

2. Policy Context

2.1 INTRODUCTION TO THIS CHAPTER

Policies regarding renewable energy and CO₂ reduction are rapidly evolving as our understanding of the challenge of climate change becomes clearer and appropriate responses are established at different administrative levels and through varying mechanisms. This, along with the multifaceted nature of energy uses, generation methods and fuel sources, makes for a complicated policy context where approach and importantly targets are not necessarily consistent or compatible. Below is an outline of the key national policy, which with recent publications is at the forefront of renewable energy and CO₂ reduction policy, followed by discussion of how regional policy and local policies currently relate.

2.2 NATIONAL POLICY

The challenge of climate change, and the need to reduce greenhouse gases and stabilise carbon dioxide in the atmosphere to 450ppm (parts per million) has intensified in recent years. At the international level, the **Kyoto Agreement** is currently being updated (using the “Bali Roadmap”) and was to be agreed in Copenhagen in December 2009. Following failure to agree a framework for carbon reduction at Copenhagen, this is hoped for at the upcoming conference in Mexico, beginning at the end of November 2010. The next UN Climate Change Conference is scheduled to meet in South Africa in November 2011. An agreement will commit the UK to an updated carbon dioxide reduction path, as well as technology development and transfer and financial investment, which will need to be reflected in planning policy. In addition, the UK Government is committed to reducing greenhouse gas emissions by 80% from 1990 levels by 2050, and at least 34% by 2020, through the **Climate Change Act (2008)**. The Act is supported by the **UK Low Carbon Transition Plan**, a National strategy for climate and energy, which sets out the Government’s approach to meeting their CO₂ reduction commitments. To achieve this long term target, the UK Government announced in May 2011 an intermediate carbon reduction target of 50% by 2025. As building related CO₂ emissions currently account for approximately 25% of all CO₂ emissions, improving efficiency and supplying buildings with low and zero carbon is a priority. Furthermore, it is predicted that around two thirds of the current housing stock will remain in 2050, highlighting the importance of improving the existing housing stock as well as ensuring new buildings are highly efficient. The Transition Plan includes commitments to reducing greenhouse gas emissions from existing housing stock by 29% on 2008 levels by 2020 and by 13% for places of work on 2008 levels by 2020.

A crucial part of our strategy to reduce CO₂ emissions is a step-change in the resources used to generate electricity and heat, through a switch away from gas and coal, to a much higher reliance on renewable energy. Installations of renewable and low carbon energy infrastructure will need to be both significant and widespread, with every local authority area looking to utilise opportunities. The UK is currently committed to meeting carbon reduction targets set out by the European Commission in the **EU Renewable Energy Target** which requires a 20% reduction in CO₂ associated with electricity, heating and transport through conversion to renewable energy sources. As the UK’s portion of this target, it is expected to supply 15% of its energy from renewable sources. The translation of this target across to the various energy generation areas is not equal in portion, and is instead related to the opportunities and delivery constraints associated with each. Accordingly, the following proportions of renewable energy supply are expected for the three sectors:

- 30% of electricity
- 12% of heat
- 10% of transport.

This study is concerned with the use of electricity and heat in the built environment, and excludes the use of renewable energy for transport. However, the carbon implications of the modelled transport scenarios for the Core Strategy are included as an Appendix to this study.

Traditionally, drivers and targets for renewable energy have focussed on electricity supply. We are now seeing an expansion in focus to consider heat supply as well. **The Draft Heat and Energy Saving Strategy** (2009) aims to ensure that emissions from all existing buildings are approaching zero by 2050. Proposed mechanisms for achieving this include a new focus on district heating in suitable communities, and removing barriers to the development of heat networks, encouragement of Combined Heat and Power (CHP) and better use of surplus heat through carbon pricing mechanisms. Alongside the drivers for CO₂ reduction and the inclusion of renewables, there are also targets and strategies in place to encourage the inclusion of CHP schemes in new and existing neighbourhoods. In 2000 the Government set a new target to achieve at least 10,000 Megawatts-electrical (MWe) of installed ‘Good Quality’ CHP capacity by 2010^{1,2}. In support of this target, the Government set a target to source at least 15% of electricity for use on the Government Estate from Good Quality CHP by 2010. The Government fell well short of this target, only sourcing 6%, which meets the Good Quality standard. However, the shortfall, combined with the introduction of the Renewable Heat Incentive (RHI)³, suggests the Government will be placing significant emphasis on uptake of CHP going forward. Local authorities will play a key supporting role in the implementation of CHP.

