

UKBCSE response to the Conservative Party Green Paper – The Low Carbon Economy: Security, Stability and Green Growth

The UK Business Council for Sustainable Energy (UKBCSE) brings together the major players¹ in the energy sector to develop an effective dialogue, across the political spectrum as well as with other key stakeholders, to strengthen the strategic agenda for and delivery of sustainable energy in the UK.

The Council believes that a rapid transition to a low carbon economy is essential to mitigate climate change and to strengthen the UK's security of supply. Central to this is decarbonising energy supply, renewing and transforming grid infrastructure and improving the energy efficiency of the built environment and products. All parts of society need to be actively engaged in this process. Investors need to have confidence in a clear and stable policy environment.

We very much welcome the Conservative Party's focus and contributions to this agenda. This response to the *Low Carbon Economy* green paper draws on a wider series of policy papers developed by the Council as well as its continuing work. It sets out a broad context of policy positions and proposals, with an emphasis particularly on energy demand reduction and renewables which have been significant areas of focus for the Council. Key issues covered are listed below.

Key points

- *Pathway to meet ambitious targets* – the targets for carbon reduction in the UK are ambitious, and in order to ensure they are achieved, a coherent, stable, long term policy framework is needed.
- *Decarbonising energy supply* – decarbonisation of the electricity system is a necessary step in meeting the UK's carbon reduction targets including development of a range of low carbon technologies together with the necessary grid infrastructure. There is also untapped potential to make very significant carbon savings in heat and gas supplies.
- *Encouraging investment in low carbon technologies* – a robust, more predictable carbon price is needed to ensure that low carbon investment requirements are met. If the EU Emissions Trading System (EU ETS) becomes more stable and firmer, it is considered the most appropriate mechanism to achieve this in the long term. However, the present outlook for the carbon price is insufficient to trigger most forms of low carbon investment and so there might be merit in exploring options to reinforce or underpin the carbon price in the UK.
- *Meeting the renewable energy target* – achieving the EU target of 15% renewable energy by 2020 will depend critically on ensuring a stable, long-term framework for renewable investment, addressing planning and transmission access issues and ensuring a more predictable carbon price. The Renewables Obligation (RO) should remain the key mechanism for enabling investment in large-scale renewable electricity generation in the foreseeable future, supplemented by Feed-in Tariffs (FITs) at the small scale, whilst the introduction

¹ Members of the Council include Centrica, EDF Energy, E.ON UK, National Grid, RWE npower, Scottish and Southern Energy and Scottish Power.

of an appropriate Renewable Heat Incentive (RHI) is potentially vital for decarbonising the supply of heat and encouraging renewable sources of gas supply such as biomethane.

- *Developing new and smarter infrastructure* – new infrastructure is required to connect up low carbon generation, and a more strategic, anticipatory approach to network development is needed. There is also significant opportunity for smarter meters and grids which could facilitate energy balancing, to maintain security of supply with increased levels of small scale renewables and decentralised energy, and dynamic demand-side management.
- *Reforming the planning regime* – planning issues continue to pose a major challenge for the delivery of new low carbon generation. It is essential to maintain momentum on planning reforms. Any revisions to these reforms will need to ensure that the decision making process is efficient, reaches conclusions on a timely and predictable basis and avoids reopening national energy or climate change policy.
- *Improving the energy performance of buildings and products* - a large scale push to retrofit existing buildings with energy efficiency and low carbon measures is needed, as well as ensuring stricter standards for new buildings and appliances.
- *Consumer engagement* – it is vital to consider how consumer demand for measures will be stimulated and how the process for taking action can be made as simple, and trouble free, as possible. In particular, there is potential for a more coordinated approach to communicating with the public on climate change and carbon reduction.
- *Providing financial packages* – there should be simple, accessible finance packages available to consumers. This is likely to include low interest energy saving loans and financial incentives. There is also considerable 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 and appliances.
- *Ensuring cost-effective delivery* – the current main delivery framework for energy saving measures – the Carbon Emissions Reduction Target – runs only to 2012 so an early decision is needed on its successor. We believe 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. Companies are keen to continue to play a strong role in delivery, however, they recognise that it might be right to adapt the current model or explore the benefits of alternative options to meet new challenges post 2012.
- *Supporting vulnerable households* – with high energy prices likely to continue in the future, not least as a result of increasing government obligations, it is important to ensure that vulnerable households are supported through a coherent government fuel poverty strategy which includes better targeting and uptake of state benefits, in addition to improving the energy performance of homes.
- *Leadership* – the government should take a leading role in progressively decarbonising the public estate. There is also considerable potential for

demonstration of energy efficiency practices and low carbon technologies within businesses and local communities.

- *Joined up approach* – the policy landscape is becoming ever more complex and it will be important to ensure that policies are brought coherently together under an overarching framework.

Energy companies are ready, willing and able to accept the challenge of low carbon delivery. The Council is working to develop practical advice and proposals to ensure robust policies are developed to achieve the UK's climate change commitments.

The Council looks forward to continuing to work with the Conservative Party as it develops its thinking in this and other policy areas.

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Introduction

The Council believes that a rapid worldwide transition to a low carbon economy is essential to mitigate climate change. The UK has legally binding and ambitious climate change targets, including reducing carbon emissions by eighty percent by 2050, and a strong vision and leadership are needed to ensure these targets are met.

