Bournemouth, Dorset and Poole Renewable Energy Strategy to 2020

Final version



January 2013

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Separate supporting documents:

- Policy Context for Renewable Energy in Dorset summary of key policies affecting renewable energy deployment in Bournemouth, Dorset and Poole.
- Renewable Energy Resource Assessment for Dorset outlining the renewable energy resource assessment undertaken by RegenSW in development of this Strategy.
- Unpacking Renewable Energy Technologies for Dorset the potential for each renewable energy technology in Bournemouth, Dorset and Poole, including current status and barriers and opportunities

Executive Summary

The first Bournemouth, Dorset and Poole Renewable Energy Strategy was published in 2005. It was developed by the Dorset Energy Group (DEG) which is composed of officers from Dorset County Council, all of Dorset's district/borough councils, Poole and Bournemouth unitary authorities as well as other stakeholders from across the public, private and community sectors. The Strategy set out a comprehensive plan of action to increase the generation of renewable electricity and heat in the area by 2010 and has been successfully delivered by the Dorset Energy Group and its working groups. Overall, significant progress has included:

- Securing over £1.7 million additional funding to support renewable energy installations, demonstration projects and feasibility studies.
- Developing planning policies and tools to support renewable energy.
- Delivering an extensive range of awareness raising activities on renewable energy amongst a range of audiences.
- Increased partnership working with public, community and business partners.

This revised Strategy is the result of an 18 month process led by the Dorset Energy Group and supported by Regen SW (an independent, not for profit organisation, specialising in sustainable energy in the South West). It has involved extensive research, evidence gathering, a renewable resource assessment, policy review and has been shaped by the views of around 900 stakeholders and members of the public. The Department for Communities and Local Government (CLG) funded the development of this strategy as part of its Local Carbon Framework programme in recognition of the ongoing achievements and strong partnership working on sustainable energy within Bournemouth, Dorset and Poole.

This Strategy supersedes the original and seeks to: promote a common awareness of the latest situation; provide an updated understanding of potential local renewable energy resources; identify an aspirational target for renewable energy generation for 2020 and outline the key actions necessary to realise Dorset's renewable energy potential.

Seven years on from the publication of the Bournemouth, Dorset and Poole Renewable Energy Strategy in 2005, the main drivers for developing renewable energy sources remain and have, in many respects, strengthened. In addition, significant changes in policy surrounding renewable energy and incentives for renewable energy technologies mean that the development of renewable energy is being encouraged even more strongly by a host of existing and emerging international, national and local policies. In particular, as part of the European Renewable Energy Directive the UK now has a legally binding target to generate 15% of the UK's total energy needs from renewable sources by 2020. This is a UK wide target and although no local targets have been set by government it is clear that the government expects local authority areas to play their part in meeting the national 2020 renewable energy target.

Through the consultation process for the Strategy stakeholders were asked how ambitious they thought Dorset should be with regard to renewable energy in the area. Overall there was strong support (over 80%) for adopting an ambitious renewable energy target for Dorset to generate 15% or more of its total energy needs from renewable sources by 2020 and to monitor performance towards this target. The consultation also highlighted concerns about how this should be achieved, in particular:

- the potential effects of large scale renewable energy development (particularly wind) on the local environment and Dorset's unique landscape;
- the potential international impacts of importing bio-fuels for large scale power stations;
- the need to ensure maximum local economic and community benefit.

Current generation in Dorset is estimated at 146GWh, or only 0.95% of total energy demand, a third of the UK national average of 3% in 2010. For the area to play its part in meeting national renewable energy targets, a significant step change is required, with generation needing to increase by over 15 times in just 8 years. In addition substantial efforts will need to be made locally to reduce Dorset's energy demand through installing energy efficiency measures and encouraging behaviour change.

In July 2011, the Department of Energy and Climate Change (DECC) published a Renewable Energy Roadmap for the UK to 2020¹ which sets out how the government expects the national target to be achieved and how much of the contribution will be generated from 'national' rather than local resources. This indicates that 50% of the national target is likely to be made from renewable energy deployed at a national level, such as off shore wind or large scale biomass power stations.

