



Carbon Management

Building a supportive policy
environment for business

A report to the Carbon Trust by Rebecca Willis

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About this report

This report is the result of a research project commissioned by the Carbon Trust that explored the motivations of businesses working with the Carbon Trust's Carbon Management programme for reducing carbon emissions. The research focused on the role of policy and legislation in encouraging businesses to take further steps to manage their carbon emissions. The report is not intended to be a quantitative, statistically significant exercise, but aims instead to draw out the opinions and experience of companies who are already actively working toward reducing their carbon emissions.

The report is an independent study, commissioned by the Carbon Trust. The results do not necessarily reflect the views or policy positions of the Carbon Trust.

Executive summary

The UK has a clear commitment to tackling climate change, and a long-term goal to reduce carbon emissions by 60 per cent by 2050. To achieve this challenging goal, business, along with other sectors, will need to make significant changes. Previous Carbon Trust research has shown that there is huge untapped potential for energy efficiency within business. There is a need to look for ways in which government and business can work to unleash this potential, through policy and legislation to realise both cost and carbon savings.

About this project

This project aims to facilitate discussion between businesses and government about how policy can be made more effective in encouraging businesses to take action on energy and carbon management. The project began with a series of qualitative interviews with Carbon Trust clients (12 large companies from a range of sectors) to explore motivations for carbon reduction, and the role of policy and legislation in encouraging action. All the companies that participated are actively involved in carbon management - the research did not address other, less-motivated companies, or SMEs. Interview findings were discussed at a round-table seminar attended by business and government representatives, policy experts and Carbon Trust clients. Views from both the interviews and the seminar have been incorporated into this report.

Research findings

Measuring and managing energy

The companies interviewed are increasingly developing systems to measure and manage energy and carbon emissions. The approach taken depends on how significant energy costs are to the business as a whole. Many companies now handle energy issues through dedicated energy managers or through facilities or environmental management systems, and most have a system for reporting to board level, though this link is often indirect.

Why are companies taking action?

The companies cited three main reasons for taking action on carbon emissions. First, **cost of energy** is a key motivator - especially given the considerable recent price rises. Second, **reputational issues** emerged as a driver - including pressure from consumers, from the supply chain and from institutional investors, all of whom are increasingly asking questions about carbon management. Third, **government policy and legislation** influences companies. However, there is a feeling that policy is not currently clear or direct enough to be a significant influence, particularly for non energy-intensive companies.

Why aren't more companies taking action?

Businesses are less likely to take action if they do not see energy costs as significant, compared to other costs. In particular, companies are reluctant to use scarce investment capital for energy efficiency in preference to other investments. Many organisations do not have an individual responsible for energy, so the issue does not have the necessary profile or influence.

Behaviour change

Many of the companies interviewed referred to the importance of behaviour change, both within organisations and by customers and consumers, as a factor in addressing climate change. While policy development must provide business incentives to manage carbon and support new technology, it also needs to encourage the behaviour change necessary to have a real impact on carbon emissions.

The role of policy and legislation

As described above, government policy and legislation is a motivating factor for business. It influences companies in a number of ways. First, companies want to operate within legal boundaries, and so will put systems in place to ensure **compliance with legislation**. However, complying with legislation may not drive more strategic action within a business. Second, some government policies require companies to measure and report their emissions, which requires **management time**, and can help to focus attention on an issue. Third, and related, a policy measure might prompt a company to **think strategically about carbon**, starting to look at the carbon impact of investment decisions, for example. Sometimes the mere threat or expectation of future legislation, such as emissions trading, has such an effect. Lastly, some policies may work simply because they **change the price of energy**, or improve the business case, relatively speaking, of saving energy. However, policy-induced price signals are not always an effective motivator on their own, unless linked to other policy measures.

How well are current policies working?

Companies were asked about a number of policies which government has put in place to encourage business to tackle carbon emissions.

- **The Climate Change Levy (CCL)** was not seen by many companies as a significant factor in changing behaviour on its own, because most companies simply pay the bill rather than finding ways to reduce energy use. Some companies had changed their decisions about sourcing energy, switching to electricity sourced from renewable generators which is exempt from the CCL.
- **Climate Change Agreements (CCAs)** have encouraged companies to dedicate management time to the issue, and enabled them to think strategically about energy efficiency.
- **The EU Emissions Trading Scheme (EU ETS)** was cited by those covered by the scheme as the most significant policy driver for their company, and respondents were generally positive about its impact. Companies like the scheme because it provides opportunities for profit as well as cost. Like the CCAs, it focuses management time on energy issues, creates risk which needs to be managed, and encourages companies to think strategically.
- **Enhanced Capital Allowances (ECAs)** are used by most companies in this survey. Few saw them as a significant motivator, because the tax rebate is small compared to the overall cost of an investment such as a new building; and the system for claiming ECAs is seen as complex. Some companies cited ECAs as a real help, however, particularly when the same investment is being made across multiple sites.
- **Building Regulations** were cited as the most important policy by most of the non-energy intensive companies in the survey - particularly following the new regulations which apply to refurbishment too. However, the current uncertainty surrounding the implementation of the European Performance in Buildings Directive has made it hard for companies to plan ahead, and there are ongoing problems with enforcement of regulations.
- **Other policies** which companies cited as having an impact include: the UK Emissions Trading Scheme, planning requirements imposed by local authorities specifying on-site generation, and the Code for Sustainable Homes due to the influence it is having on firms in the construction supply chain.