Progressive decarbonisation of UK electricity generation is needed, particularly through new investment in a range of low carbon technologies such as renewable generation, coal with CCS and nuclear. There is also significant untapped potential to decarbonise heat and gas supplies and we welcome the focus that this is now receiving from across the political spectrum.

New and smarter networks will be necessary to ensure low carbon generation technologies are connected up and performing to maximum efficiency, and to address the challenges of managing load balancing with increased levels of low carbon energy supplies on the grid and demand side management.

Planning reforms are crucial to delivering new generation and networks at the pace required. New arrangements set out in the Planning Bill 2008 including development of National Policy Statements (NPSs) and an Infrastructure Planning Commission (IPC) are potentially the most important step in de-risking low carbon investments.

Energy efficiency has a key role to play in terms of carbon abatement, reducing consumer bills and can be a cost effective alternative to new energy supply infrastructure. However, improving the energy performance of the existing stock is a huge challenge and developing consumer buy-in to the agenda will be critical.

With the significant investments required in terms of new generation, networks and demand side measures, one consequence will be that consumers will face notably higher energy prices than today. Public understanding and acceptance of these costs is essential. It is also important to ensure that there is adequate support for vulnerable households.

Government has a key role in terms of setting out a vision for a low carbon economy and developing a stable, coherent, long term policy framework to address climate change and energy security issues. Government should also be leading by example through progressive decarbonisation of the public estate.

Low Carbon Investment

Given the challenges of maintaining secure energy supplies, creating a low carbon future and meeting ambitious carbon target reduction targets, the UK's economy must decarbonise well in advance of 2050.

There is also a substantial requirement for new capacity over the next 10-15 years to replace fossil fuel plants closing as a result of the Large Combustion Plants Directive (LCPD) and nuclear plant closures. Significant levels of investment for new plant and in transmission and network infrastructure will be required.

In addition, the current economic climate has reduced expectations of future energy demand growth. Considerable uncertainty remains over the likely length of the downturn, timing and rate of recovery and implications for future impacts on energy demand.

There is also uncertainty over the long-term framework required for balancing the future electricity system with higher levels of intermittent generation and to ensure that investment is driven into building sufficient capacity.

Given the context set out above, we agree that in encouraging low carbon investment the Government's role should be to ensure clarity over the policy and market framework, that the right incentives are in place, with a robust carbon price and the removal of significant barriers.

Energy companies believe that for low carbon investments to be made by them over the next few years, a reasonably stable and predictable carbon price will be required that adequately recognises the value of a plant's contribution to carbon emissions reductions if they are to be commercially viable.

The present outlook for the carbon price is insufficient to trigger some forms of new low-carbon investment, such as renewables, coal with CCS (carbon capture and storage) and nuclear, and there are difficulties in establishing a long-term forward market until there is clear international agreement on a successor to Kyoto.

Both for reasons of UK competitiveness and for reducing CO₂ emissions from electricity generation in the future, it would be desirable to achieve a firmer and more predictable carbon price on an EU-wide basis, but this may take some time.

With present levels of uncertainty over the price of EU ETS Phase 2 allowances, and imminent investment decisions required, there would be merit in some initial thinking on how options to reinforce the EU ETS in the UK might be taken forward.

Renewables

The Council supports the Renewable Obligation (RO) as a long-term support mechanism for large-scale renewable electricity with a Feed-in-Tariff (FIT) to support small-scale generation and a Renewable Heat Incentive (RHI) for renewable heat at various scales and biogas.

In terms of the EU 2020 renewables target, achieving this will depend critically on ensuring a stable, long-term framework for the ROC (Renewable Energy Certificate) regime, addressing planning and transmission access issues and ensuring a sufficient, medium-to-long term carbon price.

In the longer term, as an increasing proportion of intermittent renewable electricity comes on-stream, it will be important to explore the potential for a responsive demand-side (to suppress peaks or offer short-term solutions) and ensure sufficient investment in new thermal back-up (to operate both for short peaks and over longer

time periods). A transparent and structured discussion is needed now on long-term market frameworks suited to a far more intermittent electricity system.

The new Office of Renewable Energy Deployment will need to play an active role and the various tiers of government should be engaged, including the devolved administrations and local authorities. Government should also take a lead in terms of demonstrating renewable energy projects on its own estate.

Renewable obligation

The Council supports the role of the Renewables Obligation and the way it has brought forward significant private sector investment in large-scale renewables in a relatively short period of time. Companies welcomed the intention to extend the RO from 2027 to 2037 and ensure that new projects are guaranteed 20 years of support.

The guaranteed headroom arrangements introduced in the Energy Act 2008, were also welcomed by companies, and effectively set a year-on-year ceiling for the RO. Companies see no additional benefit in adopting an explicit cap for the RO (e.g. 10% by 2010, 35% by 2020). Instead, the headroom arrangements should be used to increase the target for renewable electricity progressively, taking into consideration actual and planned project delivery. This will provide investors with the assurance of a minimum level of support without exposing consumers to unreasonable costs.