Planning Policy Statement 1: **Delivering Sustainable Development** (PPS1) (2005) places an emphasis on promoting more sustainable development, with a **supplement to PPS1 on climate change** released in December 2007. It advised planning authorities to provide a framework to encourage low carbon and renewable energy generation in their local development documents and confirmed that there are situations where it is appropriate for LPA to expect higher standards than building regulations. Paragraphs 31-33 explain that the local circumstances that warrant higher standards must be clearly demonstrated, such that there are clear opportunities for low carbon developments or that without requirements, development would be unacceptable for the proposed location. Paragraph 32 suggests that local requirements should focus on the development area or site-specific opportunities and that the requirement should be in terms of achievement of nationally described standards such as the Code for Sustainable Homes. Paragraph 33 requires that decentralised energy or other sustainable requirements should be set out in a DPD. Care must also be taken to demonstrate that the requirements are viable, will not impact on the supply and pace of housing development and will not inhibit the provision of affordable housing. The consideration of targets both on a LPA-wide scale and for strategic sites is the focus of this study.

Planning Policy Statement 22: Renewable Energy (PPS22) (2004) is becoming outdated and superseded by more current guidance however it is still important to refer to this guidance and targets on renewable energy. It sets out policies that cover technologies such as onshore wind generation, hydro, photovoltaics, passive solar, biomass and energy crops, energy from waste (but not energy from mass incineration of domestic waste), and landfill and sewage gas. PPS22 sets out the Government’s energy policy, including its policy on renewable energy, which is set out in the Energy White Paper. The **Energy White Paper** aims to put the UK on a path to cut its carbon dioxide emissions by some 60% by 2050, with real progress by 2020, and to maintain reliable and competitive energy supplies. The development of renewable energy, alongside improvements in energy efficiency and the development of combined heat and power, will make a vital contribution to these aims. The Government has already set a target to generate 10% of UK electricity from renewable energy sources by 2010. The White Paper set out the

¹ Megawatt electrical refers to electricity generation as opposed to thermal, or heat generation

² Good Quality refers to CHP schemes that are energy efficient. The CHP Quality Assurance programme (CHPQA) rates the quality through assessing the thermal and electrical outputs of CHP schemes.

³ The Renewable Heat Incentive (RHI) is a financial incentive scheme designed to increase uptake of low carbon heating schemes.

Government's aspiration to double that figure to 20% by 2020, and suggests that still more renewable energy will be needed beyond that date.

Paragraph 6 of PPS22 refers to policies in Regional Spatial Strategies and Local Development Documents. The paragraph states that Local planning authorities should only allocate specific sites for renewable energy in plans where a developer has already indicated an interest in the site, has confirmed that the site is viable, and that it will be brought forward during the plan period. Planning applications for renewable energy projects should be assessed against specific criteria set out in regional spatial strategies and local development documents. Regional planning bodies and local planning authorities should ensure that such criteria-based policies are consistent with, or reinforced by, policies in plans on other issues against which renewable energy applications could be assessed.

Paragraph 8 of PPS22 states that Local planning authorities may include policies in local development documents that require a percentage of the energy to be used in new residential, commercial or industrial developments to come from on-site renewable energy developments. These policies are required to ensure that requirement to generate on-site renewable energy is only applied to developments where the installation of renewable energy generation equipment is viable, should not put an unnecessary burden on developers by, for example, specifying that all energy to be used in a development should come from on-site renewable generation. Guidance on the formulation of these policies and best practice can be found in the companion guide to PPS22. These targets and LPA requirements within policy are still pertinent and important for this study, although the setting of specific targets for renewable energy, and not targets for CO₂ reduction from renewable and low carbon energy, is considered bad practice.

In recognition of the overlap and synergies between the PPS1 supplement and PPS22, a **draft PPS** on 'Planning for a Low Carbon Future in a Changing Climate' was released for consultation in March 2010. The draft PPS aims to combine and update the PPS1 supplement and PPS22, calling for regional authorities to set ambitious targets for renewable energy and a clear strategy to support their delivery. Regional authorities were asked to conduct studies using a consistent methodology to highlight comparative contributions that LPA areas can offer in terms of renewable resources. Although the coalition Government has since abolished the regional authorities the South East regional study (see below) remains a valuable resource and has been used to inform low carbon energy capacity within this report following the initial intention of the draft PPS for Local Development Frameworks (LDF) to support the regional strategy by not unreasonably restricting renewable and low carbon energy developments and incorporating supportive local context through criteria-based policies.