Current policies: Some conclusions

The experience of different policies suggests some generic conclusions about what type of policy and approach motivates business. Regulations setting minimum standards are helpful in providing a baseline, but will not necessarily motivate companies to think strategically. Taxes and fiscal incentives, such as the CCL and ECAs, do not work on their own, as the price signal is not clear or significant enough for less energy-intensive companies. They need to be linked to other measures to encourage companies to devote management time to the issue. Companies are positive about the effect of trading schemes, which work because they encourage companies to think through carbon management strategies. Encouraging this behaviour change is key to successful policy development. Lastly, there are gaps in the current policy framework: the non energy-intensive sector and small businesses need more effective policy support, and for all sectors, there is considerable uncertainty surrounding the post-2012 period, which prevents longer-term investment.

Policy recommendations

Based on the research findings, this report puts forward some recommendations for future policy development, in four areas: tax incentives, emissions trading, regulatory standards, and support for won-site generation.

Tax incentives: ECAs could be made less restrictive, reducing the administrative burden. More generic tax incentives could be offered to help with energy efficiency investments, including non-technological solutions. Tax rebates such as a reduction in business rates or stamp duty could also be offered for energy efficient buildings in an overall fiscally neutral fashion (see regulatory standards below).

Emissions trading: The Carbon Trust has already put forward a proposal for a UK trading scheme for non energy-intensive companies. The research carried out for this project shows that this would receive support from business. The EU ETS could also be further developed, and needs increased certainty about its future post-2012.

Regulatory standards: Building regulations need to be better enforced, combined with clear and robust implementation of the labelling schemes associated with the Energy Performance of Buildings Directive. Regulation could be better linked to other incentives, such as fiscal measures, as mentioned above. For example, buildings gaining the top rating in the new energy labelling scheme could receive tax rebates.

On-site generation: Given the wider benefits of distributed generation, more could be done to encourage companies to invest in on-site generation. Companies should be rewarded for excess power sold back to the grid, and for on-site heat generation. On-site generation could be encouraged through building regulations, business rates or labelling systems.

Further research: Lastly, the research has highlighted the need for further examination of a number of areas, including research into companies who do not currently look at energy issues in a systematic way, and small and medium-sized companies.

Introduction

The UK has a clear commitment to tackling climate change, reflected in the target of reducing carbon dioxide emissions by 20 per cent below 1990 levels by 2010 - and the long-term pledge, established in the 2003 Energy White Paper, to reduce emissions by 60 per cent by 2050. However, current estimates show that we are not on track to meet these goals, and that much more needs to be done to put all sectors - business, domestic and the transport sector - on to a low carbon trajectory.

Whilst the targets are demanding, they are achievable. For the business sector, it is widely understood that there is much more that could be done to increase energy efficiency and reduce carbon emissions. As the Carbon Trust stated in its publication on the potential evolution of the Climate Change Programme for business and the public sector, “progress so far has tapped only a modest fraction of the available energy efficiency potential.” There is a need now to look for ways in which government and business can work to unleash this potential, through policy and legislation which increases efficiency and realises both cost and carbon savings.

The research presented here provides an insight into companies’ views on how this could be achieved. It gives feedback on the existing policy framework for carbon management in business; draws out some lessons from current policies; and suggests future directions for government policy.

The role of the Carbon Trust

The Carbon Trust is an independent company primarily funded by government. Its role is to help the UK move to a low carbon economy by helping business and the public sector reduce carbon emissions now and support the development of low carbon technologies. With its positioning half way between government and the private sector, the Carbon Trust is able to provide a unique insight into business thinking on carbon issues. This project seeks to develop this role further, by speaking to business clients directly about their experiences of government policy and legislation, and bringing these views to government to inform policy development.

About Carbon Management

The Carbon Trust’s Carbon Management programme is designed for large organisations who wish to manage and reduce their carbon emissions while growing profitably. Carbon Management is a five-step programme that works with staff across all areas of an organisation and, importantly, requires senior management involvement and support. It takes a holistic view of carbon emissions, working across the full range of an organisation’s operations, from research & development, procurement and logistics through to cost management, branding and investor, employee or local community relations.

