Objectives and Actions

This Chapter considers the objectives for microgeneration strategy and looks at the actions needed to deliver these objectives.

Objectives

There has been much discussion over the need for the Government to set a microgeneration target and the positive impact this could have. Achieving any such target would then be a key objective against which success could be measured. But even key players in the industry agree that it is too early in the development of a market to set a meaningful target. We need a clearer idea of the real potential of all the microgeneration technologies and, perhaps more importantly, an idea as to how consumers will react to the growing profile of these technologies (i.e. which technologies will prove more attractive).

Under the requirements of the Climate Change and Sustainable Energy Bill[21] (should it receive Royal Assent) we will be closely monitoring the development of the market, assessing future trends and will make a further determination, based on evidence collected, regarding the suitability of a target by November 2008.

Action: DTI will undertake such further analysis and research as is required, building on the EST study, to enhance understanding of the future potential of microgeneration technologies before making a decision on whether a microgeneration target is required.

The key messages to be drawn from the preceding chapters that justify a microgeneration strategy and direct its broad approach are:

- Microgeneration technologies could help Government deliver our long term objective of sustainable, reliable energy for all.
- There are many microgeneration technologies; each has particular characteristics that make it more effective in a specific setting. No single technology should be promoted above the others.
- The markets for all technologies are in the very early stages of development, which makes it difficult to make long term predictions regarding uptake.

[21] References to the Climate Change and Sustainable Energy Bill throughout this document are based on the premise that this Private Members Bill achieves Royal Assent.

- The UK has some level of representation in all microgeneration technologies but there may be a skills shortage if the market increases rapidly.
- Uptake of microgeneration technologies is currently constrained by the high cost of the technologies and a lack of reliable information.
- There are opportunities for local authorities to be more proactive in promoting the incorporation of microgeneration through sensible use of planning policies.

- There may also be opportunities to promote microgeneration through use of Building Regulations.
- Long term solutions are needed to ensure that when levels of microgeneration increase this type of energy generation fits into the wider energy system.

Guided by these factors, the objective for the strategy can be defined as "creating conditions under which microgeneration becomes a realistic alternative or supplementary energy generation source for the householder, for the community and for small businesses".

Actions

To deliver the above objective a portfolio of actions is needed to remove the constraints outlined in earlier chapters.

Tackling cost constraints

Although the upfront costs of most microgeneration technologies are possibly the most significant constraint on uptake, there are several ways in which these costs can be reduced for the end consumer or additional revenue (from electricity generating technologies) can help the consumer to recoup the cost more quickly. We need a better understanding of consumer behaviour and the drivers of early-adopter purchase decisions in order to ensure that our support measures are correctly targeted. A greater understanding in this area will be of particular value when developing a communications package (as outlined in the next section).

Action: DTI will undertake further research into consumer behaviour and, in particular, what drives early-adopter purchase decisions.

Capital grants are the obvious method for reducing upfront cost. The Low Carbon Buildings Programme (covering the UK) encourages both energy efficiency and microgeneration technologies in buildings and will allocate £80m of grants over a period of three years (between 2006-09) through two streams.

The original £30m fund was supplemented by the announcement in Budget 06 of a further £50m to help fund the installation of microgeneration technologies in a range of buildings including schools, social and local authority housing, businesses and public buildings.

Stream 1 will provide grants to household and small community projects, whereas Stream 2 will fund larger-scale projects. Stream 1 will continue the support for

projects at the individual and community level that has been started under previous capital grant programmes (Clear Skies and the Major PV Demonstration Programme). The larger projects funded under Stream 2 will incorporate advice from the Carbon Trust on optimising energy efficiency and microgeneration technologies in buildings. The projects will help to raise the profile of microgeneration, bringing it to the attention to a wider audience. They will also encourage the construction industry to make use of microgeneration with a focus on projects that can be replicated, with the aim of helping to generate the levels of demand that will see costs fall. (A break down of how the original £30m will be spent can be found at Annex B and further details regarding the additional £50m will be published shortly). The scheme will be run by a consortium bringing together the Energy Saving Trust and the Buildings Research Establishment, and will be launched in April 2006[22].