Feed-in-Tariff and Renewable Heat Incentive

A list of key recommendations on the design of the FIT and RHI mechanisms is included below:

- *Level of ambition* – a clear level of ambition in terms of desired size of uptake needs to be set out, in particular so that cost and supply chain implications can be fully explored.
- *Consumer interface* – it should be simple and non-bureaucratic for consumers to access the incentives. Consistency in the design of and delivery process for the incentives where possible would therefore be desirable.
- *Payment type* – for FITs, rewards should be based on total electricity production rather than purely the net amount exported. For the RHI, rewards should be based on the displacement of carbon.
- *Payment level* – entitlements should be pre-set at the point of installation. The level of incentive could reduce over time to encourage early action. The payment level for larger projects that are already viable under the RO should be set at a discount to the payment level under the RO, to avoid any incentive to deliberately scale down projects to qualify and to reflect the lower risk arising from fixed FIT payments.
- *Banding* – this could be used to differentiate by scale and technology, but could risk supporting highly priced technologies at the expense of cheaper ones – thus reducing the cost effectiveness of the programmes.

- *Capitalisation* – this should be possible, for example through third parties, but not required as part of the schemes, 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 utilised in the domestic market only and only in the absence of appropriate metering technology. Rewards to non-domestic users should be based on metered production.
- *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.
- *Accreditation* – technologies will need to be accredited to qualify.
- *Arrangement prior to launch* – in terms of interim arrangements, we support the continuation of support via the Low Carbon Buildings Programme (LCBP). We also welcome the commitment for eligibility for new installations from 15th July 2009 that has been supported by the Conservative Party. However, it is important to ensure that there are no double incentives in terms of the LCBP, FIT and RHI funding.

Carbon Capture and Storage

The Council agrees that there is a need for full scale demonstration projects for Carbon Capture and Storage (CCS) including pre- and post-combustion technologies. The projects should be aimed at enhancing the reliability and reducing the cost of CCS technologies for deployment in the UK and internationally. It is important to move forward quickly on these projects, and to date the competition process for an initial plant has been unduly protracted.

With the current proposals set out in the Government's Consultation on Clean Coal, companies believe a wide range of engineering, economic and policy uncertainties remain both with respect to the proposed demonstration plant and eventual full deployment. A genuine risk-sharing between developers, the Government and the public will be needed if CCS is to be demonstrated and deployed in the UK.

Clarity is needed in respect to future requirements for CCS retrofit. In particular, how the definition of technical and economical viability will be agreed and the nature of any tests to demonstrate that the technology is 'proven'.

In terms of Emissions Performance Standards (EPS), greater clarity is needed on how these might operate in practice and in tandem with the EU ETS. Some companies have expressed concerns about introducing EPSs, particularly at an early stage, as this could make investment in the UK less attractive and result in a continued emphasis on gas.

Nuclear

A number of companies have expressed a commitment to develop new nuclear in the UK. However, the development of a sufficient, sustained and long term carbon price is critical to enable this.

Other critical pre-2010 decisions for nuclear are:

- Timely publication and designation of a National Policy Statement (NPS) on nuclear;
- Agreeing terms for managing waste this year with involvement from the Office of Nuclear Development (OND), Government and developers; and
- Developing skills and other critical aspects of the supply chain.

It is felt that the OND is generally ensuring positive progress on the investment pathway for nuclear.

Gas

There is a continued need for new investment in Combined Cycle Gas Turbines (CCGT) in the near term. In particular, new and existing CCGTs are likely to be needed for thermal back-up in a more wind-based energy mix.

Biogas

The Council believes that biomethane produced from waste could potentially play a significant role in decarbonising UK gas supplies, and 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 Council believes that biogas should be supported as part of the Renewable Heat Incentive (RHI). However, consideration is required as to how to enable development of the technology in the lead up to launch of the RHI, in particular as local authority waste contracts are currently being agreed, and might otherwise be tied up and directed towards less efficient electricity generation for the next decade or more.

District Heating and Combined Heat and Power

The Council believes that District Heating and gas fired Combined Heat and Power (CHP) has a significant role to play in reducing carbon emissions in the short to medium term and should be deployed where the most appropriate opportunities exist.

Local authorities also have a key role to play in identifying potential for district heating in their areas, and we therefore welcome the proposal to give local authorities greater powers to zone urban areas by energy density, encourage district heating where appropriate and provide infrastructure grants to help with the upfront costs of developing new heat networks.

In terms of large scale CHP, we welcomed the extension of the exemption from the Climate Change Levy (CCL) for all supplies of CHP electricity to 2023. If the CCL is to be transformed into a Carbon Levy, consideration should be given to how a continued exemption could be used to stimulate investment in large scale CHP. In

much the same way as the previous Conservative Government exempted CHP from the cost burden of the Non-Fossil Fuel Obligation.

We would also recommend that there is universal applicability of Enhanced Capital Allowances to all large scale, good quality CHP plant, no matter what the form of ownership is.

There is potential for development of CHP projects and proactive procurement of low carbon heat within the public estate. The Government has made a commitment to source at least 15% of electricity from good quality CHP by 2010, and the current government is not on a trajectory to meet this target.

Networks

In order to get new low carbon plant on stream as quickly as possible we need to ensure ready access to networks for electricity, heat and gas.

Electricity

It is important to ensure that better use is made of existing transmission networks, in particular ensuring new generation assets can be quickly and efficiently given access. Early resolution of Ofgem's Transmission Access Review (TAR) is needed, with companies favouring a 'connect and manage' approach until anticipatory investment in the grid can be made.

There is a need for more strategic approaches to new network development both on- and off-shore to facilitate more rapid connection based around future clusters of generation. However, consideration of how funds will be raised for strategic investment and reinforcements of networks is critical.

In relation to offshore networks, the Council welcomes the approach the Conservative Party is taking in its proposals to establish a number of Marine Energy Parks and provide transmission companies with incentives to build new under-sea Direct Current (DC) cables. This will require considerable investment. Therefore, redirecting the Marine Renewables Deployment Fund (MRDF) may not be appropriate particularly as companies developing marine technologies may have already built this support into their business plans.