The draft PPS states that LPAs should also set out opportunities for decentralised energy and district heating and support opportunities for community-led renewable and low carbon developments, including the production and management of bio-energy fuels. It clarifies that authority-wide targets for carbon reduction associated with new development are likely to be unnecessary following planned changes to Building Regulations in 2013 (see below), though recognises targets could be set for the period prior to that change. It encourages LPAs to select development sites by considering their potential to exploit low carbon energy sources and to identify and set policy for strategic sites where there are significant opportunities for carbon reductions. It also urges LPAs to set out how their area will be planned to adapt to climate change, considering local vulnerabilities and possible adaptation methods. It is unlikely that the draft PPS will be adopted given the streamlining of planning policy by the Coalition Government and the recent publication of the draft National Planning Policy Framework (see below).

In July 2011 the Government published the **draft National Planning Policy Framework (NPPF)** for consultation. The NPPF will replace the current suite of national Planning Policy Statements, Planning Policy Guidance notes and some Circulars with a single, streamlined document. The NPPF will set out the Government's economic, environmental and social planning policies for England. Taken together, these

policies articulate the Government’s vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. The draft NPPF continues to recognise that planning system is plan-led and that therefore Local Plans, incorporating neighbourhood plans where relevant, are the starting point for the determination of any planning application. In assessing and determining development proposals, local planning authorities should apply the presumption in favour of sustainable development and seek to find solutions to overcome any substantial planning objections where practical and consistent with the NPPF.

In relation to renewable energy, the draft NPPF notes that local planning authorities should recognise their responsibility to contribute to renewable energy generation. Specifically, the document states they should:

- *Have a positive strategy to promote energy from renewable and low-carbon sources, including deep geothermal energy*
- *Design their policies to maximise renewable and low-carbon energy development while ensuring that adverse impacts are addressed satisfactorily*
- *Consider identifying suitable areas for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources*
- *Support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and*
- *Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.*

Further, when determining planning applications, local planning authorities should view sustainable developments favourably. This includes not requiring applicants for energy development to demonstrate the need for renewable and low carbon energy, and approving applications if its impacts are, or can be made, acceptable.

The Government has also announced its intention for **Building Regulations** to require that the dwelling emission rate (DER) of new residential development to be 25% better than Target Emissions Rate (TER) in 2010, 44% better in 2013 and meeting a zero carbon target by 2016, with non-residential development expected to meet the zero carbon target by 2019. The enforcement of CO₂ reductions through building regulations, removes the emphasis somewhat from planning. Previously stand-alone policies for CO₂ reduction, such as ‘Merton-style rules’ for inclusion of certain percentages of renewable energy supply, have been used for new development, but such policies are likely to be superseded by proposals for changes to Building Regulations to some extent. However, LPAs can still require sites to go beyond Building Regulations where suitable.

The proposed residential Building Regulations correspond to the DER targets set out in the energy section of the Code for Sustainable Homes for levels 3 (25% reduction) and level 4 (44% reduction), however the definition of zero carbon is likely to differ from the level 6 of the Code (the Code is discussed in greater detail in the section at the end of this chapter). It is a common misconception that full Code levels will be required under the government proposals, but in fact it is just the equivalent of the energy section of the Code that will be applied through Building Regulations (the energy category is one of nine different categories in the Code). Expected changes to Building Regulations are discussed in more detail in section 2.5 below.

The Government has recently undertaken consultation on the **Definition of Zero Carbon Homes and Non-Residential Buildings**. The consultation proposes meeting part of the zero carbon requirements through offsite measures. The document suggests that between 44 and 100% of the CO₂ emissions

reduction must be met onsite, and that for the remaining emissions a range of onsite and offsite solutions are possible. Currently, it is expected that developers will be required to meet a 70% reduction in TER on-site. The consultation also proposes a maximum cost per tonne of CO₂ for offsite measures, which is yet to be published and updated in 2012, to give developers some certainty over the costs they face.

Circular 05/2005 (Planning Obligations) states that the objective of the planning system is to deliver sustainable development and those obligations are intended, among other things, to secure a contribution from a developer to compensate for loss or damage created by a development or to mitigate a development's impact.

The **Energy Act (2008)** gives power to the Secretary of State to establish or make arrangements for the administration of a scheme of financial incentives to encourage small scale low-carbon electricity generation. The holders of distribution licences may also be required under this act to make arrangements for the distribution of electricity generated by small-scale low-carbon generation and to make a payment to small-scale low-carbon generators (or to the Gas & Electricity Markets Authority). This act also allows the Secretary of State to make regulations to establish a new scheme to facilitate and encourage renewable heat generation and to establish methods to administer and finance the scheme.

The **Planning Act (2008)** paves the way for a new planning system for approving nationally significant infrastructure projects, and introduces the concept of National Planning Statement (NPS). Twelve NPSs are envisaged including one covering renewable energy. The act also adds a duty on councils to take action on climate change within their development plans.