A detailed assessment of potential local renewable energy resources in Dorset has been carried out following a standard national methodology. This indicates that using a combination of resources and technologies and assuming a contribution from 'national' renewable energy installations, that a 15% target could be achieved in Dorset.

Our Vision

"For the community of Dorset to play our part in mitigating climate change by using energy more efficiently and harnessing our viable renewable energy resources. We wish to maximise the local economic, environmental and community benefits that doing this can bring."

Aims

- 1. To maximise the potential for local economic benefit and diversification.
- 2. To facilitate renewable energy development that is appropriate to Dorset's environment and communities.
- To encourage a high degree of community involvement, understanding and benefit from using energy more efficiently and developing Dorset's renewable energy resources.
- 4. To enable Dorset to play its part in reducing greenhouse gas emissions in line with local, regional, national and international targets.
- 5. To provide local, affordable and secure renewable energy supplies.

¹ Downloadable from http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/renewableenergy/2167-uk-renewable-energy-roadmap.pdf

The vision and the aims should be seen as guiding principles for all future renewable energy development locally, confirming that renewable energy development should be environmentally, socially and economically sustainable.

Strategy Targets

The Strategy will adopt a twin-track target taking into account the national commitment to legally binding targets, local policy commitments to tackle climate change, the assessment of available resources and the level of ambition evidenced in the responses to consultation. The Strategy proposes an aspirational target of at least 15% of Dorset, Bournemouth and Poole's energy needs to be met from renewable sources by 2020. However, to reflect the expectation that approximately 7.5% of this will be delivered via renewable energy resources considered by Government as 'national' resources, regardless of local action, this Strategy will focus on delivering a secondary target of a minimum of 7.5% of Dorset's energy needs to be met from local renewable energy resources over which we have more influence and control. This would equate² to the area using enough local renewable energy resources to generate just under 1200 GWh of energy per year - enough to power about 250,000 homes or to heat around 85,000 homes³.

This Strategy aims to set the agreed direction of travel for renewable energy in the local area to 2020. It sets out the priority areas where effort needs to be focused to help us meet our aspirations for renewable energy together with a number of strategic actions which need to be taken forward within each area. The six priority areas of action that have been identified are: **Priority 1:** Supporting the development of community renewable energy.

Priority 2: Maximising the local economic benefits of renewable energy generation.

Priority 3: Creating a more supportive planning system for renewable energy.

Priority 4: Developing locally appropriate technologies.

Priority 5: Delivering leadership and partnerships that support renewable energy.

Priority 6: Improving renewable energy communications and learning.

Each priority area represents a topic area where concerted effort is required across multiple partners in order to bring about a step change in renewable energy generation locally up to 2020. Under each of these headings the Strategy outlines the current national and local position, what action is already underway in the area and barriers and opportunities to further action.

In February 2012 the Dorset Energy Group was renamed the 'Dorset Energy Partnership' (DEP), to reflect Bournemouth, Dorset and Poole working together for a low carbon future. The DEP executive will oversee the delivery of both this strategy and the Bournemouth, Dorset and Poole energy efficiency strategy.

These priority areas for action will be delivered through detailed annual action plans developed by the Dorset Energy Partnership, its working groups and other key partners.

² These figures are indicative only to give an impression of the scale that 1200 GWh represents. The number of homes powered or heated represents more than 7.5% of the area's 345,340 homes because there are other types of energy use making up total energy use in the area from which the 7.5% target is calculated - including commercial and industrial heating, power and processes, and transport energy use.

³ Based on a local domestic consumption average of 4,800kWh of electricity and 14,000kWh of heat (from DECC produced local consumption figures http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/regional/regional.aspx).