Smart meters and grids

The Council welcomes the Conservative Party's commitment on smart grid and metering infrastructure. Smart meters will enable more accurate billing, better energy information for consumers and a greater range of tariffs. They are also an important component in delivering smarter grids which facilitate small scale renewable feed-in and could enable dynamic demand-side management.

Companies are in broad agreement with the Government's preferred model for meter roll-out (central communications) but foresee that considerable effort must be devoted to reach early agreement on what this means in practice.

Concerted progress needs to be made during the anticipated two-year preparatory stage. This includes agreeing and establishing appropriate governance arrangements, programme design and management, approaches to interoperability and data handling, and stranding of legacy meter assets.

The roll-out of some 50 million smart meters is a massive undertaking. Government and Ofgem must ensure that their involvement facilitates the process. Companies wish to move ahead quickly are keen that the pace of delivery increases significantly.

Gas and Heat

There is, of course, already an extensive gas distribution network in the UK. Ofgem is also running a programme to extend the network to non-gas fuel poor households. As discussed above there is potential for decarbonisation of the gas network through injection of biomethane. In order to realise the potential for renewable gas, it is important that appropriate support is provided to encourage development of commercial scale gasification plants to convert mixed municipal waste to biomethane. This technology has been demonstrated in other countries, but support is needed to make such projects bankable in the UK.

As has been demonstrated in Sheffield, Southampton, Birmingham and parts of London, there is also potential for low carbon heat systems at community scale or larger. These projects have been run on a commercial basis but with strong local authority involvement. We believe that there is a key role for local authorities in taking a more holistic approach to spatial planning and identifying opportunities in their local area for community energy systems which could serve new and existing homes as well as non-domestic buildings.

Planning

Obtaining planning consents, and in a timely fashion, remains critical to delivering a low carbon economy. The Council supports the new arrangements introduced by the Planning Act 2008 including the development of National Policy Statements (NPSs) and an Infrastructure Planning Commission (IPC) and believes implementation of these changes is potentially the most important step for de-risking low carbon investment.

A key benefit of the new IPC will be the speed and predictability for all parties in the planning process. The statutory deadlines that have been specified for IPC decisions, together with the level of dedicated resource and expertise that is being sought, will reduce uncertainty, complexity and cost for applicants, objectors and local residents. In addition, the extensive local consultation obligations introduced as an integral part of the IPC process will provide additional opportunity for local input.

Were alternatives to the IPC to be considered, they would need to deliver the same level of expertise, resource, timely performance and consultation. Hybrid parliamentary bills and “streamlined” public enquiries (for example) are unlikely to achieve this. The existing commitment to review the IPC after the first two years

provides an opportunity to address any concerns arising, without losing the benefits of proceeding with the total package of planning reforms.

The National Policy Statements are essential to communicating national policy on key infrastructure clearly and unambiguously. They will provide much needed clarity on the need for major infrastructure. They will enable individual planning decisions to focus on the specific impacts of a project and the acceptability of mitigation measures.

Energy Demand

Consumer engagement

Greater focus is needed on how the Government and other stakeholders can drive consumer interest in the climate change and carbon saving agenda, and encourage consumers to take meaningful action. This can be done in a number of ways, all of which may be appropriate to meet the scale of the challenge:

- *Developing consumer demand* – it is vital to consider how consumer appetite for measures will be stimulated, for example through targeted marketing, more innovative engagement methods (such as community initiatives, social networking, popular media), leadership and demonstration (such as showcasing best practice, demonstrating new technologies in businesses, schools and community buildings), financial/fiscal incentives and possibly minimum standards for buildings as well as products in the longer term.
- *Making change easy* – it is important to ensure that consumers know what they need to do, where to go for advice and what support is available. This includes addressing specific barriers to uptake such as high upfront costs, long paybacks, hidden costs, lack of information and split incentives (e.g. landlord-tenant), providing home energy advice and audits, better energy use information such as clearer billing, smart meters, clear and consistent labelling, and simple, accessible finance packages.
- *Gaining consumer trust* – consumers need to have confidence in the measures, payback periods and providers. This could be done through training and accreditation of organisations providing certain products and services (such as solid wall insulation, home energy advice/audits), robust analysis of costs and payback periods for measures, and more consistency in the advice provided to consumers from a variety of stakeholders (such as local authorities, builders/architects, appliance retailers, energy companies).
- *More coordinated communications* – we believe a coherent communications strategy is needed 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.

Existing Buildings

Improving the energy performance of the existing built environment is likely to prove a considerable challenge over the coming years – particularly as cheap and easy

solutions are exhausted and it may be necessary to move to more costly and disruptive measures.