In addition, the **Planning and Energy Act (2008)** enables local planning authorities to set requirements for energy use and energy efficiency in local plans, including:

- a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development;
- a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development; and
- development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.

The Coalition Government's Change in Direction

With the recent change in government, it is important to understand how their thinking might change with respect to climate change. The best indication thus far comes from the release of The Coalition Programme. Similar to the previous government, this document seems supportive of climate change mitigation and adaptation strategies. There are, however, some specific changes they have signalled they are interested in changing. These include:

Carbon Targets

The new government supports the increase in European Union carbon reduction target of 30% below 1990 levels by 2020 and seek to increase the Renewable Energy Targets. On the other hand, national targets and climate change adaptation indicators, such as NI185, NI186 and NI188, may be abolished with the Comprehensive Area Assessment.

Driving Action

The new government have indicated that they support local carbon reduction measures and intend to establish a full system of feed-in-tariffs, encourage energy efficiency, and create green financial products that will help the UK work towards a greener future. The Coalition Programme explicitly addresses each of these goals as follows:

- “We will encourage community-owned renewable energy schemes where local people benefit from the power produced. We will also allow communities that host renewable energy projects to keep the additional business rates they generate.”
- “Through the ‘Green Deal’, we will encourage home energy efficiency improvements paid for by savings from energy bills.”
- “As part of the creation of a green investment bank, we will create green financial products to provide individuals with opportunities to invest in the infrastructure needed to support the new green economy”



Bringing Emphasis to the Local Level

Overall, the new government sees local authorities as the most likely bodies to understand what their districts need most. Therefore, they have introduced “open source planning,” which provides neighbourhoods with more influence over local development. The coalition has also mentioned that “Incentives for local authorities to deliver sustainable development” will be introduced. They have gone so far as to give local authorities increased financial autonomy to “do anything they consider likely to promote the economic, social and environmental well-being of their areas unless explicitly prohibited elsewhere in legislation.” They have also abolished Regional Spatial Strategies.

Feed-in Tariffs (FITs) were introduced in April 2010 to replace the support provided by the Low Carbon Buildings Programme and stimulate increased vigour in the take up of installation of small to medium scale renewable electricity generation.

The scheme includes:

- Fixed payment from the electricity supplier for every kWh generated (the “generation tariff”).
- A guaranteed minimum payment additional to the generation tariff for every kWh exported to the wider electricity market (the “export tariff”).
- Generators receiving FITs will also benefit from on-site use: where they use the electricity they generate on-site, they will be able to offset this against electricity they would otherwise have had to buy.
- Technologies included: wind, solar PV, hydro, anaerobic digestion and non-renewable micro CHP.
- Tariffs are tax free and will be paid for 25 years for new projects.
- The tariff levels proposed have been calculated to ensure that the total benefits an investor can be expected to achieve (from the generation tariff, the export tariff and/or the offsetting benefit) should compensate the investor for the costs of the installation as well as provide financial return.
- The government intends to set tariffs at a level to encourage investment in small scale low carbon generation. The rate of return will be established between 5% and 8%.
- The proposed tariff levels for new projects will decrease by predetermined rates each year (“degression”). The tariff rate agreed at the project outset will be maintained for the 20 year period providing guaranteed returns for each installation.

Since its introduction, however, the Government has mentioned that it will come under review in 2013. In March 2011, the coalition government cut the incentive for larger scale solar installations (greater than 50kW) by more than 50%. While this will not directly impact micro-generation installations, it does suggest that as a relatively new policy, FITs may continue to undergo changes going forward.

In 10 March 2011, the Government confirmed that the *Renewable Heat Incentive (RHI)* was to open for applications for the first phase of funding on 30 September 2011. At the time of writing this report, however, phase one has been slightly delayed, but a revised date has not been set. The first phase of funding will focus on supporting large emitters in the non-domestic sector. As part of this phase, the Government will also initiate the *Renewable Heat Premium Payments (RHPP) programme*, which is a £15m pilot programme to test installing renewable heating systems in homes. The RHPP will run between August 2011 and March 2012. A second phase of funding will be introduced in 2012 alongside the Green Deal for Homes (see below).

The RHI represents over £850m of government investment. There is no upper limit to the size of heat equipment eligible under the Renewable Heat Incentive and anyone who installs a renewable energy system producing heat after July 15th 2009 is eligible. The following technologies are included in the scheme;

- Solid and gaseous biomass, solar thermal, ground and water source heat-pumps, on-site biogas, deep geothermal, energy from waste and injection of biomethane into the grid.
- Unlike FITs, tariffs will be paid not on the basis of a metered number of kWh generated, but instead on a “deemed” number of kWh, namely the reasonable heat requirement (or heat load) that the installation is intended to serve.

