilisation of energy performance certificates for homes and non-domestic buildings through advertising and fiscal incentives, and possibly regulation in the longer term, this would help develop consumer interest and a value for energy performance.
- *Supporting community heating where appropriate* – there is a key role for local authorities in identifying potential for community heating and waste-to-biogas schemes in their area. Government could take a lead in developing such projects as part of its commitment to decarbonise the public estate.
- *Joined up policies* – HESS must be consistent and avoid overlap with all other carbon reduction policies and align with the carbon budgets to ensure that savings are achieved efficiently and cost effectively.

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Targets & policy objectives

Pathway to meet ambitious targets

It is proposed that the Heat and Energy Saving Strategy (HESS) will contribute to an annual emissions reduction of up to 44 million tonnes of CO_2 per year by 2020, with changes to the Carbon Emissions Reduction Target (CERT) and new Community Energy Saving Programme (CESP) bringing the total up to 50 million tonnes of CO_2.

These are ambitious carbon reduction figures, but we feel that they are appropriate in the context of the overarching target of reducing carbon emissions by 80% by 2050. The key to ensuring that they are achieved is to set out a clear long term policy framework with milestones, ideally linked to the carbon budgets, to assess progress toward the target.

Our reflections on the indicative pathway:

- *Insulate all lofts and cavity walls by 2015* – this is challenging but achievable as long as there is early clarity on arrangements post 2012.
- *"Whole-house" packages offered to 7 million homes by 2020 and delivered to all homes and buildings by 2030* – we believe there should be further exploration of what such packages would look like for different building types and tenures and the likely uptake, to judge if the targets can be met and what they might achieve in carbon terms.
- *All emissions from buildings to be as close to zero carbon as possible by 2050* – we agree that this is an important aspiration. However, '*as close to zero carbon as possible'* is difficult to determine and greater clarity would be welcomed. Further consideration is also required on the relative contributions of decarbonising supply and retrofitting the existing housing stock.

Clear policy objectives

A number of objectives have been set out for HESS including reducing carbon emissions, increasing renewable generation, saving money off energy bills, maintaining security of supply and taking advantage of economic opportunities in the shift to a low carbon economy. There are also overlapping objectives such as addressing fuel poverty and improving the UK housing stock.

It is important for the Government to specify which objective is the priority for particular instruments as it is very difficult to meet multiple objectives optimally with a single instrument. We believe that the primary objective of the HESS should be carbon abatement, particularly in the context of the ambitious and legally binding carbon budgets and targets.

Coherent policy framework

The policy landscape is becoming ever more complex with numerous interacting and overlapping policy instruments – including CERT, CESP, Warm Front, Decent Homes, Building Regulations, Product Standards, Smart Meter roll out, Zero Carbon Homes, Renewable Energy Strategy (RES), Feed-in-Tariff (FIT), Renewable Heat

Incentive (RHI) and the Carbon Reduction Commitment (CRC). It is vital that the Government ensures that these policies are effectively and coherently brought together under an overarching framework, which ensures no unintended double counting or perverse incentives.

The broad scope of the HESS is refreshing but unfortunately it means that the picture beyond 2012 appears more uncertain. So as to avoid delaying investment and to allow continuity between schemes, we recommend that the Government sets out a firm timeframe for providing early clarity on arrangements for the post 2012 Supplier Obligation, Feed-in-Tariff and Renewable Heat Incentive.

Consumer demand

Stimulating consumer appetite

In order to meet the ambitions of the HESS, a key challenge for the Government and other stakeholders will be how to increase consumer interest in energy efficiency, renewable heat and microgeneration. This can be done in a number of ways, all of which may be appropriate to meet the scale of the challenge, including:

- *Targeted marketing* – varying the message and medium to suit particular segment groups, and looking to capture the consumer's attention at the right time, for example when they have recently moved house, are undertaking renovations or other lifestyle changes. Marketing also needs to be more positive and fun, emphasising how low carbon fits in an attractive, modern lifestyle.

- *More innovative engagement* – encouraging local community action, social networking, competitions and using popular media to make lifestyle changes appear desirable and the social norm.

- *Leadership and demonstration* – showcasing best practice, from sharing experiences peer-to-peer to community projects to 'greening' the Government estate. Implementing and demonstrating low carbon technologies in businesses, schools, hospitals and community buildings can help build consumer familiarity and trust in them.

- *Financial support* – offering loans, grants, subsidies or incentives for measures.

- *Fiscal incentives* – offering rebates on council tax, stamp duty or capital gains tax linked to the energy performance of the home.

- *Energy pricing* – developing specific tariffs and making the most of the increase in prices to encourage energy saving.

- *Valuing energy performance* – demonstrating the benefits of measures in terms of convenience, comfort and financial savings, and ensuring these are reflected in the property value.

- *Regulation* – long-term regulation linked to energy performance certificates might help show consumers the direction of travel and prompt them to act sooner while financial support is available, rather than later, when they would be required to comply.

Making change easy

Once people are engaged it must be easy for them to make changes. They will need good, consistent, relevant information and advice on the steps required to take action and any financial support available. In particular, we would support the suggestions outlined in the HESS, including:

- *Address specific barriers to uptake* – such as high upfront costs, long paybacks, hidden costs (i.e. “hassle factor”), lack of information and split incentives (e.g. landlord-tenant).
- *Home energy advice & audits* – providing advice to consumers in their homes and preferably in combination with an audit which will identify a package of measures most appropriate to their circumstances.
- *Better energy use information* – advice, clearer billing, real time displays, and smart meters could help consumers to manage their energy use more effectively.
- *Clear consistent labelling* – ensuring energy performance certificates for homes and energy labels for products are clear and easy to understand.
- *Simple, accessible finance* – ensuring consumers are aware of and have confidence in the financial support available and payback terms.

Gaining consumer trust

It will also be fully important to ensure that consumer trust is developed and maintained, for example in terms of:

- *Measures that work* – in order to ensure the quality of measures offered to consumers, accreditation schemes should be developed for individuals or organisations delivering certain products and services, e.g. solid wall insulation and home energy audits.
- *Confidence in payback* – if consumers will be investing a greater proportion of their own money in measures it will be important to ensure that cost and payback estimates are robust.
- *Independent advisors* – in-home advisors should provide impartial advice and should suggest solutions most appropriate to the householder rather than promote particular technologies or products. We do not believe this role should be limited to Domestic Energy Assessors (DEAs), but there should be standard criteria and training for advisors.
- *Consistent messaging* – it is important to engage a broad range of stakeholders on this agenda so that they can provide better, more consistent advice to householders and clients. This could include local authorities, housing associations, planners, developers, architects, builders, installers, estate agents, appliance retailers and energy companies. This could be done through partnerships, training and accreditation.

More coordinated communications

A step change is required in the level of consumer engagement and the scale of the challenge suggests that most, if not all, of the initiatives suggested above need to be implemented. Public, private and voluntary sectors can all play important roles in ensuring that this is achieved.

Currently a wide variety of organisations communicate with householders, businesses and the public sector on climate change, energy efficiency and renewable energy. This includes central, regional and local government, the Energy Saving Trust, Carbon Trust, Consumer Direct, other environmental/consumer interest groups and energy companies.

We believe that the Government should prepare and publish a coherent communications strategy which ensures greater coordination of marketing, advice and information from the various tiers of government and the bodies that it directly supports. This should result in more targeted and consistent messaging to consumers (including domestic, public and private), address any gaps in existing provision and reduce duplication of effort.

External stakeholders should also be made aware of the Government's activities as part of the strategy so that opportunities for partnership working can be identified and impacts fully understood. For example, energy companies and installers should be informed of marketing on particular measures to ensure that call centres and supply chains are able to cope with any increase in demand.