About this project

This research was commissioned by the Carbon Trust in early 2006. The project aims to facilitate discussion with government about how policy can be made to work more effectively, to encourage businesses to take action on energy and carbon management. The project began with a series of qualitative interviews with Carbon Trust clients, to explore motivations for carbon reduction. Interview findings were discussed at a round table seminar in May 2006, and views from the interviews and seminar have been incorporated into this report.

The box below sets out the research process in more detail.

The research process

The research was carried out in two stages:

Stage 1: Qualitative interviews with companies from the Carbon Trust's Carbon Management Programme. Twelve interviews were conducted, from across a range of sectors: heavy industry; retail; services; and food and drink companies. The companies were asked about what steps they took to measure and manage their carbon emissions; what motivated them to do so; and what role government policy and legislation played in decisions about carbon and energy. Companies were also asked for their views on what more government could do to encourage carbon management.

All companies interviewed were large companies who had already made a commitment to reducing their carbon emissions. Talking to these companies provides useful insights into motivations for carbon reduction. However the sample obviously does not represent business views as a whole. Many companies have yet to tackle carbon issues in a strategic way, and the challenges facing smaller companies are different again. Further research will be needed to understand the needs and motivations of these groups of companies - this is discussed in the conclusions to this report.

Stage 2: A round table discussion seminar, bringing together representatives from business, government, Carbon Trust staff and clients, and other policy experts. The seminar focussed in particular on future directions for policy.

Research findings

Below, findings from the interviews and subsequent seminar are presented. First, the report explores how companies are responding to climate change - what systems they have put in place to measure and manage carbon emissions. Then the companies' motivations for cutting carbon are examined. Finally, the report takes a more detailed look at how policy and legislation motivates companies, and how it could be made to work more effectively.

What are companies doing to cut carbon?

All the companies we spoke to are working with the Carbon Trust to reduce their emissions through the Carbon Trust's Carbon Management Programme, and so put considerable effort into measuring and managing their carbon and energy use. Approaches differ across different sectors, and according to the internal culture of companies, but it is clear that, due to a combination of high energy prices, reputational pressures, and the influence of government policy and regulation, carbon management is emerging as a strategic issue. Previously it would have been an operational matter, managed by staff alone. Now, in most of the companies we talked to, it is a matter for boardroom discussion.

Measuring energy and carbon

All the companies we spoke to measure their energy use, mainly through monitoring electricity bills and direct fuel consumption. Some then convert figures into carbon metrics, allowing them to look at carbon impacts as well as energy use. Energy-intensive companies have detailed data on energy use by site and time of day. Other firms vary considerably in approach. Some retail and service companies analyse and benchmark individual buildings (such as shops and hotels), allowing comparisons and benchmarking across similar buildings. Others build an aggregate picture. One general weakness in terms of measurement is transport emissions. Vehicle fleets are often outsourced, and data is harder to gather, meaning that cutting transport emissions can be more problematic.

Managing energy and carbon

Helped by the Carbon Trust, companies have taken action in a number of ways to reduce their emissions. The diversity of approaches is striking. It includes:

- Benchmarking and emissions reduction targets for each site (e.g. each building) or for the company as a whole.
- For more energy-intensive companies, employing an energy or environmental manager for each site. Non energy-intensive companies have an energy manager working at corporate level instead. Some have no energy manager.
- Working groups or central programmes to investigate particular areas for energy saving.
- Dedicated funds, such as spend-to-save funds, to allow investment in energy efficiency and on-site generation.
- General awareness-raising and training initiatives for staff, and even competitions to incentivise employees; energy champions for each site.

Most companies have a system for reporting on energy and carbon issues at board level. This link is usually indirect or included in a wider report, such as the corporate social responsibility report, environmental management or facilities management report. Rising energy prices have, however, had an effect here: "massive hikes in fuel prices tend to get it on the board agenda."

Most companies handle energy issues either through dedicated energy managers, or through facilities or environmental management systems. In some companies, there is quite a strong link to corporate responsibility teams, with the two parts of the company linking together to tackle climate change as both a cost and a reputational issue. Few companies, however, involve their government affairs functions. For many companies, issues of energy management and carbon emissions are not important enough to be reflected throughout business structures - they are confined to certain functions.

Why are companies taking action?

The companies we spoke to cited three main reasons for taking action on carbon emissions. Given current high energy prices, it is not surprising that the cost of energy is a key motivator. Reputational issues and corporate social responsibility considerations also emerged as a significant driver. Government policy and legislation also motivates businesses, and its significance is growing.

Cost of energy

The recent dramatic price increases have had a considerable impact on the way that companies view energy. As one retailer said, “the cost of energy is number three on our risk register, after economic downturn and terrorism.” Rising fuel bills have prompted some to take action for the first time: “we have only just started to look at energy systematically, because of the high prices.” Due to escalating costs, companies who do make an effort to reduce energy use can gain a considerable competitive advantage, as one services company told us: “we need to be better than the next person in terms of efficiency. If we can cut costs, we can increase margins.” A linked incentive is risk management - the need to control energy use carefully, to prevent shortages, particularly at times of peak electricity demand; and a longer-term worry about dependence on fossil fuels.