Some key areas for consideration include:

- *Assessing the existing stock* – some companies consider that there is likely to be a role for local authorities in assessing the existing building stock and identifying opportunities for improved energy efficiency and domestic/community scale sustainable energy.
- *Providing financial packages* – consumers should be able to access finance packages which are simple to understand and tailored to meet their needs.
- *Energy saving loans* – long term, low-interest loans could help consumers to meet the upfront cost of expensive measures (e.g. microgeneration, solid wall insulation), enabling repayments to be financed over a long period, with payments effectively offset by lower energy bills – i.e. pay-as-you-save. However, it is important to underline that while a financing package can help people access more expensive measures, it cannot improve the cost-effectiveness of the measure.
- *Pay-as-you-save* – for the PAYS concept to work we believe it would be necessary to ensure low interest rates, positive economic benefits to the consumer, net social improvement in relation to any subsidised costs and protection of the asset value (e.g. through stronger utilisation of Energy Performance Certificates). A number of possible models have been put forward including linking a loan to a property via local authorities or energy companies. Further analysis of these models is needed, including the risk that savings do not meet repayments or that consumers do not perceive the benefits, due to fluctuating energy prices, increased comfort taking and other lifestyle changes.
- *£6,500 loan scheme* – we would suggest a degree of flexibility in terms of a loan offering to consumers as some would need less than £6,500 to bring their home to a reasonable standard but some will require considerably more. There should also be a strong element of consumer choice in terms of measures installed while being mindful of the need to achieve significant carbon reductions – this may mean expanding the list of eligible measures beyond those with a particular rate of return. It should also be noted that the payback periods for measures will be influenced by a number of factors, including energy prices, and will become more favourable in the context of upward pressure on energy bills from environmental levies (including the RO, RHI, CERT etc.).
- *Fiscal incentives* - we see significant potential for using fiscal incentives to increase consumer interest in the energy performance of their homes. This could include linking Stamp Duty, Council Tax and/or Capital Gains Tax to improvements in the EPC rating of a property, reducing VAT rates on energy saving refurbishment and 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.
- *Financial support* - We also believe that grants, subsidies and/or incentives may be required to improve the economics and take-up of certain measures. Currently even highly cost effective measures (such as low energy light bulbs

and loft/cavity wall insulation) have to be subsidised by 50-100% to make them attractive to consumers. With more expensive measures and as the level of ambition heightens, such levels of subsidy may be difficult to sustain, and for reasons of fairness, it is important that those who can afford to pay for measures, do so. The routes to financing also need to be considered in more detail including the relative contributions from able-to-pay individuals, tax payers and energy consumers.

- *Valuing energy performance* – we believe that is considerable scope to strengthen the role of EPCs through consideration of:
 - o Stronger requirements on display and advertising (e.g. Display Energy Certificates in all public/commercial buildings and EPC ratings on all advertising for sale/rental of properties);
 - o Fiscal incentives linked to EPC improvements;
 - o Regulatory support (e.g. building regulations, minimum energy performance standards for sale/rental and social housing); and
 - o Utilisation of data by local authorities where appropriate (e.g. to enable proper enforcement of the Housing Health and Safety Rating scheme which applies a minimum standard to social housing and private landlords).
- *Ensuring effective delivery* – a post 2012 framework should deliver cost effective carbon savings, with the flexibility to incorporate different measures, approaches, delivery bodies and increased scope for innovation. The Council has been considering various options, which are summarised in **Appendix A, Figure 1**. Companies have a range of views as to preferred approaches. There is agreement that the existing supplier obligation has proved to be a cost effective delivery mechanism, but it may be right to adapt this model or explore the benefits of alternative options in order to meet new challenges post 2012. Suggested improvements to the existing model include provisions to incentivise over-performance, more coordination of communications and home energy audits, greater scope for innovation and trading, and tackling fuel poverty issues separately.
- *Establishing good quality pilots* – there will need to be a carefully planned transition from existing programmes to a post 2012 framework, and we believe that piloting of different approaches and technologies (particularly less familiar ones such as renewable heat, micro-electricity, solid wall insulation and smart meters) alongside existing schemes 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

New Buildings

The Council supports the ambition for all new homes to be zero carbon by 2016 and non-domestic buildings by 2019. This includes constructing buildings to the highest practical levels of energy efficiency, with onsite carbon mitigation where possible, and other allowable solutions such as offsite renewable generation as appropriate and to ensure cost effective delivery. It will be important that standards can be met

at a reasonable cost, so that the construction of new buildings, which are more efficient than the existing stock, is not held back.

We would also urge the creation of a new Code for Sustainable Buildings which sets out a clear framework for improving non-domestic buildings, including existing building stock. The approach taken for non-domestic buildings should be consistent with that of homes with some flexibility to take into account a wider variety of building types and uses.

Products

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 to continue to push for wider application of the labelling system to new products at an EU level (including brown goods), 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.

We believe it is important to encourage continual improvements in standards and therefore support the proposal to introduce a similar scheme to the Japanese top runner programme. However, further consideration is needed on how this would be implemented in an EU context.

Affordability and Fairness

High energy prices are likely to continue in the future and will potentially create the economic drivers to encourage consumers to undertake energy efficiency and low carbon measures. However, it is important to ensure that vulnerable householders are supported and a coherent government strategy for responding to fuel poverty is developed.

We recommend that the following actions are taken by Government:

- *Ensuring better targeting* – need to ensure that data sharing work is progressed.
- *Providing appropriate state benefits* – annual changes in state benefits should adequately reflect the changing cost of energy and we believe there should be a campaign to promote the take up of benefits. We would also recommend improving targeting, for instance extending Winter Fuel Payments for pensioners to other disadvantaged and vulnerable households.
- *Improving the housing stock* – we recommend enhanced support for Warm Front and Warm Zones. The Homes and Communities Agency should be enabled to systematically improve the hard to heat homes of vulnerable households in the social housing sector. Stronger enforcement of the Housing Health and Safety Rating scheme, which applies minimum standards (including insulation and heating) to both public and private landlords, would also be welcome.