To this end, energy companies are keen to build on existing partnerships and co-branded communications which they have been undertaking with Government at a local level and nationally with the joint Government/Industry *'Save money, save energy - Act on CO_2'* booklet which will be going out from June 2009.

Obligating parties

Need for an obligation?

There is limited consideration in the HESS of whether there will be obligations on parties in the future and who these parties might be. Currently through CERT there is an obligation on energy suppliers to achieve a target reduction in CO_2 emissions through the delivery of measures to householders. This approach has given certainty of outcome, with all suppliers meeting or in some cases exceeding their targets, and has provided the flexibility for suppliers to deliver savings at least cost.

In the long term companies are keen to shift to a more open energy services market, but in the short term, with tight carbon budgets to meet, we recognise that a continuation of some form of obligation in relation to energy efficiency may be necessary, although not necessarily, or not solely, on energy suppliers.

Type of obligation

Companies believe that the focus of any future obligation should remain on delivery of CO_2 savings. Companies have significant concerns about the concept of a financial obligation on parties which does not provide them the opportunity to influence the cost effectiveness of delivery, for example, as might be the case with supplier financing of a central coordinating body.

Obligated parties

In addition to energy companies, there is potential for other bodies to be obligated to deliver certain elements of the programme. For example, we believe that there is scope for local authorities to be legally empowered to deliver certain elements of the programme such as home energy audits and marketing activities in their local areas. However, there are a number of issues which would need to be addressed to achieve this.

Financing

Criteria for financing options

We believe that finance packages should be flexible and tailored to meet the needs of the householder. We endorse the criteria outlined by Government for a financing system which includes ensuring packages are simple to access and understand, that they reduce the upfront costs for measures, save money on consumer bills, are provided through responsible contractual arrangements and enable consumers to switch suppliers. We also agree that there should be further consideration by Government as to how the value of energy performance could be better reflected in the value of properties.

For reference, an evaluation of the advantages and disadvantages of different financing options is included in **Appendix A: Figure 1**.

Pay-as-you-save

As we move to higher cost measures with longer payback periods, long term loans could help assist consumers to meet upfront costs, whilst providing savings on energy bills which could compensate for the loan repayments – i.e. “pay-as-you-save”.

There would need to be a robust analysis of the costs and payback periods of measures in order to ensure the economics of the pay-as-you-save concept works. For example, solid wall insulation costs currently appear to be underestimated and costs/payback would vary based on the type and size of property as well as the insulation products used. There would also need to be consideration of how the risk that savings do not meet repayments, for example because of faulty equipment, increased comfort or fluctuating energy prices, is managed.

Financial packages for consumers could include:

- *Commercial loans* (e.g. conventional loan, energy saving mortgages);
- *Standard finance* (e.g. an energy company or other organisation could provide a loan with a subsidy rolled in, either as a reduced loan amount or a low interest); and/or
- *Low interest public loans* (e.g. student loans are delivered by a non-departmental public body).

If there is consumer demand for long term loans then commercial organisations, energy companies and/or others will develop these financial products. We do not believe it is necessary or appropriate to mandate such bodies to offer loans. However, the Government could assist in their development by providing guarantees.

Companies believe there could be a stronger role for government in offering low interest loans (such as already offered by the Carbon Trust). This would be an attractive option as government would be able to offer preferential interest rates and is more likely to engender consumer trust in the current economic situation. This leadership might also help stimulate the market so other bodies develop their own packages.

Linking cost recovery to a property

Some concerns are raised in the HESS about loans that are linked to individuals as, if people move house, they are unlikely to want to continue paying off a loan for measures they are no longer benefiting from. This could be addressed by paying off the loan at the time of sale, or through a charge on the property via:

- *Energy suppliers / energy service companies* (e.g. an energy service company might install equipment and charge consumers for the use of the service over time);
- *Distribution network operators* (e.g. DNOs could be used as a conduit for energy companies to maintain a long term relationship with the property); or
- *Local authorities* (e.g. local authorities could provide loans and recoup costs with an extra line on council tax bills, or at the time of sale).

Diagrams of the above options are included in **Appendix A: Figure 2**.

It would be possible for suppliers directly to provide loans which are linked to a property although there are specific issues which would need further exploration including customers switching suppliers, and ensuring that debts are taken on by future occupants. Companies also have some concerns about acting as financing institutions.

DNOs have a long term association with properties so in theory they could be used as a conduit to collect funds in partnership with a funding institution and enable suppliers to retain a link with the property. Some companies have concerns about

this as distribution companies do not have experience of customer interface and there will be additional costs involved in the establishment of new billing and IT systems and in operation of this mechanism due to the additional layer of administrative and legal complexity.

There may be other ways to establish a link between finance and a property, for example, we believe a local authority route could be attractive, as this avoids issues of supplier switching, it could be easier to transfer the debt to future owners, and could help engender consumer trust. This could include a private or public loan administered by the local authority (e.g. Camden Council private sector revolving loan scheme for energy efficiency) or a charge on the property recouped at the time of sale (e.g. Kirklees Council re-charge scheme). Again, government leadership in this area could help drive private sector interest in developing such products.

Fiscal incentives

There is significant potential for using fiscal incentives to increase consumer interest in the energy performance of their homes. There are a number of benefits to linking energy performance to personal taxation, including improving the economics of measures, reinforcing the message that everyone has a responsibility to reduce carbon and there is also some evidence to suggest that some consumers have a disproportionate desire to reduce their tax levels.

We suggest that the following fiscal incentive options are considered:

- *Linking taxation to energy performance of a household*, including stamp duty, council tax or capital gains tax;
- *Extension of the landlords Energy Saving Allowance* (LESA) which allows landlords to claim on their tax return against the cost of buying and installing energy saving items; and/or
- *Reducing VAT rates on energy saving refurbishment.*

These options are discussed in more detail in **Appendix A: Figure 3**.

Financial support

In addition to providing long term loans and stimulating interest with fiscal incentives, it may be necessary to provide some financial support to improve the economics and take up of certain measures. This financial support could include subsidies, incentives and/or grants.

Under CERT, energy companies have needed to subsidise many measures by 50-100% to make them more attractive to consumers. As we shift to more expensive measures and the level of ambition heightens, such levels of subsidies cannot be sustained. Therefore, the Government will need to decide if there is still a role for some form of subsidy and whether this should be banded (to make particular measures attractive) or uniform (to improve uptake of measures in general).

Incentives for renewable heat and micro-electricity

There are already plans to support renewable heating and micro-electricity through the Renewable Heat Incentive and Feed-in-Tariff respectively. In relation to these incentives we recommend the following:

- *Level of ambition* – the Government should set out a clear level of ambition in terms of desired size of uptake.
- *Higher support for early adopters* – the level of incentive could reduce over time to encourage early action.
- *Payment level* – entitlements should be pre-set at the point of installation.
- *Banding* – this could be used to differentiate by scale and technology.
- *Energy and gross production* – the incentives should be based on energy rather than capacity. For FITs, rewards should be based on total production rather than the amount exported. For the RHI, rewards should be based on the displacement of carbon.
- *Capitalisation* – this should be possible but not compulsory, and where it is provided up-front partial capitalisation may be preferable so as to incentivise the customer to use and maintain the technology.
- *Deeming* – this should be possible but not compulsory and offered only to domestic consumers in the absence of appropriate metering technology. Rewards to non-domestic users should be based on metered production.
- *Accreditation* – technologies will need to be accredited to qualify.
- *Registration* – all users will have to register and there should be a requirement that applicable, cost effective energy efficiency measures have been put in place.
- *Interim arrangements* – we support the continuation of support via the Low Carbon Buildings Programme (LCBP) leading up to the launch of the new incentives.
- *Retrospective rewards* – we suggest further exploration of whether incentives could be claimed retrospectively, for example after a set date, and how to ensure there are no double incentives in relation to the LCBP.
- *Interface between mechanisms* – the interaction between the incentives and the renewable obligation, CERT/CESP, LCBP and zero carbon homes will need to be carefully considered. Incentives should be designed to encourage the most efficient use of renewable resources and there should be no unintended double incentives.
- *Potential for biogas* – in relation to the RHI specifically, there is potential for injection of biogas into the gas network. Early clarity on the structure and level of the RHI would be welcome otherwise waste contracts may be tied up and directed towards less efficient electricity generation for the next decade or more.