Reputational issues

For some companies, particularly the less energy-intensive retail and service companies, reputational issues are more of a driver than cost. “Our customers are doing something about it, and expect us to do the same.” As consumers become more aware of environmental issues, businesses are under increasing pressure to show that they are taking note. This helps to motivate senior management within the company. Increasingly, investors too are asking questions of large companies: “we get questions from our shareholders about carbon disclosure.” Similarly, two companies mentioned pressure from their supply chain as a motivating factor. “Some clients are starting to ask us, because of their ethical or procurement policy.”

Government policy and legislation

Though currently overshadowed by price rises, companies also cite government policy and legislation as an influencer. Companies understand that the UK has targets which all sectors are asked to contribute to, and that government will implement policies to help the process. However, there is a feeling that policy is not currently clear or direct enough. “We need a link between the 60% target and legislation... we need a clear idea of where we’re heading and how we’ll get there.” Energy-intensive companies involved in the European Emissions Trading Scheme (EU ETS) or a Climate Change Agreement (CCA) see policy as a more significant motivator than non-energy-intensive industries. As one company told us, “We’re not in the EU ETS... so there are no direct effects.” However, most companies can point to a piece of legislation that had impacted on them, and do feel the effects of policy. As one respondent puts it, “I’ve never sat down and looked at this from a policy perspective. Government policy is part of the background noise pushing us in the right direction.”

Why aren't more companies taking action?

The companies included in this research had all made a commitment to managing carbon emissions. The research did not involve companies who have taken no action, or limited action. However, the companies interviewed, and Carbon Trust staff, were asked for views on why more companies do not take a systematic approach to carbon management. Most stated that the primary reason for companies not taking action on carbon emissions is because energy costs are simply not a company priority. This rationale often applies to smaller businesses that do not see energy costs as a major business issue, and so are unwilling or unable to invest sufficient capital or management time in tackling emissions.

There is also a sense that many companies are only prepared to undertake energy efficiency measures that will result in immediate cost savings. Unless the return on the initial investment is obvious, reasonably certain and the investment pays back in the short term, many companies are not prepared to take the investment risk.

Organisational issues are also a factor for businesses that do not engage with the issue of climate change and carbon management. Many organisations do not have a team or individual responsible for energy and delivering efficiency savings. These issues do not, therefore, have the profile within an organisation necessary to focus management time on the business opportunities associated with energy savings.

Given some companies' reluctance to tackle carbon management, government policy has a role to play in encouraging action, and building a better business case. In the section below, the way in which policy and legislation works is considered, and then views are given on individual policy measures.

The role of policy and legislation

As discussed above, although cost and reputation are also important drivers for business, it is clear that government policy and legislation has an impact. It influences companies in a number of ways. First, companies want to operate within legal boundaries, and so will put systems in place to comply with legislation. Second, some government policies require companies to measure and report their emissions, which requires management time, and can help focus attention on an issue. Third, and related, a policy measure might prompt a company to think through issues more strategically, starting to look at the carbon impact of investment decisions, for example. Lastly, some policies may work simply because they change the price of energy, or energy efficient products: companies will want to reduce costs and so will make changes accordingly. Each of these motivations is explored below.

Compliance

Large companies see compliance with legislation as something that should be done automatically - they want to operate within legal boundaries. This is not necessarily the same for smaller companies, who may not be aware of, or understand, legislation. But large companies have clear processes for compliance. In some ways, this is helpful. It means that companies accept legislation - particularly standards-based regulation of processes, products or buildings, for example - as something they just have to comply with. "That's the easy bit", as one retailer says.

Seeing policy as just a matter of compliance is also problematic, however, in that it is less likely to drive strategy or change within a company. It is just a hurdle to jump, not a motivator: "Legislation is irrelevant because we'll just comply with it. It doesn't drive the people at the top." A number of interviewees made the distinction between basic regulations, and economic instruments such as taxes and trading schemes. When companies see potential cost saving or money making opportunities, regulation and legislation becomes more motivating. "Economic instruments are far more powerful motivators than regulation."

Management time

Some policy works because it encourages companies to focus management time on an issue. The EU ETS and the CCAs both work in this way, as reducing carbon emissions finds its way to the boardroom table. The legislation requires companies to enter into a dialogue with government and to meet prescribed targets. This means that companies have to devote resources to measuring, managing and reporting carbon or energy. As they devote more management time to energy issues, they may well begin to see other opportunities for savings. Companies may, therefore, begin to realise savings over and above what is required by the policy measure itself. This seems to have been the case with the CCAs, as targets were achieved earlier and more easily than expected. Many companies went into the Agreements thinking that they were already as energy efficient as they could be, but focussing further attention on energy saving realised substantial further benefits.