Endorsement of this strategy

The following organisations have endorsed this strategy:

Bridport Environment Group

Bridport Renewable Energy Group

Borough of Poole

Bournemouth Borough Council

Christchurch Borough Council*

The Core – APC Chant Centre of Renewable Energy

Dorset Agenda 21

Dorset Area of Outstanding Natural Beauty Team*

Dorset Community Action

Dorset County Council

Dorset Energy Advice Centre

Dorset Local Enterprise Partnership

East Dorset District Council*

East Dorset Friends of the Earth*

Eco Sustainable Solutions Ltd

Ecofirst Consult

Ecos Trust

Environmental Theme Action Group, East Dorset Community Partnership*

Forest Fuels Ltd

Holme Estate

Infinergy Ltd

Magna Housing Association Ltd

NHS Dorset, Bournemouth and Poole Cluster

North Dorset District Council*

Portland Port Ltd

SUSTAIN (formerly Bournemouth Environment Forum)

Transition Bournemouth

Transition Town Dorchester

Universal Engineering

West Dorset District Council

West Dorset Partnership

Weymouth Energy Advice Centre

Weymouth and Portland Borough Council

Weymouth and Portland Transition Town Group

Endorsement of the strategy will imply support for its vision, aims and for the broad strategy laid out for achieving it. The implementation of the action plan will depend on the availability of resources.

*These organisations have endorsed the strategy with caveats – see appendix 2 for details.

1. Introduction

1.1 Background

In 2005 the Dorset Energy Group published the Bournemouth, Dorset and Poole Renewable Energy Strategy which set out a comprehensive plan of action to increase the generation of renewable electricity and heat in the area by 2010.

The Dorset Energy Group (which is comprised of officers from Dorset County Council, all of Dorset's district/borough councils, Poole and Bournemouth unitary authorities, as well as other stakeholders from across the public, private and community sectors) have led the successful delivery of the Strategy to date.

Since the original Strategy was published there has been significant change regarding renewable energy policy and practice in the UK. This revised Strategy therefore seeks to: promote a common awareness of the latest situation; provide an updated understanding of potential local renewable energy resources; identify an aspirational target for renewable energy generation for 2020 and outline the key actions necessary to realise Dorset's renewable energy potential.

The production of this revised Strategy has been funded by the Department for Communities and Local Government (CLG) which selected Bournemouth, Dorset and Poole as one of only 9 areas in the UK to pilot Local Carbon Frameworks in recognition of the ongoing achievements and strong partnership working on sustainable energy within Bournemouth, Dorset and Poole. This supported the development of the Strategy and a number of associated projects.

In February 2012 the Dorset Energy Group was renamed the 'Dorset Energy Partnership' (DEP), to reflect Bournemouth, Dorset and Poole working together for a low carbon future. The DEP Executive will oversee the delivery of both this Strategy and the Bournemouth, Dorset and Poole Energy Efficiency Strategy and Action Plan (2009).

Throughout the remainder of this document, reference to 'Dorset' should be taken to include Bournemouth and Poole.

1.2 Why do we need a Strategy?

This revised Strategy provides an opportunity for the people of Dorset to be pro-actively involved in, and help shape the development of local renewable energy resources rather than simply react to external events. A proactive approach is more likely to maximise local, social, economic and environmental benefits. This Strategy is therefore needed to:

- Provide a strategic framework, to coordinate effort in delivering a common vision and shared aims;
- Encourage buy-in and ownership from all those who have a role in developing renewable energy resources in the area;
- Ensure effort is focused in the right direction – by identifying the priority areas where our efforts need to focus to ensure the greatest benefits to the local area.

1.3 What does the Strategy cover?

Focusing on renewable energy for electricity and heat

The Strategy covers the production of renewable electricity and renewable heat, within Dorset. It **does not** address transport energy demand and use⁴ as these are dealt with by other area wide strategies and plans.

Complementing the Bournemouth, Dorset and Poole Energy Efficiency Strategy

The exact amount of renewable energy which will need to be installed by 2020, to achieve national and international targets and to reduce carbon dioxide emissions, depends on actual future energy demand. If demand for energy falls, so too does the amount of heat, electricity and transport fuel which needs to be generated from renewable resources.

This means that both renewable energy generation and energy efficiency measures to reduce demand, must be progressed in parallel. Within Dorset this Strategy will, therefore complement the existing Bournemouth, Dorset and Poole Energy Efficiency Strategy and Action Plan (2009) which is also being delivered by the Dorset Energy Partnership.