Raising revenue

The Government ideally needs to consider routes to financing energy efficiency, renewable heat and micro-electricity measures in more detail, including the relative contributions from tax payers and energy consumers.

The Government currently provides financial support for microgeneration measures under the Low Carbon Buildings Programme and heating/insulation measures under Warm Front (targeted at vulnerable groups) and Decent Homes (targeted at social housing).

Energy companies fund the delivery of insulation, heating and microgeneration measures under CERT, large scale renewable technologies under the Renewable Obligation, and also social programmes through voluntary contributions.

Raising revenues via energy companies is a more regressive approach than taxation as individual circumstances and means cannot be taken into account. Therefore, if energy consumers are to continue to bear costs from various programmes these costs should be recognised in benefit levels and other support for vulnerable groups.

Delivery

Current delivery models

To date, companies have played a major role in delivering energy efficiency, heat and microgeneration measures to consumers. Through the Energy Efficiency Commitment (EEC) and the first phase of CERT companies have proved very successful at delivering cost effective carbon savings and in both programmes they have broadly exceeded their statutory targets.

In terms of extending CERT and CESP to 2012, we agree that this would be a logical step, consistent with the UK carbon budgets. As companies have already outlined, they would support an extension of the *existing* CERT programme, with pro-rata extension of existing targets, rather than incurring the cost and administrative complexity of a separate programme. Companies would welcome early clarity on this.

Criteria for delivery framework

With tight carbon budgets to meet, higher cost measures, and harder to reach consumers, the challenge for a delivery model is increasing. Therefore, we believe that a delivery framework post 2012 should:

- Deliver carbon savings which are cost effective in the longer term;
- Focus on carbon abatement with fuel poverty addressed separately;
- Engage a broad range of consumers (e.g. from domestic, public and private sectors) and drive demand for measures;

- Provide solutions to consumers that are appropriate to their property and circumstances and offer them choice as to which measures to undertake, when and by whom;
- Have the flexibility to include lots of measures (e.g. advice, energy efficiency, heating and microgeneration) and different approaches (e.g. targeting on a street-by-street basis, engaging community groups and looking for key intervention points, such as when someone buys or renovates a property, retires, has children etc.);
- Expand the scope for innovation and experimentation;
- Build on existing experience, partnerships (e.g. with local authorities) and enable companies to further develop energy service relationships with consumers;
- Enable competition and new entrants;
- Incentivise over-performance; and
- Fit into a long term policy framework and with other government policy mechanisms.

Does the current model fit the criteria?

The current supplier obligation is a proven model which meets many of the criteria outlined above. However, it would need to evolve to meet the challenges post 2012. These include meeting a much higher level of ambition, generating and sustaining consumer interest, shifting from cheaper and easier measures to more expensive and disruptive measures and addressing current market distortions which mean that independent installers cannot compete with prices offered by energy companies.

Some of the ways in which companies feel the supplier obligation could be improved include:

- *Incentivising over-performance* – companies should be incentivised to not only meet but exceed their targets. This could help increase supply chain confidence by reducing the risk of schemes stopping once targets or quotas are reached. It could also help in ensure carbon budgets are met with greater flexibility to cover shortfalls in other sectors.
- *More coordinated communications and auditing* – in response to calls for a more coordinated, systematic approach to delivery, we believe this would be most appropriate in terms of communications and home energy audits. In particular we envisage continued strong and sustained voluntary partnerships with local authorities to ensure auditing, marketing and delivery is coordinated in an area and meets the needs of local communities.
- *Stronger scope for innovation* – companies should be given greater opportunity to develop new innovative products and services, in particular, in relation to encouraging and sustaining behaviour change. The innovation and demonstration route is currently slow and costly, and we believe there is scope to revise it so it keeps pace with new advances.
- *Greater scope for trading* – as will be trialled under CESP, there could be greater flexibility to trade all or part of an obligation away to other obligated parties. Mechanisms could also be put in place to make it easier for external stakeholders to verify and sell carbon savings to obligated parties.

- *Complementary financing mechanisms* – development of complementary financing mechanisms, such as long term / low interest loans could potentially help companies offer measures with a lower level of subsidy attached. Through the RHI and FIT there will be additional support for renewable heat and micro-electricity respectively, and if the Government wanted to encourage uptake of other high cost measures such as solid wall insulation, then this might best be done outside of the supplier obligation through specific targeted support.
- *Tackling fuel poverty separately* – we believe that by continuing to manage carbon reduction and fuel poverty issues together we compromise the delivery of both. We would not therefore support the continuation of a priority group target. However, there should be focussed complementary policies which ensure vulnerable groups are supported and fuel poverty is eradicated.

For an evaluation of the strengths and weaknesses of the existing CERT model, see **Appendix B: Figure 4**.

Possible delivery models

In addition to the existing energy company obligation model, we have been looking at a number of other options, including:

- *Energy company obligation with area based coordination* – energy companies may voluntarily or be incentivised to deliver schemes on an area basis and in partnership with local stakeholders (e.g. as under Warm Zones and CESP). This can result in greater local coordination and sometimes better uptake due to the use of trusted intermediaries (e.g. local authorities), but has similar drawbacks to the current supplier obligation model.
- *Obligation with white certificates* – obligated parties, which could include energy companies or an independent agency, are required to deliver a target saving of energy with white certificates used as the unit of measurement (e.g. white certificate schemes operate in Italy, France and Denmark). The market is open to other eligible parties to claim and sell white certificates. The main drawbacks are high administrative costs and that the price for certificates can crash during the programme (although this could potentially be resolved with a price floor).
- *Incentive scheme with agency coordination* – an agency could coordinate the delivery of home energy audits, marketing, information, advice and measures. Energy service providers could be given subsidies to deliver measures and/or contracted by the agency to deliver a local or regional franchise. The role of such an agency could range considerably, from administering funds to directing delivery. This model would enable a more coordinated approach and open the market to new delivery agents. However, contractual steps would need to be taken to ensure efficient operation and compliance with any targets set by the Government.
- *Energy services market* – providing heat and warmth to consumers rather than units of energy. This would require high consumer demand for energy services and measures which could be stimulated by marketing, but more likely in the short term through Government setting regulations and/or providing financial/fiscal incentives. This model would open the market to new delivery agents but would have less certainty of outcome.

Diagrams of these models are included in **Appendix B: Figure 5**, and an evaluation of the strengths and weaknesses in **Figure 6**.

We are instinctively attracted to incentive based approaches, which enable interested parties to deliver energy services competitively and not just companies who are required to do so. This would allow growing demand to be met unfettered by targets and quotas and incentives could be reduced over time (such as in the lead in to legislation) to result in a more open market. However, incentive based approaches rely on consumer interest, and so if uptake is low a means is required of increasing the incentive, or the consumer interest, so that targets are not missed.

Companies have concerns about models where responsibility for delivery is passed to an independent agency, as would likely be the case with a central coordinating body. As previously highlighted, it would be difficult to place a delivery obligation on an agency if a fixed amount of funding was provided by external sources, because the amount of carbon saved would be entirely dependent on the funds available.

Companies are particularly concerned that such a model might interfere with the existing energy service relationships that they are developing with consumers. They also feel that many of the benefits attributed to the model such as area based coordination could be achieved with the existing model as has emerged with Warm Zones and is being trialled under CESP.