- Tariff levels will be calculated to bridge the financial gap between the cost of conventional and renewable heat systems at all scales, with additional compensation for certain technologies for an element of the non-financial cost and a rate of return of 12% on the additional cost of renewables, with 6% for solar thermal.

Starting in October 2012, the UK government will introduce the UK *Green Deal* to improve the energy efficiency of all properties in the country. The funding enables owners to install energy efficient improvements with no upfront cost. Instead loans will be provided which are paid back as a surcharge on the energy bills. The scheme is attached to the address, rather than a specific person, which means that there is no financial loss when selling a building. All energy efficiency improvements made to homes or businesses qualify provided that they meet the 'Golden Rule' where the lifetime financial savings outweigh the capital cost plus finance cost, resulting in lower overall energy bills.

2.3 REGIONAL POLICY

The change in National Government has resulted in a review of the role of regional policy and the removal of Regional Spatial Strategies. However, preceding regional policy and their baseline studies are included here, as they provide an important context for how Swale Borough and Kent County as a whole are expected to perform in relation to other areas of the South East.

As set out by the draft PPS on ‘Planning for a Low Carbon Future in a Changing Climate’ discussed above, resource assessments for renewable energy and low carbon developments are to be considered at a regional level in order to inform local action. The regional assessment of renewable resource and the updating of targets was recently completed and was published in June 2010⁴. The resource assessments conducted as part of this study follow the approved DECC methodology which will be utilised for the whole of the South East, and hence results and opportunities identified should be consistent with those emerging from the Regional study.

The **South East Plan (May 2009)** (now revoked) contains a suite of policies relating to climate change and renewable energy. Policy CC2: Climate Change stresses the central role which planning policy is expected to address climate change and sets carbon reduction targets broadly consistent with those in the Climate Change Act:

*“Local authorities ... will include policies and proposals in their plans, strategies and investment programmes to help reduce the region’s carbon dioxide emissions by at least **20% below 1990 levels by 2010, by at least 25% below 1990 levels by 2015 and by 80% by 2050**. A target for 2026 will be developed and incorporated in the first review of the Plan.”*

Policy CC3 requires plans and programmes to incorporate actions which help to stabilise the South East’s ecological footprint by 2016 and reduce it by 2026. Actions will include:

- *increased efficiency of resource use in new development*
- *adaptation of existing development to reduce its use of energy, water and other resources*
- *changes in behaviour by organisations and by individuals.*

Policy CC4 requires LPAs to promote best practice in sustainable construction and help to achieve the national timetable for reducing CO₂ emissions from residential and non-residential buildings. As such, the design and construction of all new development, and the redevelopment and refurbishment of existing building stock is expected to adopt and incorporate sustainable construction standards and techniques.

Policy NRM13 also sets out regional renewable energy targets for electricity as set out in Table 1. Policy NRM14 Sub-regional targets for land-based renewable energy provides further detail as to how renewable generation is expected to be delivered across the region. The proportion allocated for the Kent sub-region is highlighted in Table 2. The Figure below shows an indication as to the mix of resources proposed to meet the sub-regional target. It shows a high proportion of wind energy expected in the South East, along with biomass fuelled heating, and smaller proportions of solar power, landfill gas utilisation and anaerobic digestion of biomass. These targets, based on a resource assessment undertaken in 2001 are however considerably lower than the targets set out by the UK Renewable Energy Strategy, which is calling for approximately 30% of electricity being sourced from renewables.

⁴ South East Partnership Board (2010) Review of Renewable and Decentralised Energy Potential in South East England. Land Use Consultants and TV Energy. Available: <http://www.se-partnershipboard.org.uk/page/5/view/175/sub/77/energy>

Table 1: South East Plan Policy NRM13 Renewable Energy Targets

Year	Installed capacity (MW)	% Electricity Generation Capacity
2010	620	5.5
2016	895	8.0
2020	1130	10.0
2026	1750	16.0

Table 2: South East Plan Policy NRM14 Target for Land-based Renewable Energy in Kent

Sub region	Installed Capacity (MW)	% of regional target
2010 Renewable energy target	111	26.2%
2016 Renewable energy target	154	27.8%