Action: DTI to publish details (following consultation with industry) of how the extra £50m will be spent.

For heat generating technologies, Government is currently considering mechanisms for supporting renewable heat in the context of responding to the Biomass Task Force. For electricity generating technologies, additional revenue can be obtained through ROCs, LECs and REGOs. These are the three types of green energy certificates that generators of electricity from renewable sources are entitled to claim (see box). The DTI has already taken some steps to improve access to ROCs for microgenerators - the Renewables Obligation (RO) was amended in 2005 to allow microgenerators (those generating stations with a net capacity of 50kW or less) to claim ROCs on an annual or monthly basis. Further amendments will be made to the RO through the Climate Change and Sustainable Energy Bill. These amendments will allow agents to act on behalf of microgenerators through the process of accreditation on claiming of ROCs, allow ROCs to be issued to agents and allow agents to amalgamate the output of microgenerators. All these changes are aimed at encouraging the development of a market where agents can remove the administrative burden of claiming ROCs, allowing microgenerators to claim the reward (less agents' costs) without needing to understand the administrative complexities of the RO. The Bill will make a further change to the RO that will remove the requirement for a sale-and-buyback agreement with an energy supplier, further reducing the administrative burden.

REGOs are of less immediate value but could become important if levels of electricity from microgenerators rise significantly and energy suppliers buying their electricity from these microgenerators are likely to want the REGO attached to the electricity for Fuel Mix Disclosure purposes. It would therefore be sensible to assess the benefits that could accrue to

[22] Further details can also be found at www.lcbp.co.uk

REGOs/ROCs/LECs.

ROCs

The Renewables Obligation (RO) is an obligation, administered by Ofgem, on licensed electricity suppliers to provide a specified and annually increasing proportion of their sales from renewable sources. Generators can claim 1 Renewable Obligation Certificate (ROC) for every 1 MW of eligible renewable electricity generated. These are then sold to suppliers who can meet their obligation by presenting ROCs or by paying into the "buy-out fund" or a combination of the two. At the end of an obligation period the buyout fund is recycled pro rata to all suppliers who presented ROCs.

Specific arrangements apply for microgenerators (those with a capacity of 50kW or less). In order to be issued with ROCs the microgenerator must first gain accreditation from Ofgem by completing a questionnaire, although ROCs will be issued for data which has been submitted prior to accreditation being obtained. In order to receive ROCs on an ongoing basis, generators must submit output information to Ofgem. Microgenerators have the option to submit their data on either a monthly or annual basis. ROCs are awarded on the basis of electricity generated. 500kWh - 1499 kWh earns 1 ROC, 1500kWh - 2499kWh earns 2 ROCs, and so on. These ROCs can then be sold to electricity supply companies to help them meet their obligation. The price of a ROC is subject to the market and is affected by different factors for example, the level of renewable generation or expected generation, but microgenerators could currently expect to receive £20-£30.

REGOs

An EU Directive on the promotion of electricity from renewable energy sources requires that Member States ensure that a Guarantee of Origin is issued, on request, in respect of electricity produced from renewable energy sources. These renewable energy Guarantees of Origin (REGOs) are issued by Ofgem. A microgenerator can obtain REGOs by completing the appropriate section of the same questionnaire they complete in order to gain accreditation before claiming ROCs.

REGOs became particularly important from 1 July 2005. After this date all suppliers must hold REGOs as evidence of renewably generated electricity in the mix of fuels supplied to customers. In addition an Ofgem consultation in 2005 on revised Green Supply Guidelines proposed REGOs as a potential method for demonstrating the origin of renewable energy for green supply under the green electricity tariffs that are becoming increasingly popular.

At the moment there is no formal arrangement for REGOs to be traded (although there is no legal barrier to prevent trades occurring), so they are unlikely to provide monetary value for microgenerators. However, because of the fuel mix disclosure arrangements generators may find that increasingly suppliers will want to purchase renewable electricity with a REGO.