1.4 How the Strategy was developed

The Strategy is the result of an 18 month process led by the Dorset Energy Group (now the Dorset Energy Partnership) and supported by RegenSW (an independent, not for profit organisation, specialising in sustainable energy in the South West). It has involved extensive research, evidence gathering, a renewable resource assessment, policy review and consultation. A summary of the Strategy review process is shown at Appendix 1.

Three key consultation events undertaken in Dorchester, Bournemouth and Poole, involving over 150 local stakeholders, formed an important part of the Strategy development process. These events informed the development of a draft Strategy which was circulated for public consultation from June – September 2011 and resulted in over 180 responses.

This final version of the Strategy follows on from the consultation draft version produced in June 2011. All comments received from public opinion surveys, stakeholder workshops and other representations during the four month consultation process have been carefully considered in the production of this final version.

1.5 The status of this document

This Strategy is a non-statutory document which aims to set out a clear, shared ambition for renewable energy in Dorset and identify where local action should focus to maximise the benefits for Dorset while protecting and enhancing our unique environment. While it is clearly intended to create a positive and proactive climate for the deployment of renewable energy, it will be for developers, organisations, communities or individuals to come forward with specific proposals. The exact type, size and location of technologies installed on the ground will be determined by individual planning applications, which will ensure detailed site specific constraints are considered.

This document is the final version of the revised Strategy, and includes a list of the organisations that have endorsed it. Endorsement of this Strategy will imply support for its vision, aims and for the broad strategy laid out for achieving it.

The information in this Strategy is accurate as of March 2012 when the Strategy was sent out for endorsement. The only information that has changed is an update on the National Planning Policy Framework.

⁴ Transport is covered by the Local Transport Plan 3 process

2. How have we been doing?

The delivery of the Bournemouth, Dorset and Poole Renewable Energy Strategy (2005) and its complementary Energy Efficiency Strategy have been overseen by the Dorset Energy Group (now the Dorset Energy Partnership). The Partnership comprises an Executive and a number of working groups addressing sustainable energy in the community and domestic sectors, as well as bio-energy and planning.

Each working group is responsible for developing and delivering a detailed annual programme of work based on the five year action plans in both the Renewable Energy and Energy Efficiency Strategies.

2.1 Progress Report

In 2010⁵ a progress report was produced which summarised the key achievements of each working group since publication of the original Renewable Energy Strategy. It also showed progress against the Energy Efficiency Strategy.

From the number and diversity of tasks accomplished by the different working groups, it is clear that both strategies have been successful catalysts for local action.

Detailed progress is highlighted within 'Section 6: Taking action' and briefly outlined below.

2.2 Summary of key achievements

Overall, significant progress has included:

• Securing over £1.7 million of additional funding to support renewable energy

installations, demonstration projects and feasibility studies.

- Developing planning policies and tools to support renewable energy.
- Delivering an extensive range of awareness raising activities on renewable energy amongst a range of audiences.
- Increased partnership working with public, community and business partners.

Each working group has focused on particular activities, as follows:

Bio-energy working group

The group has been developing projects to increase the supply of local biomass fuels and to encourage demand by supporting biomass demonstration schemes, particularly biomass boilers in schools and local authority properties. Work has also focused on maximising wider community, biodiversity and landscape benefits of biomass, through schemes including local wood accreditation and woodland management for fuel supply.

Sustainable Energy Planning working group

The group has focused on: increasing understanding of renewable energy amongst planners and decision makers; developing specific guidance on issues such as energy crops; developing renewable energy planning policies and exploring tools to assist decision making including local energy planning and landscape character assessments.

⁵ http://www.dorsetforyou.com/media.jsp?mediaid=160131andfiletype=pdf

Community Sustainable Energy working group

The group has focused on supporting renewable energy demonstration projects in public and community buildings and increasing awareness of renewable energy with decision makers, communities and the public through networks, renewable energy information sheets, training seminars, conferences and on-line resources.