Leadership

Government and Public Sector

There is an opportunity for central, regional and local government, public corporations and the public sector to demonstrate leadership on this agenda through the progressive decarbonisation of the public estate. This could also help raise consumer awareness and interest in measures as less familiar technologies could be showcased in public settings.

Building Sector

Architects, professionals in construction, heating and ventilation, commercial and residential landlords have a major contribution to make to achieving low carbon in the built sector – from responding to initial design briefs, procurement of heating and ventilation, through to where the cost should sit in leases and agreements for inefficient heating and lighting. In part, some of this will be driven by regulation, but there should also be commercial advantage in leading from the front. New innovative partnerships are likely to develop, including with the energy sector.

Private Sector

There is considerable scope for businesses to green their operations and influence change in the behaviour of their employees. With the Carbon Reduction Commitment, Climate Change Levy, and support through the Carbon Trust there should be sufficient motivation for change in the private sector. It is important to ensure sufficient support for small and medium sized enterprises, in particular as they are often not covered by the current institutional advice framework of the Carbon Trust and Energy Saving Trust and this gap should be addressed.

Joined-up Approach

Policy Landscape

The policy landscape is becoming ever more complex with numerous interacting and overlapping policy instruments – including CERT, the Community Energy Saving Programme, Warm Front, Decent Homes, Building Regulations, Product Standards, Smart Meter roll out, Zero Carbon Homes, Renewables Obligation, Feed-in-Tariff, Renewable Heat Incentive and the Carbon Reduction Commitment. It is vital that these policies are effectively and coherently brought together under an overarching framework, which ensures no unintended double counting or perverse incentives.

Institutional Framework for Delivery

There are now numerous bodies working on the climate change and sustainable energy agenda, including various government departments, regional and local government, the devolved administrations and various quasi-governmental

organisations, some have overlapping remits and considerable effort is now spent on ensuring effective policy co-ordination.

We strongly supported the creation in October 2008 of the new Department of Energy and Climate Change which will now be capable of taking a holistic view of climate change, energy security and fuel poverty issues.

However we believe that there is scope for further institutional reforms. In particular, the creation of a Sustainable Energy Agency which could potentially bring together work currently undertaken by the Energy Saving Trust within the domestic sector and Carbon Trust in the private sector, as well as some of the functions of Ofgem and the Environment Agency.

It is noted that there are currently various government offices to support development of new supply technologies such as renewables, nuclear and carbon capture and storage² but no equivalent on the demand side.

Conclusion

The UK is on the cusp of major investment designed to transform the UK's energy infrastructure to significantly reduce energy sector carbon emissions and contribute very directly to the UK's legislative goal of an eighty per cent reduction in carbon emission by 2020, as well maintaining the nation's energy security.

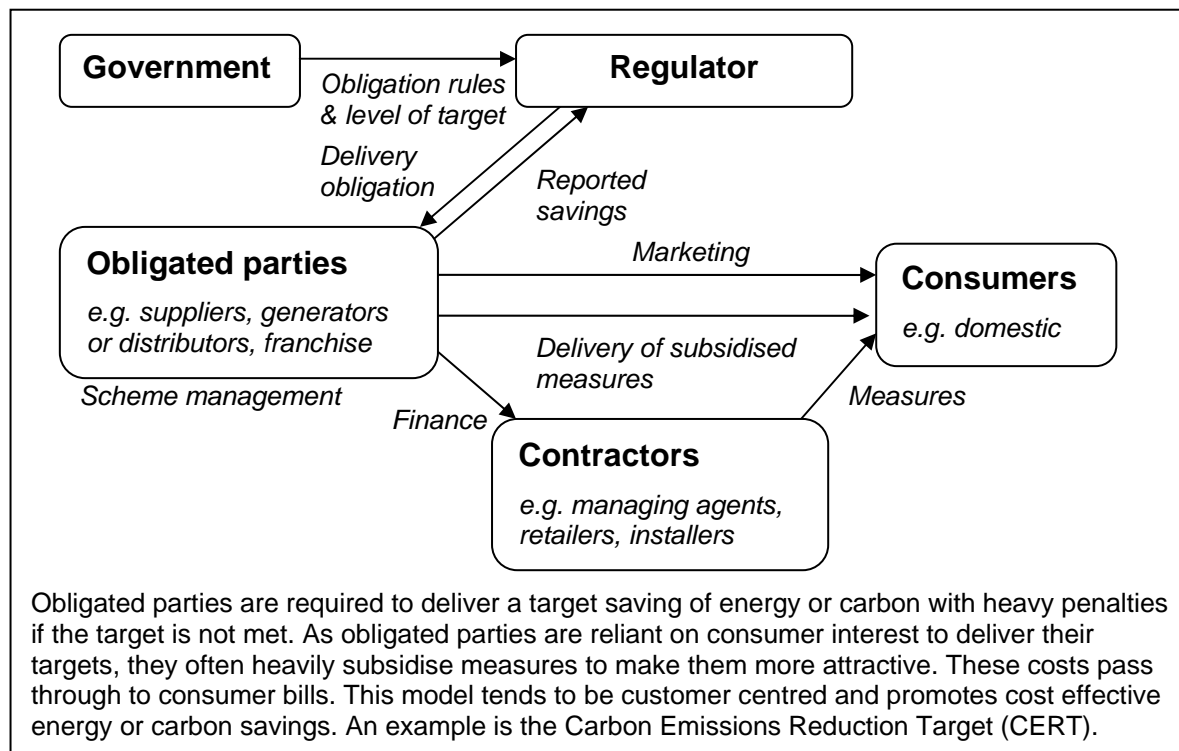
This paper is one of an emerging series of working papers and the Council looks forward to engaging with the Conservative Party as well as a wide range of stakeholders as we take this work forward.