LECs

Renewables Levy Exemption Certificates (LECs) are issued to accredited renewables generators at the rate of one LEC for every MWh of output that reaches the utility (i.e. is not consumed within the home). These LECs are sold on with the electricity and allow the supplier to 'badge' the electricity as free of Climate Change Levy. Each LEC is worth a nominal £4.30.

microgenerators as a result of acquiring REGOs, and also LECs, and whether there is a real need to simplify the process for claiming these certificates as well as ROCs.

The arrangements for claiming these certificates is complicated, with the benefits sometimes opaque to the uninitiated.

Action: DTI and Ofgem will produce a clear guidance document covering all three types.

This document will set out the benefits of each certificate and explain whether and how microgenerators would need to go through the process of applying for each.

More radical options for simplifying access to the benefits of these certificates have been raised in the consultation that preceded this strategy and in work carried out for the DTI under the Distributed Generation Co-ordinating Group.

Action: DTI will investigate all the suggestions outlined in the two reports published by the DGCG on the "Accrual of ROCs, LECs and REGOs"[23] and publish a formal view by end 2006.

Electricity generating microgenerators who export excess electricity already have the option of entering into an agreement with a willing energy supplier in order to receive payment for that electricity. This extra income can help tip the balance in the decision-making process of an interested consumer, or perhaps create an additional revenue benefit for a supplier interested in providing microgeneration through a so-called "Energy Services" contract. The main obstacle to making progress in this area is that electricity suppliers face disproportionately high transaction costs when dealing with very small quantities of exported power from individual consumers. As a consequence, there is very little incentive, and may even be a financial disincentive, for electricity suppliers to offer export tariffs. In turn, this situation largely exists because the detailed rules and codes allied to the Balancing and Settlement Code were never designed to accommodate large numbers of relatively small power exports.

There is a good case for the settlement rules that result in these difficulties to be addressed to allow microgeneration customers a fairer reflection of the value their exported energy has. Energy suppliers

[23] www.distributed-generation.gov.uk/wstreams.php?action=project_detail&f_ws_id=4&f_project_id=37&f_ws_no=4

themselves are best placed to propose and bring about the necessary changes within the industry to make this happen. The Climate Change and Sustainable Energy Bill includes a clause that is designed to encourage suppliers to develop a scheme that will lead to microgenerators having the confidence that their exported electricity will be acquired.

Action: Energy suppliers to develop a scheme that will reward those microgenerators exporting excess electricity.

If suppliers do not develop a suitable scheme within a year the Bill gives the Government the power to make modifications to supply and distribution licences to impose a scheme on the industry.

Under the Energy Efficiency Commitment (EEC), electricity and gas suppliers are required to achieve targets for improving household energy efficiency. In the second phase of EEC (running between 2005 and 2008) there is an incentive for innovative action - where a supplier carries out an innovative action, Ofgem is required to attribute an increase in energy efficiency to that action of 50% more than it would have otherwise. This incentive can apply to no more than 10% of each supplier's target. MicroCHP is specified as a technology that benefits from that incentive, and ground source heat pumps and solar water heating could potentially be incentivised through this mechanism. But other electricity generating microgeneration equipment is not currently included.

While the EEC targets placed on suppliers are achievable, we recognise that they present a challenge. As a result, we intend to consider with all stakeholders how to provide as much flexibility as possible in the range of measures that can be employed to meet EEC targets, for example microgeneration, all forms of smart metering and behavioural measures. Legislative amendments currently being considered as part of the Climate Change and Sustainable Energy Bill would allow the Government more flexibility in extending the range of measures suppliers could use to meet obligations in the household sector. The provisions would only be implemented following full analysis and consultation on the practical implications, potential benefits and disbenefits of such an approach, and would be included in our consultation process for the next phase of the EEC.

Action: DEFRA to look carefully at the possibility that electricity generating technologies (other than microCHP) could be included within the framework of the 3rd phase of EEC (or, if the enabling powers in the Climate Change and Sustainable Energy Bill are used, carbon emission reduction target framework).

Tackling information constraints

It is difficult to create demand in a market that is unaware of a product or has minimal understanding about the benefits and drawbacks of that product and no clear idea of where to get advice. The two overarching issues in relation to information are - that not enough people

know that microgeneration exists and those that do have no clear idea of costs and benefits or where to go to find this information (which is usually critical for the purchase decision).