Way forward

We see potential for adapting the supplier obligation to meet the challenges post 2012. However, we also believe there is scope to continue to explore other models, to determine whether or not they have significant advantages over the existing model and whether any particularly successful elements could be incorporated.

Whatever delivery framework is introduced post 2012 there will need to be a carefully planned transition from existing models. We believe that piloting of different approaches and technologies (particularly for less familiar ones such as renewable heat, micro-electricity, solid wall insulation and smart meters) alongside the existing schemes, as is being done through CESP, could be particularly useful. Pilots will help further our understanding of what works and what does not in terms of marketing, auditing and delivery, and should include the flexibility to experiment and to make and learn from mistakes

We would welcome the opportunity for continued dialogue with Government and other stakeholders on a suitable delivery framework post 2012 and how the transition could be made.

Regulation

We believe that there could potentially be a role for regulation, in terms of stronger product and building standards, to help ensure targets are met and increase consumer interest in the energy performance of their homes. We recognise that this is a politically sensitive issue, but we feel that a stepped approach, with early

incentives and potentially regulation in the longer term, could be effective at bringing consumers onboard. We note that this has been a key issue raised by participants in the Big Energy Shift and would encourage further public debate and involvement on the issue.

In terms of product standards, the European Union A to G energy labelling system has been very successful at stimulating consumer interest in the energy performance of appliances, and has even resulted in 'choice editing' as some retailers decide only to supply the most efficient products to their customers.

It is important for the UK Government to continue to push for wider application of the labelling system to new appliances, and also to ensure that continual improvements are captured. For example, this could be done through a reassessment of the underlying scores behind the A to G ratings to reflect overall improvements across the industry. Japan's top runner programme is a good example of how continual improvement in standards could be encouraged.

In terms of buildings, we believe the Government should strengthen the role of Energy Performance Certificates through stronger enforcement, incentives and possibly regulation. This could include:

- Social housing to reach a higher minimum standard (this is also appropriate to increase consumer confidence in unfamiliar energy saving and renewable measures)
- Giving local authorities access to EPC data, within a registered landlord scheme, to enable proper enforcement of the Housing Health and Safety Rating scheme which applies a minimum standard to social housing and private landlords.
- Requirement to display of EPC rating, and the calculated energy costs, on advertising for sales/lettings
- Extension of Display Energy Certificates beyond the public estate to all public buildings and commercial premises
- Fiscal incentives linked to EPC rating
- Financial support for measures and/or improvements in EPC rating
- Requirement for consequential improvements when renovating properties.
- Requirement for a minimum EPC rating to be reached or to implement all cost effective measures in order to rent or sell properties.

We believe that the Government should explore such approaches in terms of viability, impacts and public acceptability.

Community heating

District Heating and CHP

We believe that District Heating and gas fired Combined Heat and Power (CHP) can have a role to play in reducing carbon emissions in the short to medium term and should be deployed where the best commercial opportunities exist and the local conditions are right.

A barrier to new district heating schemes is finding the capital to cover the upfront costs of developing new heat networks, and therefore innovative new arrangements would need to be found to harness any potential support that may be available from the investment community. There could be a key role for the Government to take the lead in this area, by developing district heating schemes within the public estate. For example, central government could help underwrite the risk for local authorities of implementing schemes in their area.

Making more efficient use of fuel reduces overall energy consumption and with it the costs of energy for all consumers. Large scale, good quality CHP saves a minimum of 10% of the primary fuel that would be required to provide energy under the alternative boiler and grid electricity scenario. We welcome the extension of the exemption from the Climate Change Levy (CCL) for all supplies of CHP electricity. We would also recommend that the Government ensures universal applicability of Enhanced Capital Allowances to all large scale, good quality CHP plant, no matter what the form of ownership is.

Biogas

We believe that biomethane produced from waste could potentially play a significant role in decarbonising UK gas supplies. This could have the practical advantages that it would use existing infrastructure, cause minimal disruption to householders and address other issues such as disposal of waste. The Government should consider how to enable development of this technology in the lead up to launch of the new Renewable Heat Incentive. We would need to ensure waste streams are directed towards the most appropriate technology to maximise energy recovery.

Conclusion

We welcome the opportunity to provide input to the Government's consultation on the Heat and Energy Saving Strategy. We agree that there is considerable potential for reducing carbon emissions through behaviour change, improvements in the energy performance of buildings, and decarbonisation of supply. Such changes are also likely to have wider social, economic and environmental benefits.

The Council, ERA and energy companies will continue to work with the Government to support their work in this area.

The views expressed in this paper cannot be taken to represent the views of all parts of all companies in the UKBCSE and the ERA. However, they do reflect a general consensus.

UK Business Council for Sustainable Energy and Energy Retail Association
08 May 2009

Appendix A – Financing options

Figure 1: Advantages and disadvantages of different financing options

Long term loans for energy saving measures

Options	Advantages	Disadvantages
Commercial loans e.g. conventional loan, green mortgages	- Could be rolled in with existing mortgage	- Loans likely to be quite high interest, unless part of mortgage - Lack of certainty in the value of measures will be reflected in house sale
Standard finance e.g. an energy company could provide a loan with a subsidy included	- Loan and subsidy could be combined to improve the payback of measures to householders	- Difficult for companies to raise finances in addition to other investments and reluctance to incur debt - Likely to be higher interest than publicly backed loans - Difficulty in transferring debt to future home owners and high legal costs to do so - Added complexity when householders switch suppliers
Low interest loans provided or backed by the Government e.g. student loans are delivered by a non-departmental public body	- Relatively low interest rates could be offered making the loans more attractive to consumers - Demonstrates Government commitment and leadership - Publicly backed loans are more likely to engender consumer trust	- Long term loans can be expensive to provide - Administrative complexity of credit checking etc.

Linking cost recovery for loans to a property

Options	Advantages	Disadvantages
Energy service model i.e. companies install equipment and charge consumers for the use of the service over time	- No upfront cost or risk to householder - Measures are maintained by the ESCo - Administration is undertaken by the ESCo rather than the householder	- Not many ESCos are currently operating - Difficulty in transferring debt to future home owners and legal costs to do so - Difficulty in reclaiming measures (e.g. cavity wall insulation) if bills are not paid
Distribution network operator model e.g. DNOs could be used as a conduit to maintain a long term relationship with the property	- Permanent association with properties - DNOs are low risk and can therefore borrow money at favourable rates - Proportionate consequence for non-payment – smart meters allow load-limited supply	- No direct link with consumers or individual properties - Additional layer of complexity creates administrative costs - Also costs to change billing systems - Need for legislative change to avoid any potential difficulty or legal costs in transferring debt to future home owners - Some government guarantee required, otherwise offering loans could make DNOs appear more risky
Local authority model e.g. local authorities could provide loans and recoup costs with an extra line on council tax bills	- Permanent association with properties - Existing billing relationship with customers - Data on measures installed would be useful in terms of local authority reporting - Transfer of the debt to future owners should be less problematic and costly than for suppliers/ DNOs	- Energy savings would be on a separate bill to loan repayments - Administrative costs of providing loans, particularly if exempt from council tax
Charge on a property recouped at the time of sale	- No significant capital outlay or costs to the householder - No monthly repayments - Low administrative costs	- Possible long periods before investment returned, therefore limited recycling of funds. - Depreciation means that the sum repaid could be significantly lower than the original outlay