Encouraging strategic thinking

Legislation - or the threat of it - encourages companies to think strategically about energy and carbon. Companies might not have been aware of the potential for energy saving, until a policy requires them to address it. This encourages them to apply management time to the issue - as described above, and to look more strategically about energy used. For example, once companies discover that tax breaks are available for certain energy efficiency investments (through Enhanced Capital Allowances (ECAs)) they may start to consider investing in energy efficient buildings, as they begin to understand the longer-term potential for cost saving through efficiency.

Companies are also affected by the signals sent by policies that do not apply to them directly. For example, some companies not currently involved in emissions trading are nevertheless preparing for a future in which carbon becomes a commodity that can be traded: "the threat of emissions trading is a very powerful influence." They are therefore putting systems in place, and making longer-term investments, which they believe will put them in a good position to benefit from any future trading scheme.

Changes to costs

Some legislation works because it increases or decreases costs. For example, ECAs reduce the cost of some energy efficiency investments. The Climate Change Levy (CCL) increases the cost of energy, and so has an impact as a price signal. According to classical economic theory, investment will take place until the marginal cost equals the marginal benefit. In other words, a company will automatically respond to rising prices by investing in ways of reducing those costs, until the point at which the investment is costing more than the savings. Following this reasoning, any policy measure which changes prices will result in firms changing their behaviour accordingly.

However, the price signal does not, in reality, work in this way. Companies do not have enough information or time to seek out all the opportunities available to them, even if they could save money over the longer term. There will always be other things to focus on, and a certain amount of inbuilt inertia which prevents firms from taking action. As described below, many firms, particularly ones with lower energy bills, have responded to the CCL by simply paying the bill, rather than finding ways to reduce their energy use.

Companies in our study did respond to changing costs imposed by the market, given the huge increases in energy costs over recent months. However, changes to energy costs as a result of legislation are not seen as a significant influence on their own - perhaps because the market cost of energy over recent years has dwarfed any policy-induced price change - in 2005 the CCL represented an increase of between 4 and 7 per cent of the average electricity bill paid within the commercial sector.¹ Economic instruments work just as much through requiring a company to focus management time and thinking on an issue - this is particularly true of trading schemes rather than taxes.

¹ *Quarterly Energy Prices*, Department of Trade and Industry, June 2006

How well are current policies working?

Companies were asked about a number of policies which government has put in place to encourage business to tackle carbon emissions.

The Climate Change Levy

Most companies with smaller energy bills do not see the Climate Change Levy (CCL; distinct from the Climate Change Agreements, discussed below) as a significant factor in changing their behaviour. “The CCL hasn’t encouraged people to do things differently”, as one food and drink company says. Many companies see taxation as an unavoidable cost: “The Levy is seen in the most part as just another form of taxation, and many companies don’t see the link in reducing energy usage and reducing CCL spend.” Neither is the Levy high enough to make any real impact on the bottom line: “We just pay it. It’s a relatively small proportion of our bill.” As discussed in the section above, companies do not automatically respond to price changes, especially the relatively small price changes caused by the CCL. Price signals on their own do not necessarily provide a strong enough motivation to act.

The CCL is linked to a reduction in National Insurance (NI) contributions, and was introduced as the first step in a process of shifting taxation from labour to resource use, as pledged by the Government’s 1997 ‘statement of intent on environmental taxation’. However, this link is not understood or noted by many companies. Only one in our survey actually referred to the link: “You are supposed to get a reduction on your NI - that is difficult to see in practice.”

Not all companies, however, are so dismissive of the CCL. One pointed out that “it has an effect through the price signal.” Two companies said that it had affected decisions about sourcing energy: “it has made us view how we purchase energy differently.” In particular, it may encourage uptake of renewable energy tariffs, as these are exempt from the CCL.

Climate Change Agreements

The Climate Change Agreements (CCAs) were introduced alongside the CCL. Open to energy-intensive industries only, they offer companies an 80 per cent discount on the CCL, in return for reaching energy efficiency targets. Around half the companies we spoke to are involved in a CCA, though in some cases, these cover only a fraction of the company’s business. Reactions to CCAs differ markedly to the CCL. The CCAs have encouraged companies to think strategically about energy efficiency and to drive a greater understanding of energy use, helped in part by the threat of a tax if they do not comply. They have also helped many businesses who felt they had reached the limit of the energy efficiency options open to them find further efficiency savings. One company said that CCAs have “put the issue on the radar”; another said “we have definitely saved energy through the agreements.” Interestingly, the threat of a tax for CCA companies seems to have had more of an impact than the imposition of the CCL for those that pay it. One company has calculated that their CCA agreement is worth £1 million a year, in terms of the CCL rebate: “This figure is used to justify investment.”