Domestic Sector Sustainable Energy working group

The group has focused on improving energy efficiency in the domestic sector with the aim of reducing energy demand, tackling fuel poverty and ensuring Dorset maximises national funding available. In particular work has included clarifying and signposting to advice and support services and initiating area based pilot projects and affordable warmth schemes.

2.3 Summary of current renewable energy deployment

Renewable electricity installations to date In 2005 Dorset agreed to a target of 64-84 megawatts (MW) of renewable electricity generating capacity to be online by 2010. This was developed as part of the 'REvision 2010' renewable energy resource assessment undertaken for all counties in the South West and resulted in county renewable electricity targets being included within the draft Regional Spatial Strategy. Regional Spatial Strategies are in the process of being abolished by the Government, though the evidence base which led to the inclusion of County targets remains relevant.

The latest Regen SW Annual Survey (January 2011) identified 617 renewable electricity projects in Dorset (Table 2.1), with a total installed capacity of 19.2MW. However since this survey was undertaken there has been an exponential increase in the number of solar photovoltaic (PV) installations in Dorset, as a direct result of the Feed-in tariff. This has increased installations from 578 in January 2011 to 5,676 PV projects with an installed capacity of 18.966MW. This gives a total estimated current installed capacity of 36.67 MW of electricity generation as of 1st February 2012. There are also a number of large solar farms that have been built but do not yet appear on the national online Feed-in Tariff register.

Renewable Electricity	ATW*	Hydro	Landfill gas	Onshore wind	Sewage gas	Solar PV	Total
No of projects	2	4	3	28	2	578	617
MW	0.845	0.059	14.324	0.191	2.295	1.489	19.202
% of renewable electricity installed capacity	4%	0.3%	75%	1%	12%	8%	100%

Table 2.1 Summary of renewable electricity projects and their contribution in overall installed capacity.

*Advanced treatment of waste including anaerobic digestion and pyrolysis Source: 2010/11 Regen SW progress report (installations to January 2011

Renewable heat installations to date

The Regen SW progress report (January 2011) identified a total of 302 renewable heat installations in the area (table 2.2). The majority of these schemes (173) are solar thermal installations, although the 39 biomass projects contribute most in terms of installed capacity, at over 5MW. These include the 1.2MW biomass district heating scheme at Guy's Marsh Prison in north Dorset.

Table 2.2 Summary of renewable heat projects and their contribution in overall installed capacity.

Renewable Heat	ATW	Biomass	Heat pumps	Sewage gas	Solar Thermal	Area total
No of projects	1	39	88	1	173	302
MW	0.02	5.008	0.753	1.10	0.446	7.33
% of renewable heat installed capacity	0.3%	68%	10%	15%	6%	100%

Source: 2010/11 Regen SW progress report (installations to January 2011)

Combining both the electricity and heat renewable energy projects gives a total installed renewable energy capacity of 26.53MW, made up from a range of technologies. Considering the capacity factor⁶ for each particular technology gives an approximation of how much energy each year could be generated from this installed capacity. Current renewable energy generating in Dorset is, therefore, estimated at 146GWh equivalent to 0.95% of Dorset's total energy demand.

⁶ Capacity Factor is described in more detail in the 'Renewable Energy Resource Assessment for Dorset' and 'Unpacking Renewable Energy Technologies for Dorset' - http://dorsetforyou/renewableenergystrategy2020

3. An increasing imperative for renewable energy

Six years on from the publication of the Bournemouth, Dorset and Poole Renewable Energy Strategy in 2005, the main drivers for developing renewable energy sources remain and have, in many respects, strengthened. In addition, significant changes in policy surrounding renewable energy and incentives for renewable energy technologies mean that the development of renewable energy is being encouraged even more strongly by a host of existing and emerging international, national and local policies.

3.1 Key drivers

Mitigating climate change

The global scientific consensus that we need to reduce man-made carbon emissions to mitigate the worst effects of climate change, and that climate change is perhaps the greatest challenge the world will face over the coming half-century, remains intact. The imperative of reducing greenhouse gas emissions is reflected in international treaties and European law. Recognising the increasing importance of the issue, the UK Government in 2008 passed the Climate Change Act, which sets a legally binding target to reduce carbon emissions by 80% by 2050 and 30% by 2020.