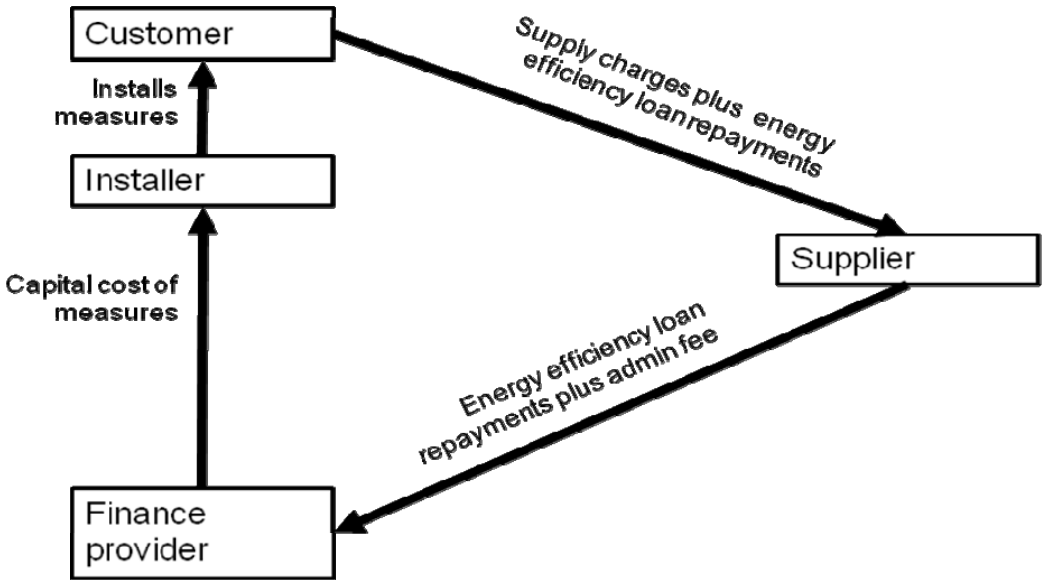
Financial support

Options	Advantages	Disadvantages
Subsidies e.g. energy companies subsidise measures under CERT	- Encourage consumer take up of measures - Level can be adjusted for specific technologies, consumer groups, areas and over time – this can make them very efficient - Often simple for the consumer to access and rolled into the price for measures	- Costs are passed through to consumers either through tax or bills - Equity issues as costs for individual measures increase - Subsidies for particular measures can distort market forces - Subsidies may not be visible to consumers
Incentives / grants e.g. consumers apply or are offered for financial support for the installation of measures	- Encourage consumer take up of measures - Financial support is tangible to the consumer - May be possible to band support levels by technologies or consumer groups	- Costs are passed through to householders either through tax or energy bills - May be available for a limited time period or until funding runs out - Difficult to ensure the incentive/grant is set at the right level - The application process can be off putting and admin costs may be high
Fiscal incentives e.g. link stamp duty, council tax and/or capital gains tax to EPC.	- Can help stimulate consumer interest in energy performance - Can be cost neutral – i.e. penalise worst performers and reward best	- Inefficient, as subsidy only loosely related to carbon saving - Works best when housing market booming rather than in decline - Equity issues, as not necessary based on ability to pay

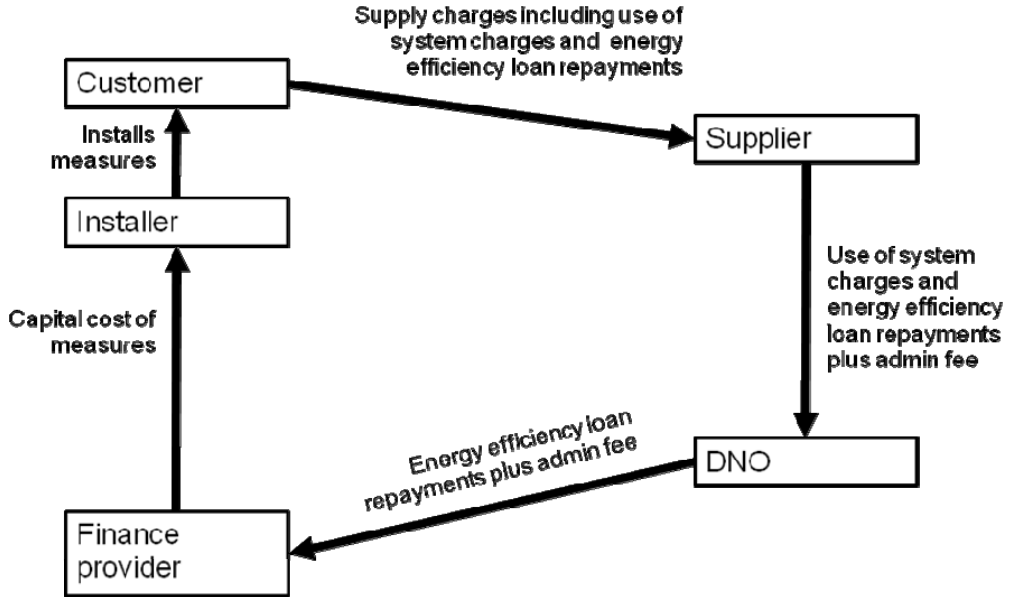
Figure 2: Diagrams illustrating options for linking cost recovery to a property

These diagrams show cash flows between various actors where the cost recovery for energy efficiency loans is linked to the property.

Energy supplier model



Distribution network operator model



Local authority model

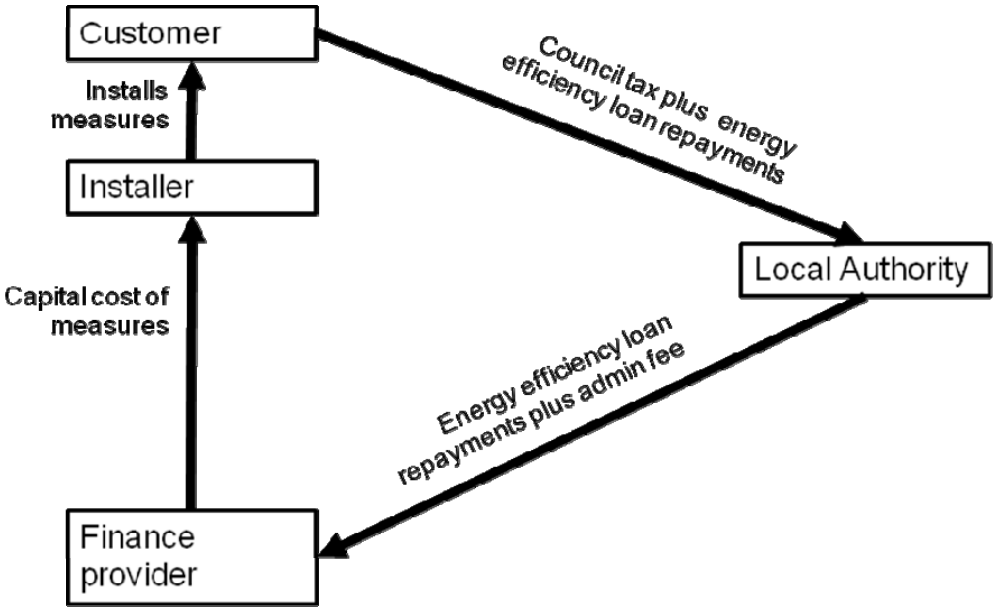


Figure 3: Possible fiscal incentive options

Stamp Duty

Stamp Duty is paid by the buyer, but its impact on the total cost of purchasing the property makes it of significant interest to the seller.

Varying Stamp Duty with EPC rating would therefore affect both buyer and seller attitudes:

- It would raise buyers' awareness of any shortfall in potential energy efficiency in their property. Buyers are best placed to make more intrusive changes if they are undertaking refurbishment or major redecoration, so a stamp duty rebate should be available if work carried out on the property within one year of purchase improves the energy performance of the property.
- Buyers may also be under pressure from mortgage providers to ensure the property is in the best condition;
- Prospective sellers may prepare their property for sale to enable them to sell quickly and for the highest price.

Lower Stamp Duty for better EPC ratings will also give buyers starting on the housing ladder an opportunity to reduce the overheads of house purchase.