Companies do, however, report problems in terms of complexity and conflict between the CCAs and the EU ETS. The two schemes work in different ways - for example, the EU ETS requires absolute carbon savings, whereas the CCAs are based on relative improvements in energy efficiency. It is therefore difficult to use CCAs to prepare for the EU ETS.

The EU Emissions Trading Scheme

The EU ETS is a relatively new policy instrument. Several companies cite it as the most significant policy driver for their company, and respondents were generally positive about its impact, seeing it “more as an opportunity than a threat”. Companies like the scheme because it provides opportunities for profit as well as cost, depending on how they decide to approach it: “it’s an important policy measure that is premised on the right basis, as trading is an opportunity for business.” Like the CCAs, it works because it focuses management time on the carbon and energy issues, creates risk which needs to be managed, and encourages companies to think strategically: “It has had a marked impact on our understanding of carbon costs.” There are some concerns, though, about the bureaucracy associated with the scheme - a company with only one small site covered by the scheme points to a £30,000 cost to get verified. There is some resistance to the scheme from companies who do not view it as a core part of the business: “we are shopkeepers, not energy traders.” There is a sense in business that the skills required to understand the scheme and to make it work effectively for a company will be too much of a diversion from the day-to-day work of the organisation.

Even companies not in the EU ETS have been influenced by it. As one says, “it’s inevitable that we’ll be scooped up into some form of trading scheme, so we’re preparing now.” Another services company is thinking of introducing its own scheme: “we’re looking at some kind of carbon trading scheme across all our European properties.”

Enhanced Capital Allowances

Enhanced Capital Allowances (ECAs) are essentially a tax rebate for energy-saving technologies and products. If companies invest in equipment which is on the list of approved technologies, they can claim 100% first year capital allowances. Most companies we spoke to had used ECAs, but few saw them as a significant motivator or driver of investment decisions. The majority view is summed up by one respondent who says: “we use them, and they make it a bit less expensive. But there are too many rules surrounding them - it’s too complex.” The difficulties lie in the fact that only specific pieces of equipment qualify for an ECA. So, as one company explains, “their impact on a project is fairly small. For example, on a £0.5 million building project, only £2k of the investment was eligible for an ECA.” A further problem with ECAs is that they only provide help for technological investment, when many energy efficiency solutions involve better management of existing assets.

Some companies have, however, found ECAs to be very useful in stimulating investment. ECAs were factored into the investment equation when making major new equipment purchases. This was particularly relevant for retailers who purchase an electrical product (such as a chiller) for installation across an entire network of stores. On this scale, ECAs have the potential to “dramatically change an investment decision.”

Two companies noted that ECAs have a beneficial effect through the supply chain - companies want to buy technology which is eligible for an ECA, and so encourage their suppliers to get their technologies onto the list. To some extent, the presence of a particular product on the ECA list gives it a ‘seal of approval’ which can itself help to generate demand for the product.

Evidence from Carbon Trust clients shows that the greatest cost-savings realised through an ECA investment are those brought about by the energy efficiency savings, not by the tax reduction itself. In other words, companies save money because they are using less energy, thanks to more efficient products. The savings gained through the actual tax incentive are not so great, but they have the effect of focussing attention and directing the company to invest in the right way.

Building Regulations

Building regulations were cited as the most important policy by most of the non-energy-intensive companies we spoke to - particularly following the new measures introduced as part of the EU's Energy Performance of Buildings Directive (EPBD). Building regulations set a minimum standard required by law, so companies have to comply. The new standards require them to change the way they approach large refurbishment projects as well as new build. However, the government has not yet made clear how they will implement several aspects of the Directive, including the requirement to introduce an energy labelling scheme for public buildings. Many companies feel that the UK has missed an opportunity in the way that they have transposed the Directive into UK law: "The industry has been ready to run for ages. The regulations should be strengthened and not watered down. Strengthen it and we'll do it", as one services company told us. Some companies suggested more imaginative ways in which the EPBD could have been implemented, too: "The EPBD could have been a very powerful policy instrument particularly if it was attached to a business rate." Companies operating in this sector believe that the energy labelling system has the potential to become a market shaper by driving behaviour change in consumers.

Most companies we spoke to were also very critical of the enforcement of building regulations. The inspection and compliance mechanisms are ineffective and under-resourced. This penalises companies who do make an effort to comply. It also increases the uncertainty, making investment decisions more difficult. If building regulations are to be used as a strategic driver for low carbon investment, the issue of enforcement will need to be addressed.