Renewable energy technologies can make a major contribution to this goal by replacing existing fossil fuel energy supplies.

Energy security

Energy security is increasingly seen as an important issue due to political instability in oil producing nations, dwindling oil supplies, worries over the safety of nuclear power and the need to replace much of the UK's large scale electricity generating capacity.

In addition, fossil fuel costs continue to rise, as a result of increasing demand from growing economies elsewhere in the world. Future energy cost predictions from Ofgem show that the average annual domestic energy bill in the UK in 2009 of £1247 is predicted to rise 60% by 2016, to £1995 per year.

Renewable energy generation has a critical role to play in increasing the security of local energy supply, and reducing Dorset's exposure to the risks highlighted above.

Maximising local economic benefits

Householders and businesses in Dorset currently spend £800 million per year on energy (including road transport fuel). Virtually all of this expenditure is on fossilfuel or nuclear derived energy and so this money is lost from the local economy. The generation of energy locally at a community or household level offers the opportunity to retain spending on energy for the benefit of local people and the local economy.

In addition, development of renewable energy technologies provides opportunities for skilled job creation, local economic growth and significant financial benefits. In 2010, there were an estimated 11,000 jobs in the sustainable energy sector across the south west. With the advent of the Feed-in Tariff and the Renewable Heat Incentive this is likely to have increased considerably since 2010. RenewableUK recently published comprehensive employment figures for the national wind energy industry, showing a 91% increase in full-time employment in the sector between 2007/8 and 2009/10. This growth in employment stands in stark contrast to the overall UK employment level, which has shrunk during the same period by 3.4%.

3.2 Changes in renewable energy policy

The development of renewable energy is driven by central and local government policy. Since 2005 an enormous amount of new policy on renewable energy and reducing carbon emissions has been introduced.

This section gives a brief overview of the key policies, with more detailed information found in the supporting document on 'Policy Context'.

International and national renewable energy targets - The European Renewable Energy Directive sets an overall target for Europe to generate 20% of its energy from renewable sources by 2020. The target has been negotiated with each individual EU member. As a result the UK now has a legally binding target to generate 15% of the UK's total energy needs from renewable sources by 2020.

The Localism Act (2011) and National Planning Policy Framework - Wholesale reform of the planning system is currently being undertaken through the Localism Act (2011) and the National Planning Policy Framework (NPPF), introduced in March 2012. Regional Spatial Strategies are being abolished and through the guidance set out in the NPPF, will now be delivered through the development of Local Plans and Neighbourhood Plans. At the heart of the NPPF is a presumption in favour of sustainable development which should be reflected when developing local planning policy and also in determination of planning applications.

In particular, the NPPF indicates that development proposals should be granted permission in accordance with the development plan (i.e. adopted Local Plan or Neighbourhood Plans) unless it is absent, silent or relevant policies are outof-date. The NPPF therefore recommends that it is highly desirable that local planning authorities should have an up-to-date plan in place. West Dorset District Council in partnership with Weymouth and Portland Borough Council are developing a Local Plan alongside a Neighbourhood Plan in Cerne Abbas as part of a national pilot. North Dorset District Council is currently supporting the community in Gillingham to develop a neighbourhood plan.

A draft West Dorset, Weymouth and Portland Local Plan has been completed and is currently out for public consultation. The renewable energy section makes reference to the 7.5% local renewable energy generation by 2020 aspirational target in the Bournemouth, Dorset and Poole Renewable Energy Strategy. All Bournemouth, Dorset and Poole Planning Authorities are currently at various stages of preparing Local Plans.

The NPPF identifies the need for local planning authorities to recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources, for example having a positive strategy to promote energy from renewable and low carbon sources and designing policies and determining applications which secure renewable energy development, whilst protecting and enhancing our natural, built and historic environment (paragraph 97). **Zero carbon development -** Zero carbon standards for all new homes are due to come into force from 2016, with interim tightening of the requirements from 2013. This will increase requirements for the integration of renewable energy technologies into new housing developments.