The current thresholds for Stamp Duty[3] are:

Up to £125,000	0%
£125,001 - £250,000	1%
£250,001 - £500,000	3%
£500,001 or more	4%

We propose the rates of Stamp Duty vary with EPC rating as follows:

	A	B	C	D	E	F	G
Up to £125,000	0%	0%	0%	0%	0%	1%	2%
£125,001-£250,000	0%	0%	0.5%	1%	1.5%	2.5%	3.5%
£250,001-£500,000	0%	1%	2%	3%	4%	5%	6%
£500,001+	1%	2%	3%	4%	5%	6%	7%

The rationale for this matrix is:

- Broadly revenue neutral (slight increase at current EPC distribution; slight decrease if households improve one band);
- Consistent with rules for zero carbon homes;
- Strongest pressure on F and G rated homes, where excess cold is a potential health hazard;
- Preserves current step structure of Stamp Duty, though the principles could be adapted to any wider change to Stamp Duty to remove the steps.

[3] Excluding disadvantaged areas – 0% band extends to £150,000

- Basing it on actual EPC rating rather than shortfall from potential EPC rating (as proposed for Capital Gains Tax, see below) gives a clearer benefit from outperforming potential and also avoids customer confusion and alienation from the potential rating changing (due to technology and price changes).[4]

The materiality of the side-benefit on the economics of home improvement measures varies by house value. Typically, cavity wall and loft insulation become obvious items to deliver, which should help reduce the costs of completing these programmes, whilst more expensive measures receive a useful boost. The effect would be greatest on those householders who have recently purchased a property and are planning major refurbishments, as they would be more likely to install multiple measures and seek to recoup some of their expenditure through the stamp duty rebate.

It may also incentivise those who are considering selling their property to install cost effective measures which cause minimal disruption, as a small expenditure could disproportionately increase the value of the property, by reducing stamp duty payable, especially if they were otherwise to fall into the lowest category of EPC banding. These householders who are perhaps most in need of encouragement to make more costly investment decisions (the stronger message for customers intending not to move for some decades is to "proof the house" against any energy price fluctuations).

If the wider policy framework requires a stronger financial effect from Stamp Duty, two potential variants are:

- 1% higher Stamp Duty within five years of a government grant towards EPC improving measures – this would recover some of society's costs of subsidy;
- Stamp Duty rebate if installation of measures within six month of purchase improved the EPC rating (though this would be regressive, the effective subsidy increasing with house price).

If EPCs are to be the primary tool used to determine the amount of stamp duty payable on a property, it is important that they are not open to fraud or abuse, particularly as the sums involved could be significant. Consideration would need to be given to ensure that the methodology used to determine EPC ratings is both scientific and objective. Those who deliver EPCs should meet high professional standards and may incur liability should they be found to have intentionally or negligently misstated the banding of a property (similar to those who survey or value properties).

[4] The additional cost to first time buyers of an E, F or G rated property should be outweighed by the available government grant for refurbishment.

Council Tax

British Gas' scheme with a number of local authorities shows that even a modest one-off reduction in Council Tax can be effective in raising consumer interest and action.

Linking Council Tax to EPC rating would likely have a similar effect.

The benefit could be one-off, as with the British Gas scheme, or ongoing. Some possible options are:

Option	How it works	Who pays	Advantages	Disadvantages
BG/CERT	£100 lower charge[5], year after installation	Energy customers, through CERT	- Raise interest in specific measures - Modest subsidy - Supplier differentiator	
One-off, EPC	£200 lower charge/EPC band improvement, year after the change	Council Tax payers, as a cross-subsidy	- Raise interest in improving EPC - Modest subsidy - Optional (to have EPC)	- Requires new EPC assessment
Ongoing, EPC	Charge varies with EPC rating, say, ± 5% for each band different from D rated	Council Tax payers, as a cross-subsidy	- Raise interest in improving EPC - Modest annual incentive, adds up over time	- Compulsory - Requires new EPC assessment - Long term cross-subsidy unrelated to LA responsibilities - Consumers may not value ongoing benefit
Ongoing, EPC potential	+5% charge for each EPC band higher than potential	The householder, as a penalty	- Sets target as "achieve EPC potential" - Fair, if LAs have a carbon target - Modest annual cost, adds up over time	- Compulsory - Requires initial and new EPC assessment - EPC potential can change[6] - Tenants depend on landlords' action

[5] Saving varies between councils

[6] Rising prices or technological change can bring new measures within the seven year payback target

Capital Gains Tax

Private rented property amounts to 11% of the UK market, with a slightly higher tendency to less energy efficient properties.

Varying Capital Gains Tax (CGT) with EPC rating would:

- Strengthen landlords' economic incentive to invest in improving the energy performance of their properties ;
- Ensure that property investors either ensure their property achieves its energy performance potential, or make a contribution to the costs society will have of meeting carbon targets in some other way.

We would suggest that CGT rates are re-valued by 5% for each EPC band a property falls short of its performance potential.

Example

A £100,000 house increases in value to £200,000 over eight years. Its EPC rating is E and its EPC potential is C.

Capital Gains Tax would be 28% instead of 18%, an extra £10,000.

The property owner would be foolish not to invest in relatively easy measures such as loft and cavity wall insulation and would have a strong incentive to carry out all economic measures (which would also likely be reflected in the sale price, as lower energy bills would allow increased rent).

The further advantages of this proposal are:

- The extra tax is fair – it can be avoided by responsible investment and is proportionate to the benefit of the investment;
- It rewards investment in the property at any time, notably to take the opportunity for low cost installation of measures whenever the property is refurbished;
- Investment to achieve a better EPC rating still is encouraged, as by the time the property is sold this may be the EPC potential;
- No additional administrative cost, as a new EPC assessment is required anyway;
- Fits with the principle that we are trying to avoid waste of energy, not punish use of energy (though the extra visibility of the EPC rating should help ensure that the higher energy costs affect the value of properties with a lower energy performance).

Another option which could be considered might, for instance, be to utilise existing regulatory arrangements in the housing sector to encourage landlords to only rent out G rated properties until, say, 2012, and F rated properties until 2015.

Landlords Energy Saving Allowance (LESA)

LESA is a tax allowance which lets landlords claim on their tax return against the cost of buying and installing energy saving items. The Council would urge the Government to extend the uptake period of the £1500 tax allowance from 2015 to 2020 and be extended to cover low carbon/renewable technologies. In addition, the Council would suggest that the allowance be conditional on a pre- and post- measures EPC assessment being presented.

The Council would encourage the Government to promote the Allowance among private landlords by disseminating information via letting agencies and the Landlord Tenancy Deposit Scheme. As part of delivery of the scheme the Allowance should be included in documentation sent to private landlords.

VAT reductions on refurbishment

Currently, there is a perverse incentive in relation to building new homes, as opposed to refurbishment and remedial work to the existing stock. Refurbishment costs are liable at a 15% (to revert to 17.5% in 2010) VAT rate, whilst existing housing is zero rated and certain renewable technologies are rated at 5%.

The Council would suggest that VAT rates on energy saving refurbishment should be cut to 5% to incentivise the refurbishment of housing stock. The lower rate of VAT currently applies to energy efficiency programmes with a social purpose and this should be extended to the new proposed programme. The benefit of this reduction may be increased, and auditability improved, by requiring householders to commission an energy saving audit (leading to whole house recommendations) as a condition of the lower VAT rate.