² Office for Renewable Energy Deployment (ORED), Office for Nuclear Development (OND) and Office for Carbon Capture and Storage (OCCS).

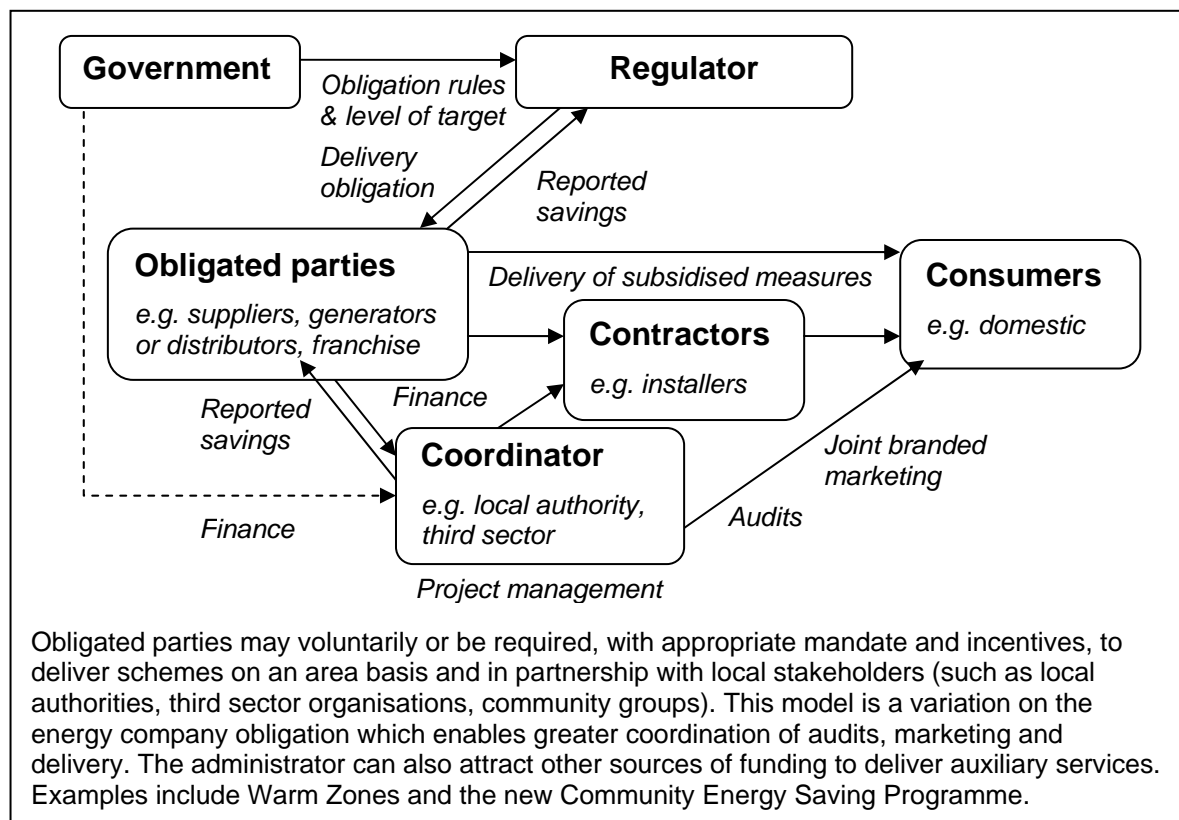
Appendix A

Figure 1: Diagrams illustrating possible delivery models for energy saving measures