An accreditation scheme covering products, installers and manufacturers can move some way towards filling this information gap (providing such a scheme is well known) by providing consumers with an independent indication of reliability and a route for complaints. A scheme covering the product installation and a code of conduct, will be introduced building on the existing Clear Skies and Solar PV accreditation schemes. It will be supported by DTI initially with the objective of the industry itself taking over the responsibility in due course.

Action: DTI will work with the winner of a tender exercise to develop such a scheme with the aim of having it in place by end 2006.

Advice and information for consumers on microgeneration is currently available from a wide range of sources - the Carbon Trust, Energy Saving Trust, Trade Associations, local authorities, etc. Whilst there are some excellent examples of advice provision and guidance offered to consumers, the vast majority of respondents to the consultation indicated that there was a lack of co-ordination and clarity that needed to be addressed. The consumer also has to know where to look (a simple search on Google for 'microgeneration' turned up 70,400 hits, most of which appeared to be related to policy or scientific documents rather than practical advice). Potential consumers (both householders and community organisations) should be able to easily find reliable sources of information regarding microgeneration technologies and the process of installation.

Action: DTI will undertake a thorough review of existing activity in this area to assess effectiveness and identify gaps. We will then assess the feasibility of a communications/information campaign that raises the profile of microgeneration technologies, signposts consumers to reliable sources of information and highlights the accreditation scheme outlined above.

This report will link into the framework of incentives and powers that already exist for local authorities by way of Sustainable Community Strategies (which will evolve from the existing Community Strategies) and the well-being power. The strategies will set out, amongst other things, what local action will be taken to minimise climate change and the well-being power enables local authorities to facilitate or co-ordinate local activity. ODPM held a public consultation[24] (between December 05 and March 06) on the future of Local Strategic Partnerships (LSPs) and this included a section on the evolution of community strategies into Sustainable Community Strategies. Pending the outcome of the consultation, ODPM aims to revise guidance later this year in discussion with representatives of local authorities and LSPs among others.

[24] www.odpm.gov.uk/index.asp?id=1162320

Government Departments are in a good position to lead the way through demonstration of these technologies. The current re-working of the Sustainable Framework for the Government Estate will aim to establish fewer but more stretching outcome-focused targets that add real value to the four priorities for immediate action (including climate change and energy) detailed in the UK Sustainable Development Strategy "Securing the Future" (March 2005)[25]. Further details of these targets will be available later this year when the revamped Framework is published. Some Departments and Government agencies have already made significant steps towards reducing their impact on the environment (see box for details of Environment Agency office).

Action: DTI to actively investigate the possibilities for microgeneration on its own estate.

There are also other information constraints that may be impeding development of a market. Planning regulations have an important role to play in encouraging or discouraging the take-up of microgeneration; equally important is the application of those regulations. Yet if officers in the planning departments of local authorities do not have easy access to relevant information regarding the characteristics of the various technologies they may unintentionally prevent installations even where this is not the intent of the regulations.

Red Kite House : Wallingford

One of the most environmentally friendly offices of its kind was officially opened in June 2005 as part of the Environment Agency's World Environment Day celebrations, demonstrating the Environment Agency's commitment to sustainable building. The office will be used to promote best practice and showcase sustainable building for the 21st Century.

20% of the estimated electricity demand will be met through photovoltaic cells. These cells clad the south-facing canopy, which is designed to provide shade as well as power. Solar thermal panels have been placed on the roof and will satisfy around 40% of the demand for hot water. Both the solar installations were part-funded by the DTI's Major PV Demonstration Programme and are expected to save a combined total of 13.6 tonnes of CO_2 each year.

Wind turbines have been installed on the roof to help draw air through the windows and upper floor of the building. Together with other design features these turbines mean that the office does not require an air-conditioning system.

Overall the building is expected to produce 25% less CO_2 than the DEFRA benchmark of good practice.

[25] www.sustainable-development.gov.uk/publications/uk-strategy/index.htm

The companion guide to Planning Policy (PPS22)[26] offers practical advice to Planning Authorities in England as to how PPS22 can be implemented on the ground and includes a technical annex, which has specific advice on the range of renewable technologies covered by PPS22. In Wales, Technical Advice Note (TAN) 8 provides technical advice on planning for renewable energy. This supplements the policy set out in Planning Policy Wales[27] and a Ministerial Interim Planning Policy Statement on Renewable Energy.