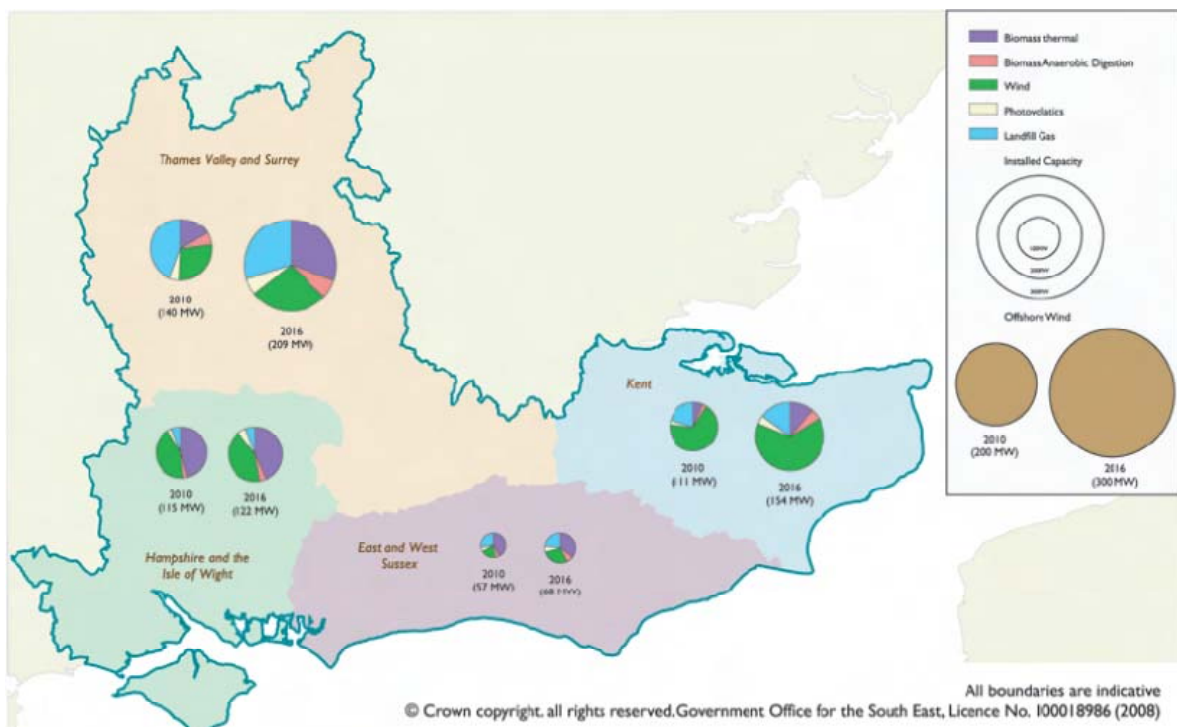


Figure 4: Indicative sub-regional renewable energy potential 2010-2016 (diagram NRM 4 from the South East Plan)

Although no targets for the proportion of renewables used for heat generation are set out in the South East Plan, it does acknowledge that ‘heat generation and use is also often the most efficient and cost-effective means of using renewable energy’.

The South East Plan also provides guidance on the location of renewable energy development through Policy NRM15. This policy states; ‘renewable energy development, particularly wind and biomass should be located and designed to minimise adverse impacts on landscape, wildlife, heritage assets and amenity. Outside of urban areas, priority should be given to development in less sensitive parts of countryside and coast, including on previously developed land and in major transport areas... informed by landscape character assessment where available...and in... protected and sensitive landscapes including Areas of Outstanding Natural Beauty or the national parks, development should generally be of a small scale or community-based’. In general, however, renewable energy developments should be supported by local authorities, as set out in Policy NRM16. The policy states that ‘Local development documents should include criteria-based policies that should consider the following issues:

- i. the contribution the development will make towards achieving national, regional and sub-regional renewable energy targets and carbon dioxide savings
- ii. the potential to integrate the proposal with existing or new development
- iii. the potential benefits to host communities and opportunities for environmental enhancement
- iv. the proximity of biomass combustion plant to fuel source and the adequacy of local transport networks
- v. availability of a suitable connection to the electricity distribution network.’

Policy NRM12 also encourages the use of CHP ‘in all developments and district heating infrastructure in large scale developments in mixed use’. The Policy also refers to the fact that the ‘use of biomass fuel should be investigated and promoted where possible’. This is supported by Policy NRM7 which focuses on woodland and promotes the use of wood resources, ‘including wood fuel as a renewable energy source’.

The South East Plan also sets out requirements to improve the energy performance of new development in Policy NRM11: Development Design for Energy Efficiency and Renewable Energy. It encourages the ‘use of decentralised and renewable or low-carbon energy in new development’ and ‘in advance of local targets being set in development plan documents, new developments of more than **10 dwellings or 1000m² of non-residential floorspace should secure at least 10% of their energy from decentralised and renewable or low-carbon sources** unless, having regard to the type of development involved and its design, this is not feasible or viable’. In addition local authorities should use design briefs and supplementary planning documents to ‘promote development design for energy efficiency, low carbon and renewable energy’.