Other policies

Companies pointed to other policies that had an impact on their carbon management:

- The UK Emissions Trading Scheme, a voluntary scheme which is now reaching an end: companies saw problems because the UK scheme does not mesh with the EU ETS. There had been limited take-up among the companies we talked to. However, many companies were attracted to the idea of a trading scheme in principle. They saw the potential for an expanded, possibly mandatory, trading scheme at UK level, to complement the EU scheme. This is discussed below.
- Planning requirements: an increasing number of local authorities are specifying that commercial developments must incorporate a percentage of on-site renewable energy generation - the so-called 'Merton rule'. Although the idea of pump-priming renewables and on-site generation is generally welcomed, two involved in such a planning application questioned the practicality of such an approach, saying that on-site generation may not be appropriate in all developments, and that it is a "poor way of saving carbon". Some participants in the research felt that the percentage targets were impractical, particularly in energy-intensive city centre locations, as they believe it to be almost impossible to establish an on-site generation facility capable of meeting the site's energy needs.
- The Code for Sustainable Homes: this voluntary code, now under development, was cited as an important motivator, as it drives change throughout the supply chain in the construction industry. As one respondent says, "we are developing a whole range of more sustainable products because pressure is mounting in anticipation of the Code for Sustainable Homes. Anything that impacts on buildings has an effect on other companies too."

Current policies: Some conclusions

The research shows that companies are beginning to find ways to measure and manage their energy use and carbon emissions, and in some cases are investing considerable amounts of time and capital in doing so. However, current policy levers are not working as well as they could to motivate and encourage companies to play their part. The experience of different policies, as described above, suggests some generic conclusions about what types of policy and approaches motivate business:

- Regulations setting minimum standards are helpful in providing a baseline, but will not necessarily motivate companies to think strategically, unless regulations are linked to other incentives (labelling or fiscal measures, for example) and unless the future direction of regulation is made clear and predictable.
- Taxes and fiscal incentives, such as the CCL and ECAs, do not necessarily work on their own, as the price signal is not always clear or significant enough. They need to be linked to other measures, so that companies develop management systems for reducing carbon. Simply imposing a small cost, or offering a small tax benefit, does not do this.
- Companies are generally positive about the effect of trading schemes, which work because they encourage companies to think through carbon management strategies, and put the right systems and people in place.
- There is a gap in policy for the non energy-intensive sector, who do not feel that the current policy framework provides sufficient motivation. Neither is there a clear incentive structure in place for small and medium-sized companies, whose individual impacts are small but are a significant source of emissions overall.
- Although the energy-intensive companies have a good incentive structure, in the form of the EU ETS and / or the CCAs, the uncertainty surrounding the post-2012 period prevents companies making longer-term investment decisions.

Policy recommendations

Based on the research findings both from the interviews conducted and the seminar, the final section of this report puts forward some recommendations for future policy development, and suggests a way of taking forward a dialogue with business on these issues.

It is clear from the businesses we spoke to that there is a need for government to be clearer about the future direction of policy, and about the contribution expected from all sectors of the economy. Many pointed to increased government rhetoric on climate change, not matched by firm policy commitments, for example in the domestic and transport sectors: “There’s no drive to it. If we’re serious about reducing emissions by 60% over 50 years, something drastic has to be done.”

The need for policy to address behaviour change was also apparent. Policy needs to cover people and how they behave, as well as technology. Developing policy initiatives that affect this behaviour change is a considerable challenge.

Below, ways forward are suggested in four areas: taxation, emissions trading, regulatory standards, and support for on-site generation. Finally, ways of taking forward the dialogue between government and business are proposed, and suggestions for further research made.

Tax incentives

As described above, tax measures, such as the CCL and ECAs, are less effective in isolation than if introduced as part of a package of measures. Many companies pointed out that, to be effective on their own, taxes such as the CCL would have to be considerably higher than they are at present: “increasing tax would be a great motivator but would go down like a lead balloon.” Increasing taxes could create competitiveness effects for some sectors, particularly true if increased taxes on carbon or energy are not matched by tax reductions elsewhere. The government originally intended to link tax increases on resource use to tax decreases on labour, but the companies we spoke to did not feel that this had happened: “The shift in taxation from income to resource use has been talked about for some time. But in reality it’s piled on at one end and not taken off at the other.” One respondent said that government was “too nervous” to make this happen. But as another company commented, “if government is serious about reducing carbon, they need to look at revenue elsewhere in the economy.” Government has committed, in the recent Energy Review, to examine how CCAs can be used in future to encourage energy saving. With this in mind, it is important that policy does not create a net additional financial burden on firms, and where possible fiscal incentives are linked to energy efficiency measures to help incentivise change. Potential examples cited include:

- A less restrictive system for ECAs, reducing the administrative burden on companies and improving the level of incentive.
- More generic tax incentives to help with energy efficiency investments. This could include energy services, such as consultancy or management issues, as well as specific technologies, and would replace or supplement the existing ECAs.
- Tax rebates for energy efficient buildings - for example, a reduction in business rates for buildings that reach the highest standard under the new labelling scheme for public buildings.