Yet it is possible that further information may be useful to officers in planning departments.

Action: DTI will work with ODPM and planning officers to identify their information needs, assess whether these are being met adequately and, if not, develop a communications pack specifically designed for planners including information packs and workshops.

Local authorities have the potential to play a wider role in promoting microgeneration. There are many examples of local authorities implementing innovative policies that help to reduce greenhouse gas emissions and also tackle fuel poverty. But there is more that Government can do to help other local authorities learn from exemplars. The Climate Change and Sustainable Energy Bill places an obligation on the Secretary of State to publish a report on ways in which local authorities can improve energy efficiency and levels of microgeneration installations, reduce greenhouse gas emissions and alleviate fuel poverty. The aim of the report is not to impose new burdens on local authorities but rather to support them in developing their own approaches to reducing carbon emissions and alleviating fuel poverty, giving them the flexibility to adopt the best local solutions for their communities. Hopefully the report will help local authorities to achieve more cost effective ways of addressing climate change and fuel poverty.

Action: DTI to lead work with other Government Departments and local authorities to publish a report on measures that local authorities can take to improve energy efficiency and levels of microgeneration installations, reduce greenhouse gas emissions and alleviate fuel poverty. This report will be published within 12 months after the commencement of the relevant section of the Climate Change and Sustainable Energy Bill.

The construction industry is a key target for information. This industry has a pivotal role to play - the inclusion of microgeneration technologies on all new housing estates, for example, would have a significant impact on demand for these technologies, raising the profile of microgeneration technologies and helping to turn them into a routinely used product. But the industry has not yet moved in this direction - primarily due to cost and a lack of demand from consumers, but also because the industry remains unfamiliar with the technologies. Introduction of the

[26] www.odpm.gov.uk/index.asp?id=1143908

[27] http://www.wales.gov.uk/subiplanning/content/planningpolicy/planningpolicy-e.htm

Low Carbon Buildings Programme will go some way to address this lack of familiarity. The Government will use its regular contacts with the construction industry to work with them to understand where the real gaps in information are and assess what more can be done to encourage regular incorporation of microgeneration on a voluntary basis (rather than as a result of regulation).

Action: If there is a clear need, DTI will develop a specific communications package, including information packs, to help develop a knowledge base within the construction industry.

Tackling technical constraints

Whilst the penetration level of microgeneration technologies are at their current low point there is little impact on the overall energy system. But if the levels of penetration of electricity generating technologies were to increase, there are likely to be knock-on effects in terms of management of the distribution network. and also on the balancing and settlement arrangements. Moreover, clusters of installations involving high concentrations of microgeneration may mean that distribution networks require some reinforcement or operational adjustments to be made for the network to continue to operate within statutory limits. The current energy system tends to be centralised, with one-way distribution of electricity from big power stations. As we move towards a system where increasing numbers of households are exporting as well as importing electricity we need to ascertain whether the underlying framework can support this change or whether some adjustment is required. The operation of the balancing and settlement arrangements are also relevant to developing a system for the reward of exported electricity without imposing costly metering requirements on households. Some work on the impact of microgeneration on the network, profiling and metering arrangements has already been carried out under the auspices of the Distributed Generation Co-ordinating Group[28] (now the Electricity Networks Strategy Group).

Action: DTI will work in partnership with the energy supply companies, distribution network operators and Ofgem to ensure that network and market systems are able to cope with growing numbers of microgenerators exporting electricity.

Changes to the Electricity Safety, Quality and Continuity Regulations 2003[29] have allowed a more straightforward process for network connection for electricity producing microgeneration technologies below a certain size (16A per phase). This legislation was followed by the publication, and subsequent citation in the Distribution Code, of Engineering Recommendation G83/1, which sets out the technical performance parameters that microgeneration below 16A/phase needs to meet. Both of these requirements remove the need for a customer to obtain permission from the distribution network operator prior to connecting

[28] www.distributed-generation.gov.uk

[29] www.energynetworks.org/dg01.asp

microgeneration. However, in a significant number of contracts in existence between domestic customers and their electricity supplier, there remains a requirement to obtain this permission from the Distribution Network Operator. This is inconsistent with the intent of the relevant legislation.