2.4 LOCAL POLICY

The council’s LDF has a vital role in ensuring future development is delivered in a sustainable manner and reflects the growth requirements set out in the South East Plan. The Core Strategy is the most important document within the LDF. Core Strategies set out long-term visions for an area over a period of at least 15 years, as well as spatial objectives and strategic planning policies to guide development in accordance with the strategic vision and objectives.

Currently, the Borough Council is in the initial stages of developing a core strategy. In April 2010 the Borough Council issued the issues and options for the Core Strategy. A draft Core Strategy document is expected to be issued for consultation in December 2010.

In the absence of the LDF, the saved policies from the **Swale Borough Local Plan (2008)** are currently in application. The renewable energy policy in the local plan (U3) permits proposals for renewable energy schemes provided they demonstrate environmental, economic, and social benefits, while minimising adverse impacts.

The **Swale Borough Council Carbon Management Plan 2009 – 2013** outlines the Borough’s low carbon vision. By 2013, Swale hopes their own buildings and services will have:

- A carbon programme that is considered ‘best practice’
- Successfully mitigated against increases in energy related prices and costs
- Accumulated savings and investments in energy and carbon technologies
- Routine investment in the lowest emissions options
- An excellent record of reducing emissions

Considering that Swale occupies portions of the Kent Downs Area of Outstanding Natural Beauty (AONB), it is important to review their renewable energy policy. Kent Downs AONB states that it will support any renewable energy that can demonstrably reduce green house gas emissions without sacrificing special qualities of the AONB.

The **Swale Climate Change Strategy** is a local strategy for climate change mitigation and adaptation in a number of areas, including energy, water, waste, air quality, flooding, and biodiversity. The strategy concentrates on actions that can be taken to improve the Borough’s response to climate change. The **Kent Environment Strategy** provides a county-wide strategy for implementing the South East Regional as well as national aspirations. It looks to identify a number of focused priorities and actions for the county as a whole. It sets out an ambition of reducing the County’s carbon emissions below 1990 levels by 2030.

2.5 BUILDING REGULATIONS AND THE TRAJECTORY TO ZERO CARBON

The *Building Regulations* were first introduced to improve the energy efficiency of buildings in the 1960s and the latest revisions to the Building Regulations Part L (Conservation of Fuel and Power) continue to improve standards. In 2002, the focus started to turn towards reducing CO₂ emissions and further revisions to Part L in 2006 brought the UK Building Regulations in line with the EU’s Energy Performance of Buildings Directive (EPBD), introducing, amongst other things, the requirement for Energy Performance Certificates (EPCs).

The current 2006 Building Regulations Part L requires that CO₂ emissions calculated for a new development should be equal to, or less than a Target Emission Rate. This is generally in the region of 20% lower than CO₂ emissions from a building which complies with the 2002 Building Regulations, depending on the specific building type.



Following consultation, the Government's *Building a Greener Future: Policy Statement* announced in July 2007 that all new homes will be zero carbon from 2016. In the Budget 2008, the Government also announced its ambition that all new non-residential buildings should be zero carbon from 2019 (with earlier targets for schools and other public buildings). , Again, these improvements will be implemented through the Building Regulations.

The *Definition of Zero Carbon Homes and Non-Residential Buildings* consultation in 2009 sought to clarify the definition of zero carbon that will be applied to new homes and buildings through proposed changes to the Building Regulations. A statement by John Healey, Minister for Housing and Planning, in July 2009 confirmed the policy to require all new homes to be zero carbon by 2016 and set out the proposals which will be taken forward to implement this policy. This addressed the concern that the original definition, (which followed the definition of Code for Sustainable Homes Level 6 and required both regulated and un-regulated emissions to be off-set on site), would not be feasible or viable on many sites.

Prior to the introduction of the zero carbon requirement, the following intermediary step changes are proposed to the requirements of Part L of the Building Regulations for dwellings:

- 2010: 25% improvement in regulated emissions (relative to 2006 levels). This is expected to broadly correspond to the energy and CO₂ element (there are nine elements in total) of Level 3 of the Code for Sustainable Homes.
- 2013: 44% improvement in regulated emissions (relative to 2006 levels), corresponding to Code Level 4
- 2016: Zero carbon (initially defined as regulated and unregulated emissions, but under recent government announcements this has been revised down to just include regulated emissions).

The definition for zero carbon homes was updated in March 2011 following further analysis of costs and viability. The Government now defines zero carbon to include the 'as-built performance' of the building, including heating, fixed lighting and hot water (regulated emissions). Unregulated emissions from cooking and 'plug-in' appliances such as refrigerators, computers, and televisions have not been included within in the definition of zero carbon and it is expected that other regulations aimed at appliance efficiency will help improve these energy consuming sectors.