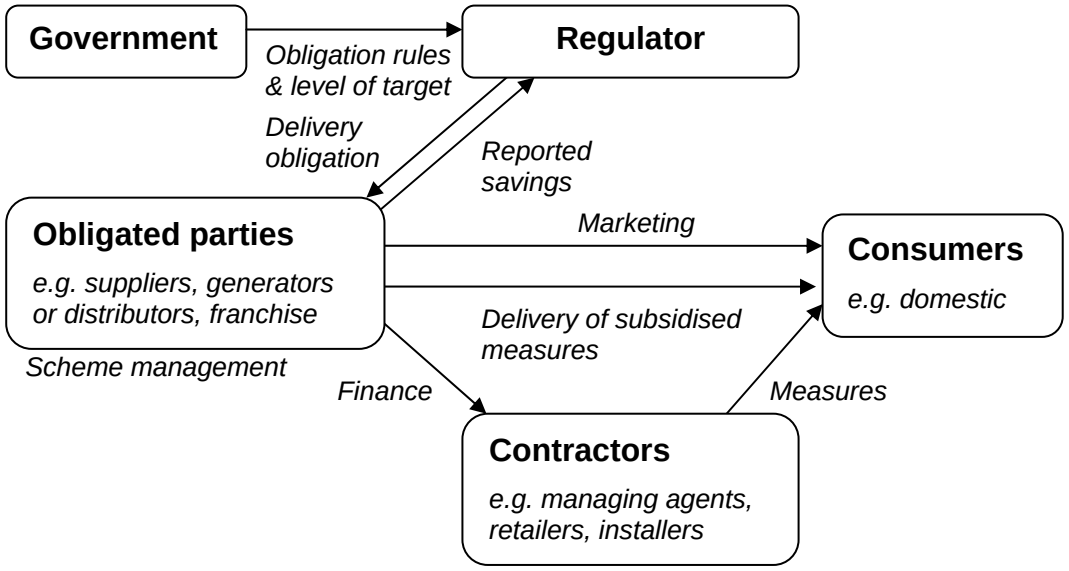
Appendix B – Delivery framework

Figure 4: Strengths and weaknesses of existing CERT model

Theme	Strengths	Weaknesses
Communications & consumer engagement	- Companies have developed strong marketing campaigns to encourage uptake of measures - Enables companies to develop new relationships with customers e.g. energy services	- Lack of public awareness of the scheme - Possible consumer confusion over measures available, costs and why companies are offering them - Lack of coordination of communications, information and advice - Companies, Government, Energy Saving Trust and others vying for credit.
Measures	- Delivery of measures - Flexibility to deliver most desirable and cost effective measures	- Mainly cheapest and easiest measures installed, sometimes in very large number (e.g. light bulbs). Therefore limited experience of delivering more costly and disruptive measures (e.g. solid wall insulation) - Difficult to quantify behavioural change and attribute a score
Delivery agents	- Companies have strong motivation to deliver and to do so at least cost - Some voluntary partnerships between companies, local authorities and other groups have emerged	- Limited access to market for new entrants - Lack of supply chain confidence can lead to stop-start delivery - Consumers may not see companies as impartial or trustworthy
Cost of scheme	- Cost effective carbon savings & supply chain management	- Costs are passed through to consumers which causes equity issues with more expensive measures - Costs to consumers are not transparent - Subsidies for measures are not always visible to consumers
Market framework	- Encourages competition - Some scope for innovation	- Little incentive for companies to go beyond compliance - Subsidies may cause market distortion
Robust policy	- Proven model - Effective delivery of carbon reduction targets	- Input rather than outcome focused (e.g. not clear if measures achieve savings attributed) - Difficult to achieve various objectives optimally with one policy (e.g. carbon reduction, affordability and fuel poverty objectives)

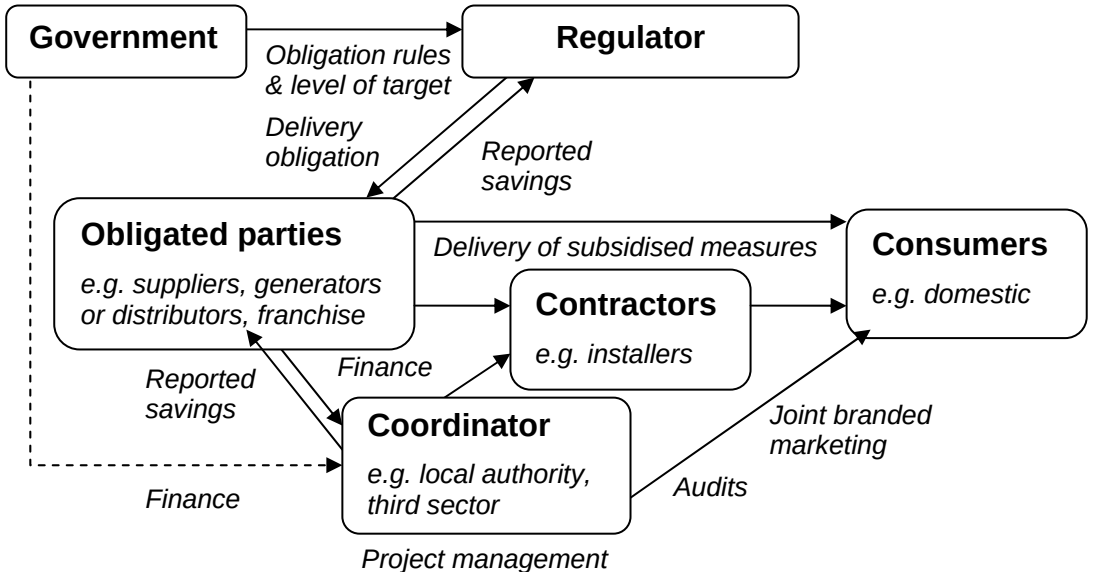
Figure 5: Diagrams illustrating some possible delivery models

Energy company obligation



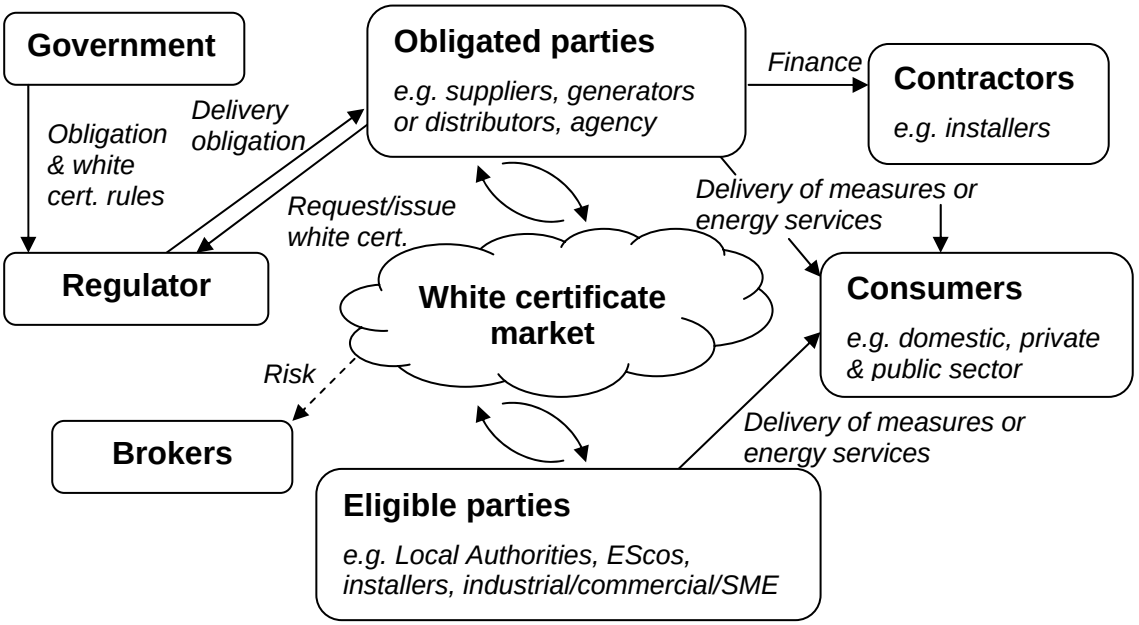
Obligated parties are required to deliver a target saving of energy or carbon with heavy penalties if the target is not met. As obligated parties are reliant on consumer interest to deliver their targets, they often heavily subsidise measures to make them more attractive. These costs pass through to consumer bills. This model tends to be customer centred and promotes cost effective energy or carbon savings. An example is the Carbon Emission Reduction Target.