3.3 New and changing financial incentives

A number of financial incentives have been established or are planned to support renewable energy.

Feed-in Tariffs and Renewable Heat

Incentive - The key policy change in recent years was the introduction of a Feed-in Tariff and Renewable Heat Incentive to offer financial support for small-scale renewable electricity and renewable heat projects. Grants to fund upfront capital costs of renewable energy installations have been phased out.

The 2010 introduction of the Feed-in Tariff has seen installation rates of solar PV increase exponentially whilst installation rates of other renewable electricity technologies have increased to a smaller extent. However, cuts from March 2012 to solar PV Feedin Tariff rates and changes to the scheme eligibility are likely to impact severely on the installation rate. A comprehensive review of the Feed-in Tariff is currently out for consultation with proposals for a mechanism to reduce tariffs periodically or in response to excessive demand in the future.

The introduction of the Renewable Heat Incentive is predicted to encourage increased uptake of renewable heat technologies. The scheme opened for commercial projects in autumn 2011 and is due to start for domestic installations from autumn 2012. Suitable projects installed from July 2009 onwards, before the start of the scheme, will be eligible to receive payments.

The Green Deal - which is due to start in autumn 2012 is a financing mechanism to enable householders to offset the upfront costs of installing energy efficiency measures and microgeneration technologies against the savings that result in their energy bills. How this mechanism will interact with incentives for renewable energy is not yet certain.

The Renewables Obligation - supports larger renewable electricity installations. Government has recently consulted on rebanding the obligation to reduce the amount of support available for most onshore technologies, and to increase it for wave and tidal technologies. From 2017, the Renewables Obligation will be replaced by a Contract for Difference Feed-in Tariff. The details of how this will work are still being decided.

4. Setting a renewable energy target for Dorset

As noted in para 2.3 the Dorset Renewable Strategy 2005 included a target for renewable energy electricity generation which was based on a regional assessment of the available renewable energy resource.

As part of updating this Strategy the target has been reviewed. This has included:

- taking account of the latest national policy direction;
- updating the renewable energy resource assessment, in line with the latest national methodology;
- seeking local people's views in order to set an appropriate target for renewable energy generation in Bournemouth, Dorset and Poole, which reflects local ambition but is also realistic and achievable.

4.1 Implications of the National renewable energy target for Dorset

As highlighted in para.3.2 the UK has signed up to achieve a legally binding EU target that 15% of total energy consumed will come from renewable sources by 2020. This includes electricity, heat and transport energy. This target is highly ambitious - in 2008 only 2.2% of total national energy demand was generated by renewable energy. Achieving the target will require a 5 fold increase in renewable electricity generation and a 12 fold increase in renewable heat and cooling in the UK by 2020.⁷

This target is to be achieved across the whole of the UK, rather than in each

individual local authority area and since the removal of the regional planning framework there is no longer a 'top down' regional or county planning target for the development of renewable energy. Despite this it is clear that the government expects local authority areas to play their part in meeting the national 2020 renewable energy target.

In addition to the national requirement there are potentially significant economic, social and environmental benefits of ensuring Dorset plays its part in meeting the national renewable energy target. Jointly agreeing and working towards an ambitious target for renewable energy may help attract external funding, technology clusters and inward investment to Dorset, as well as being beneficial in terms of climate change mitigation and energy security.

4.2 The scale of the challenge in Dorset

Dorset's total energy demand is estimated to be 15,904 GWh by 2020. For Dorset to generate 15% of this total energy demand from renewable sources will require an estimated **2,386GWh** to be generated in the area from renewable electricity or heat installations by 2020.

Current generation in Dorset (outlined in Section 2) is estimated at 146GWh, or only 0.95% of total energy demand, a third of the UK national average of 3% in 2010. For the area to play its part in meeting national renewable energy targets, a significant step change is required, with generation needing to increase by over 16 times in just 8 years.