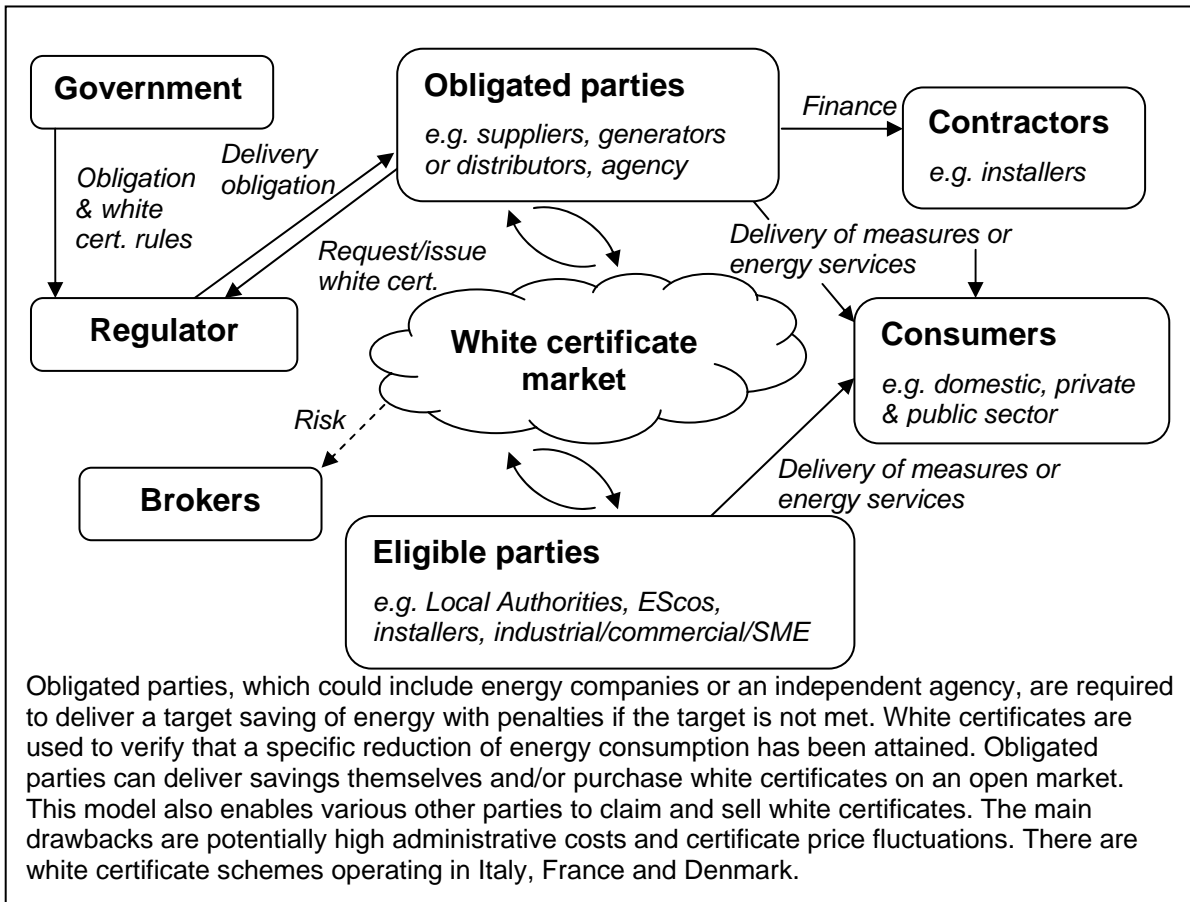
Energy company obligation



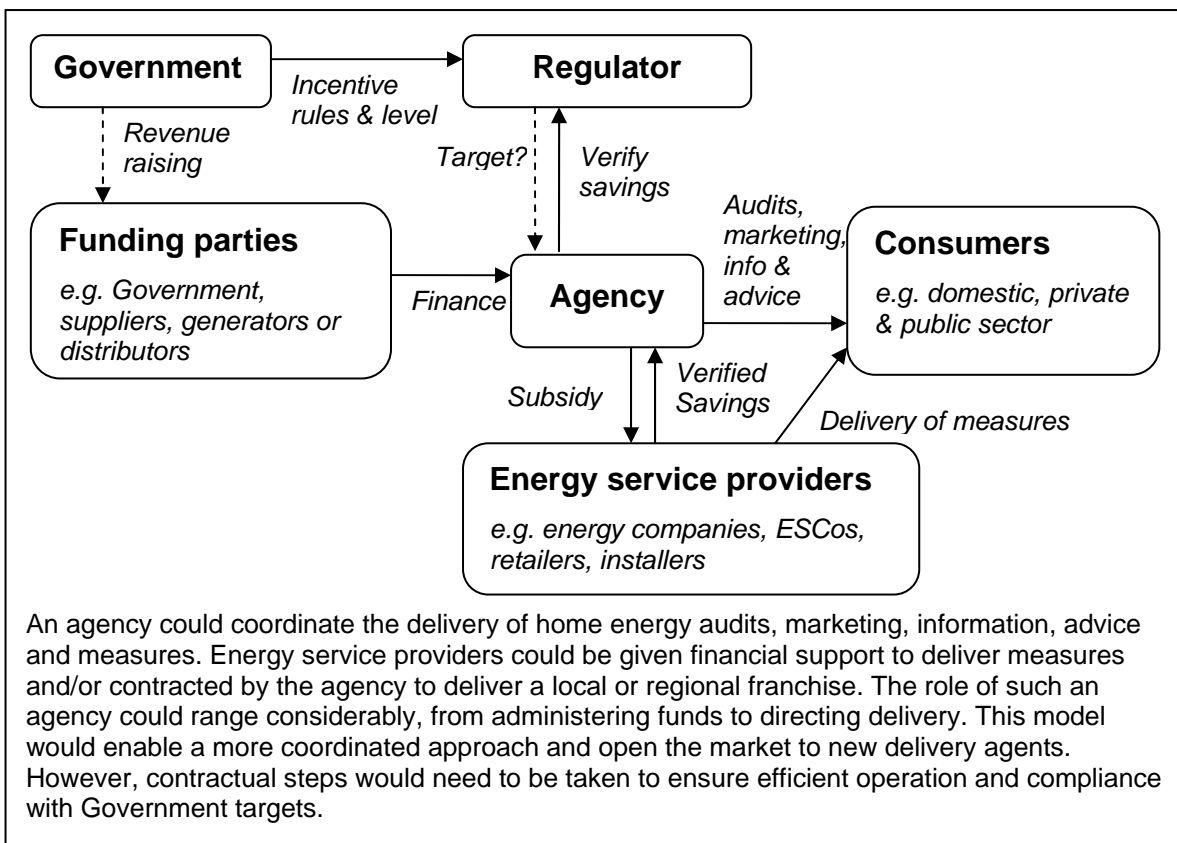
Energy company obligation with area based coordination



Obligation with white certificates



Incentive scheme with agency coordination



Energy services market