The Government has published a hierarchy for how CO₂ emissions should be reduced to achieve the zero carbon emissions standard (see Figure)

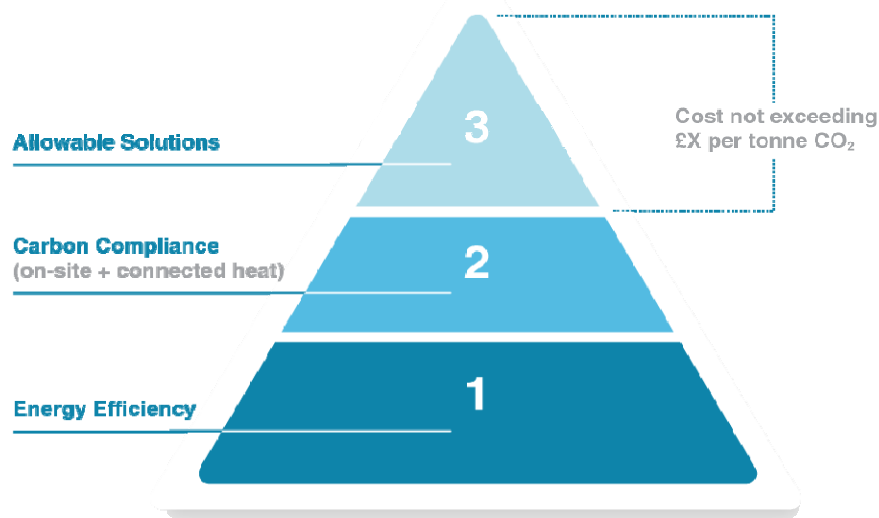


Figure 5: The Government’s hierarchy for reducing CO₂ emissions

The hierarchy in Figure 5 shows the proposal that a minimum energy efficiency standard should be achieved for fabric and services. Following this, renewable and low carbon energy must be supplied on-site to meet the CO₂ reductions required for Carbon Compliance (the levels proposed are based around the maximum viable savings which can be achieved across a range of developments). Above carbon compliance, further CO₂ reduction can be made either on-site, or through off-site savings (known as Allowable Solutions). The policy around allowable solutions is still being developed by the Government but likely allowable solutions include:

- Further CO₂ reductions on and off-site;
- Energy efficient appliances;
- Advanced forms of building control system which reduce the level of energy use in the home;
- Exports of low carbon or renewable heat from the development to other developments; or
- Investments in low and zero carbon community heat infrastructure.

Recent research by the Zero Carbon Hub titled ‘Allowable Solutions for Tomorrow’s Homes’ (July 2011) outlines the latest proposals and recommendations for how allowable solutions could be embedded in policy and administered. The document highlights the key role of local authorities in the process, and options for developing policy that will ensure allowable solutions funds are directed towards locally approved projects. In the absence of local policy, developer contributions will be delivered through a national list of allowable solution projects. Recommendations for allowable solutions policy are further discussed on page **Error! Bookmark not defined.** in the policy recommendations section of this report.

A key aspect of allowable solutions will be for the LPA to collect allowable solutions financial contributions from developers. Communities and Local Government announced in August 2010 that the government would implement a community energy fund, which would allow developers to make payments to the LPA or community. This provides local councils with the ability to create policy which determines how funds can best be used to meet government standards in a way that suits local circumstances.

2.6 KEY CONSIDERATIONS EMERGING FROM THIS CHAPTER

The sections above have considered the wider policy context, and some key findings have emerged that should be considered in the development of local policies for Swale:

- There are very strong and challenging policy drivers for both the reduction of CO₂ emissions and the inclusion of renewable and low carbon technologies from a national level;
- As identified in regional studies, Kent will play an important role in meeting targets on a regional scale, second only to Thames Valley and Surrey. While Regional policy has been recently revoked, these studies still indicate the relative potential for carbon reduction in the area.
- Swale’s Local Development Framework should be the basis for the implementation of policy relating to building related CO₂ emissions. This study is being conducted at a stage where it can directly recommend policy for inclusion in the Core Strategy;
- PPS1 Supplement requires LPAs to identify the potential for the inclusion of renewable and low carbon technologies in their LPA area, and to identify strategic sites where there is good potential for additional CO₂ reductions. Therefore, LPAs need to both consider policies on an area-wide scale and policies for specific sites where additional opportunities exist for additional CO₂ reductions.
- With the Government planning to implement a community energy fund, the Council will need to consider how such a fund can be best implemented and used in the Borough.
- With the new Government’s ambitions towards stronger local decision making, it is important to establish an evidence base from analysis of local circumstances, and to identify local partners to take actions forward.