Emissions trading

An emissions trading framework which includes more sectors of the economy, particularly non energy-intensive sectors like retail and services, was the most popular policy initiative amongst the companies that we spoke to. As one company said, “we wouldn’t mind being part of a mandatory trading scheme because it drives good practice.” Trading schemes are also seen as the most cost-effective approach, because each company can choose how they respond. Some foresee potential problems if a scheme is not linked in some way to the EU scheme: “We should keep a trading scheme in one place rather than just having UK and EU schemes... we could expand the EU scheme to cover new sectors.” Complexities of EU-level negotiations, however, make it difficult to dictate the direction of the EU scheme, meaning that extending trading to non-energy intensive sectors may well have to start in the UK, before possibly extending across the EU. Further issues surround the allocation of permits, particularly for industries that are constantly changing and expanding, such as the retail sector.

The Carbon Trust has already put forward proposals for a UK trading scheme, involving large companies who are not part of the EU ETS, such as the retail and service sector.² Defra then commissioned further work on this proposal, from NERA and Enviro.³ The resulting proposals would extend emissions trading to large non-energy intensive organisations in the public and business sectors, concentrating on energy use at sites that have a half-hourly electricity meter, but excluding small energy users in order to reduce administrative costs. Just under 5,000 organisations, on 50,000 sites, would be covered by the scheme.

The recently-concluded government Energy Review announced a consultation for a mandatory emissions trading scheme of this sort, alongside other options for achieving reductions in the business sector. Based on these research findings, recommendations for this consultation and for future emissions trading include:

- Implementation of the proposal, further developed by NERA and Enviro, for a UK-level trading scheme for large companies who are not part of the EU ETS. The research carried out for this project shows that this would receive significant support from business.
- Further development of the EU ETS, to ensure robust allocation/distribution of allowances across to EU to ensure a level playing field in term of competitiveness and increased long-term certainty over its future.
- Further investigation into ways of enhancing the uptake of energy efficiency in SMEs, possible routes including product standards and extending the current supplier obligations in the domestic sector.

2. *The UK Climate Change Programme: Potential Evolution for Business and the Public Sector*, Carbon Trust, November 2005

3. *Energy Efficiency and Trading Part II: Options for the Implementation of a New Mandatory UK Emissions Trading Scheme*, NERA / Enviro, April 2006

Regulatory standards

As this research shows, regulatory standards are useful in setting a minimum performance level, for buildings, products or processes. However, they do not always motivate companies to think more strategically about carbon management, and uncertainty about implementation and enforcement of the European Performance in Buildings Directive (EPBD) has been problematic for industry. The recent announcement in the Government's Energy Review that the guidance accompanying Building Regulations will be simplified, is very welcome. There are also ways in which government could use regulation more imaginatively, for example by linking performance standards to fiscal incentives, in order to motivate change within companies. Specific recommendations include:

- Introducing a clear labelling scheme for public buildings, as required by the EPBD. The definition of a 'public building' should be wide - including all large buildings visited by the public (such as retail or leisure facilities, even if privately owned). Buildings gaining a good rating could be eligible for tax rebates, for example through business rates, or other help with energy efficiency investments. The ability to differentiate buildings by this labelling system would also become a market driver and lead to significant changes in consumer behaviour.
- Building regulations will not drive standards up unless they are well enforced. Government, and local authorities, must improve the skills and enforcement capability of the building inspection system. The need to address issues of compliance was acknowledged by Government in its recent Energy Review.

On-site generation

Many companies we spoke to pointed to a lack of support mechanisms available for on-site generation of heat or electricity - whether combined heat-and-power (CHP) or renewable generation such as small wind, PV or biomass. As one respondent says, "Most incentives are for the generation industry - end users can only control how they use the energy they buy." Electricity and heat generated on-site has significant benefits, as it avoids the losses from the transmission and distribution system. However, under the current regulatory regime, there is little or no economic incentive for companies to invest in on-site generation, other than the Renewable Obligation and some support for CHP, and as a result, few do. Those that do generate energy on-site have very different reasons: either reputational reasons - renewable energy sources like solar panels are a highly visible commitment - or as a hedge against grid difficulties or prices. A CHP system, for example, will provide guaranteed power, reducing reliance on the grid.

Given the wider benefits of distributed generation, much more could be done to encourage companies to invest. Under the DTI's recently-published microgeneration strategy, some support will be provided. The Energy Review also recommends that local authorities should include policies in their development plans that require a percentage of energy in new developments to come from on-site renewables. Further incentives for on-site generation could include:

- Reward for excess power sold back to the grid - energy companies should be required to buy back power, and the price should reflect time-of-day benefits and carbon benefits.
- Reward for on-site heat generation, for example, through an obligation on energy suppliers and suppliers of conventional heating to supply a proportion of renewable heat installation.
- Encouragement of on-site generation through planning, building regulations, business rates or labelling systems.

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