Action: DTI will continue to work with Ofgem, the distribution network operators, energy suppliers and the microgeneration industry to resolve this issue through the Electricity Networks Strategy Group.

Some microgeneration developers would like to see changes made to the regulations (BS7671: Requirements for Electrical Installations)[30] to make it easier for customers to connect microgeneration without having to undertake disruptive and expensive wiring works. DTI is monitoring progress, through the relevant project set up under the Electricity Networks Strategy Group, of discussions between the microgeneration industry, distribution network operators, and the JPEL/64 Panel (the National Wiring Regulations Committee) with responsibility for overseeing changes to those regulations. Whilst we wish to ensure that no unnecessary barriers exist through technical regulations, the safety of the public is the number one priority for all electrical installations, and we must be satisfied that any changes made to provide better access for microgeneration is done in a manner which does not reduce safety levels.

Action: DTI will continue to work with Ofgem, the Distribution Network Operators, energy suppliers and the microgeneration industry to resolve this issue through the Electricity Networks Strategy Group.

Energy consumption feedback to consumers is another key measure to encourage energy efficiency at home. The recently agreed Energy End-Use Efficiency and Energy Services Directive will require installation of 'actual time of use' metering for all new connections and for replacement meters where "technically possible, financially reasonable and proportionate to the potential savings". The Government is committed to introducing smart metering in the UK as feedback on energy use can have substantial benefits. We estimate that about 0.2 MtC per year could be saved by 2010 with better billing and metering if from 2008 all new and replacement meters are 'smart' meters, also providing consumption feedback. The savings would increase over time as more meters were installed. However, the uncertainty about the scale and duration of these carbon savings is large.

Despite their potential benefits very few smart meters have been installed in the UK. Ofgem's current review of metering is looking at international experience of smart metering and, in the light of this evidence, is examining the potential costs and benefits of innovative metering in the UK context. Ofgem has recently conducted a public consultation[31]. The results of the review are expected in Summer 2006.

[30] www.iee.org/Publish/WireRegs/BS7671.cfm

[31] www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13745_2006.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/metering

It is important that as work continues to develop on the costs and benefits of smart meters the assessment includes the interaction of smart meters with microgeneration technologies. If smart meters are to become the new standard we must be clear on how they relate to electricity generating technologies and whether there are further benefits to systems incorporating both.

Action: DTI will be investigating the possibility of a field trial that brings together smart meters and microgeneration to the effectiveness of smart meters combined with microgeneration technologies.

A report recently carried out for the DTI into the difficulties being faced by small generators when connecting to the distribution network suggests that there are barriers still to be overcome.

Action: DTI will examine the recommendations made in this report and make an assessment regarding the desirability of their implementation.

Actions to remove regulatory barriers/take advantage of regulatory opportunities

Stakeholders have expressed several concerns in relation to the regime governing planning permission and its application. These include lack of clarity as to whether specific planning permission is required, different interpretations of the rules by local authorities and the sometimes complex process of seeking planning permission. The Town and Country Planning (General Permitted Development) Order 1995[32] sets out the criteria under which householders, in certain circumstances, can alter the exterior of their house. The installation of solar panels and photovoltaic cells often fits under these criteria. But in some cases the planning authority may consider that the works would enlarge the roof of a house or alter its shape, and may then require a planning application to be made (including the payment of a fee).

Through its Householder Development Consents Review (HDCR)[33] ODPM has been reviewing the consent regimes that regulate a wide range of developments by householders. ODPM is committed to responding to the Climate Change and Sustainable Energy Bill's requirement for the Secretary of State to form a view as to what provision (or further provision) should be made to facilitate the installation of microgeneration equipment by removing any unnecessary controls. The aim will also be to ensure that planning authorities and householders will have a clearer idea of the situations in which microgeneration can be installed without the need for planning permission. The Secretary of State will report to Parliament on the recommendations of the review and set out any proposals for changes.