Energy company obligation with area based coordination



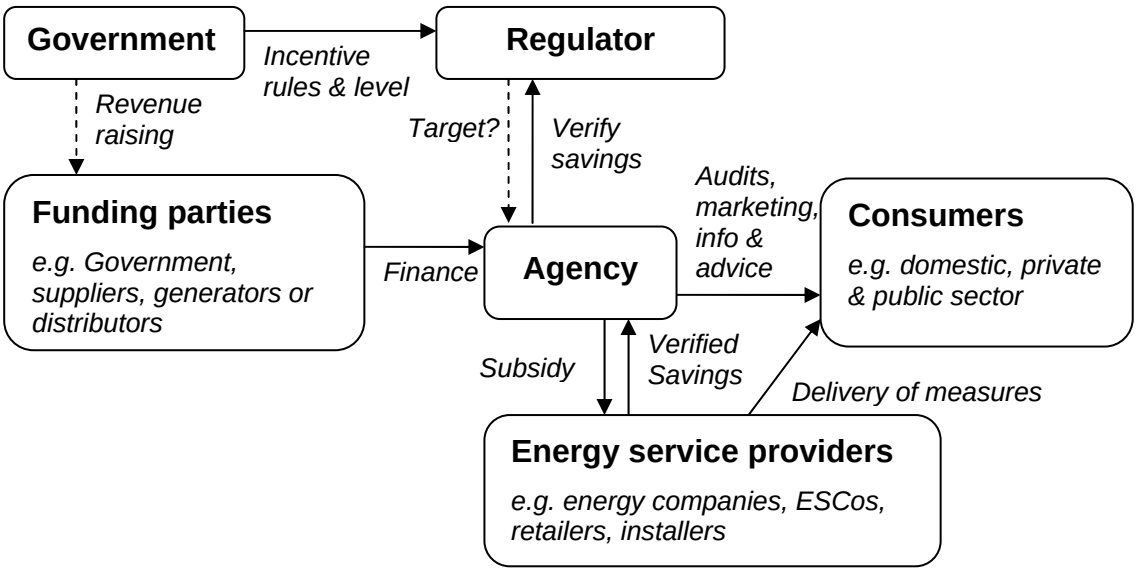
Obligated parties may voluntarily or be incentivised to deliver schemes on an area basis and in partnership with local stakeholders (such as local authorities, third sector organisations, community groups). This model is a variation on the energy company obligation which enables greater coordination of audits, marketing and delivery. The administrator can also attract other sources of funding to deliver auxiliary services. Examples include Warm Zones and the new Community Energy Saving Programme.

Obligation with white certificates



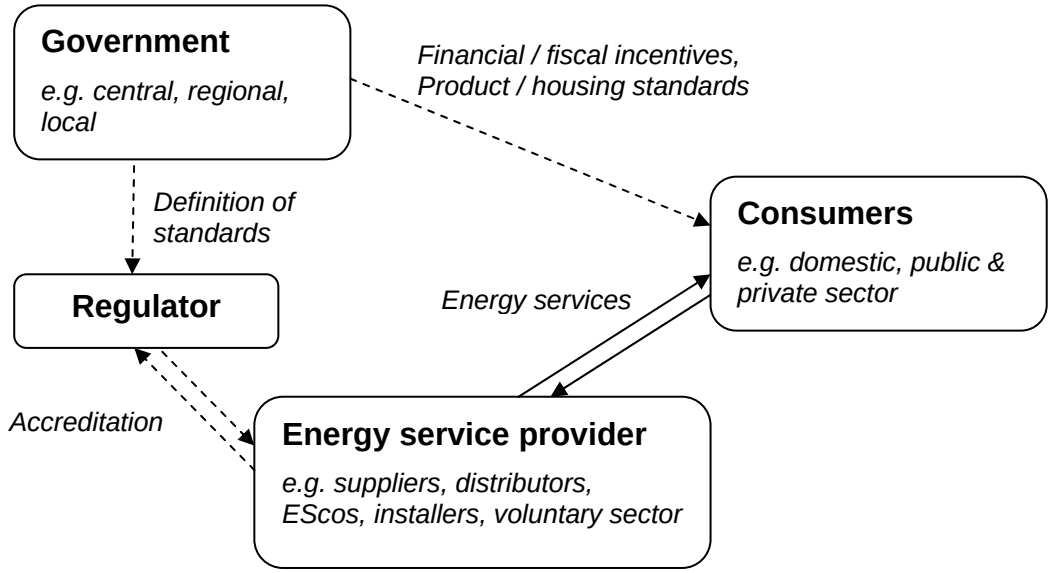
Obligated parties are required to deliver a target saving of energy with penalties if this is not met. White certificates are used to verify that a specific reduction of energy consumption has been attained. Obligated parties can deliver savings themselves and/or purchase white certificates on an open market. This model also enables various other parties to claim and sell white certificates. There are white certificate schemes operating in Italy, France and Denmark.

Incentive scheme with agency coordination



Funding could be provided to an agency such as a non-departmental public body. The agency could coordinate the delivery of home energy audits, marketing, information, advice and measures. Energy service providers could be given subsidies to deliver measures and/or contracted by the agency to deliver a local or regional franchise. This model would enable a more coordinated approach and open the market to new delivery agents.

Energy services market



In order to stimulate a market for energy services, there would need to be a strong emphasis on driving consumer demand. Energy service providers would encourage the uptake of measures through marketing. The Government might also need to play a role in terms of setting regulations and/or providing financial incentives (e.g. grants, low interest loans) or fiscal incentives (e.g. council tax rebate). This model would open the market to new delivery agents.

Figure 6: Strengths and weakness of other delivery models

	Strengths	Weaknesses
Energy company obligation with area based coordination	- Local coordination - Partnerships bring different skills - Sometimes greater uptake due to trusted intermediaries (e.g. local authorities) - Local coordinators can attract additional funds to deliver ancillary measures (e.g. benefits checks) - Obligation and penalties result in more certainty of outcome	- May require incentives to ensure certain areas are targeted - Relationships between partners can be complex and success is reliant on partners doing their bit - Scheme costs are passed through to consumers which can be regressive - Equity issues if customer must provide capital - Does not incentivise companies to go beyond compliance
Energy company obligation with outcome target	- Could provide a more transparent way of setting and adjusting targets - Could enable more of an outcome focus - Obligation and penalties result in more certainty of outcome	- Costs are passed through to consumers which can be regressive - Equity issues if customer must provide capital - Obligated parties are potentially subject to penalties, but are unable to directly control household energy demand
Obligation with white certificates	- Could enable new entrants - Could create an explicit value for energy efficiency	- High administration costs due to the need for strict accreditation - It would be difficult to achieve coordinated delivery. - Prices can drop dramatically during the programme if the target is set too low or penalties perceived as lax
Incentive scheme with agency coordination	- Could take a more coordinated rollout approach - More transparency in terms of costs and subsidies for measures - Could be cheaper to administer due to economies of scale - Open to new entrants and allows existing ones to leave	- Few proven examples in a similar competitive market context - Admin costs may be high and could become bureaucratic - Could be more expensive to deliver as there is less imperative than commercial companies to deliver cost effectively - Could develop ‘one size fits all’ solutions - Could result in reduced consumer choice in terms of delivery agents (e.g. regional franchises) - Less certainty of outcome in terms of carbon savings - Agency not accountable

Energy services market	- Market model provides flexibility to innovate - Open to diverse delivery agents - High degree of consumer choice	- Relies on consumer interest - No certainty of outcome as there would be no target or obligation to deliver - Delivery unlikely to be coordinated - Only certain measures would be attractive to investment