[32] Advice can be found on the Planning Portal - www.planningportal.gov.uk

[33] www.odpm.gov.uk/index.asp?id=1143241

Action: ODPM work under HDCR will provide the response to the Climate Change and Sustainable Energy Bill's requirement to form a view as to what provision should be made to facilitate the installation of microgeneration.

There are opportunities to promote microgeneration through use of planning and Building Regulations. Planning Policy Statement 22 Renewable Energy (PPS22), published in August 2004, establishes that local authorities in England may set targets for on-site renewable energy in residential, commercial or industrial projects. It also expressly states that "local authorities and developers should consider the opportunity for incorporating renewable energy projects in all new developments…. Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents". The success of such policies can be seen in the examples of Croydon and Merton discussed earlier. Whilst acknowledging that local authorities must ensure that design, conservation and other amenity considerations are accorded their due weight, paragraphs 1(ii), 8 and 188 of PPS22 do require local authorities to plan positively for the use of renewable energy. Nevertheless, concerns have been expressed as to whether all authorities will include policies on on-site renewables in accordance with PPS22.

Action: ODPM will undertake an urgent review of local plans to determine whether there is a problem with emerging plans that do not fully incorporate PPS22.

If a problem is then identified, ODPM will take swift and appropriate action. Depending on the severity of the problem, that action could include undertaking further direct engagement with local authorities, issuing a Government statement or consulting on an amendment to PPS22.

To help local authorities implement positive planning policies it is important that they have access to the information allowing them to do this in an appropriate way (see earlier point under 'information constraints').

With approximately 120,000 homes required each year (in order to ensure price trends in line with the EU average of a 1.1% p.a. increase), the construction of these new homes provides a significant opportunity for the use of microgeneration technologies.

Building Regulations are framed in terms of reasonable, adequate and appropriate functional requirements for buildings. The Approved Documents that accompany the England and Wales Regulations suggest how the regulations can be met by demonstrating way of compliance. Approved Document L (conservation of fuel and power) has recently been amended, with those amendments coming into force in April 2006[34]. From April 2006, new buildings will have to meet

[34] www.odpm.gov.uk/index.asp?id=1164177

increased energy standards, which will lead to an average 20% reduction in carbon emissions when compared against homes built under the previous standard. Whilst the regulations do not require the incorporation of microgeneration, it will be easier to meet the higher emissions standards demanded through their use. In fact the guidance accompanying the new Approved Document L highlights the contribution microgeneration technologies can make.

In line with the Energy White Paper commitment to raise standards over the next decade and in accordance with Article 4 of the Energy Performance in Buildings Directive ODPM are required to look at Part L again within 5 years. The level of notional contribution from microgeneration relative to the overall energy performance target would be explored again at that time to reflect technical progress, cost effectiveness and market conditions.

It is also important to ensure that microgeneration technologies are fairly assessed with regards to the contribution they can make to reducing the carbon emissions of buildings.

The Code for Sustainable Homes[35] provides an opportunity to drive forward the use of microgeneration as part of the Governments sustainability agenda. We wish to see all new homes in England built to meet the Code. From April 2006, all new homes built with Housing Corporation funding will comply with Level 3 of the Code, together with homes developed by English Partnerships and homes built with direct funding support from ODPM's housing growth programmes. The consultation on the Code finished on 6th March 2006. The Code is performance based which means that it does not prescribe how a particular standard should be achieved, and the final details of the Code are still being developed following analysis of the responses to the consultation, but it is extremely likely that compliance with the higher levels of the energy elements of the Code will not able to be achieved without the incorporation of microgeneration technologies, and that additional Code points will be available where zero emission energy sources are specified and used.

Summary Box

- Need a clearer idea of the real potential of all microgeneration technologies before setting a target. We will be closely monitoring the development of the market, assessing future trends, before making a further determination regarding the suitability of a target.
- The objective of the microgeneration strategy is to create conditions under which microgeneration becomes a realistic alternative or supplementary energy generation source for the householder, for the community and for small businesses.
- A full list of the actions outlined in this Chapter can be found at page 42.

[35] www.odpm.gov.uk/index.asp?id=1162094