⁷ Source : ENDS Special Report : Renewable Energy Europe (Sept 2010)

The estimate of current renewable energy generation is heavily based on 'landfill gas' (100GWh), which is a declining resource and likely to have reduced significantly by 2020, increasing the challenge.

In addition, the calculation of Dorset's future energy demand assumes a 4% reduction in energy demand by 2020 in line with national and local energy efficiency strategies. A concerted effort will therefore also be required to improve energy efficiency in the public, private and community sectors. It is possible that a greater demand reduction could be achieved if substantial efforts were made locally through installing energy efficiency measures and encouraging behaviour change. The Dorset Energy Efficiency Strategy (2009) sets out actions for the area to maximise efforts to reduce energy demand.

4.3 The national contribution to a local target

In July 2011, the Department of Energy and Climate Change (DECC) published a Renewable Energy Roadmap for the UK to 2020⁸ which sets out how the government expects the national target to be achieved and how much of the contribution will be generated from 'national' rather than local resources.

DECC's analysis proposed that at least half of the UK's 2020 renewable energy target will be met from 'national level' renewable energy deployment, such as off-shore wind, biomass electricity (with a large contribution from centralised biomass power stations, most burning imported wood chips or liquid biofuels) and renewable transport (the latter mainly based on liquid biofuels, also likely to be imported).

This has significant implications for Dorset in that it would be reasonable to assume that even if no action were taken locally about half of a local 15% target might be contributed from national projects over which we would have limited local control. While the Road Map certainly does not absolve Dorset of its responsibilities to promote renewable energy, it does help clarify the areas on which this Strategy might usefully focus by helping us differentiate between national resources, which we can expect to be deployed regardless of local action, and the remainder, over which we have more influence and control.

If the 'national' contribution is taken as a given, Dorset's Strategy can focus on meeting the remaining half of a 15% target from its own preferred mix of technologies, equating to roughly 1,200 GWh. If relying on the national contribution is not seen as a desirable option, other renewable technologies would need to be deployed more fully if the area were to meet a 15% target.

4.4 What is our level of ambition?

Through the consultation process local people and organisations were asked how ambitious Dorset should be on renewable energy and in contributing to the national 15% target. The consultation process for the Strategy aimed to gauge this level of local ambition through a public opinion survey, three consultation events held in Bournemouth, Dorset and Poole and specific questions within the consultation exercise.

Overall there was strong support (over 80%) for adopting an ambitious target for Dorset to generate 15% or more of its total energy needs from renewable sources by 2020 and to monitor performance towards this target.

However, there was also concern raised about how this should be achieved, in particular:

⁸ Downloadable from http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/renewableenergy/2167 -uk-renewable-energy-roadmap.pdf

- the potential effects of large scale renewable energy development (particularly wind) on the local environment and Dorset's unique landscape;
- the potential international impacts of importing bio-fuels for large scale power stations;
- the need to ensure maximum local economic and community benefit.

A number of key issues were also raised through the consultation process. In particular there is an apparent contradiction in the strong general level of support for renewable energy which contrasts with strong opposition in some areas to specific technologies, particularly on-shore wind with concerns raised over scale, numbers and potential impacts to Dorset's unique environment.

In addition concerns were raised about the provenance of imported biomass and biofuels for large scale biomass installations. This type of installation is to be counted as part of the 'national' contribution. If there is less reliance on imported woodchips and bioliquids there will be a requirement to produce a higher percentage of renewable energy from the UK's indigenous resources to meet the legally binding 15% renewable energy target by 2020. However, there is a clear preference locally for utilisation of local biomass resources to maximise the delivery of local, environmental, social and economic benefits from local, affordable and secure energy supplies.

4.5 Business as usual - is it enough?

Looking at historic rates of renewable energy installation, recent and expected trends and known future projects in the area the projected 'business as usual' growth in renewable energy generation has been assessed.

Significant increase in micro-generation The Feed-in Tariff has provided an added financial incentive for installing renewable electricity and as a result there has been a rapid rise in solar PV installations in Dorset. Between the end of January 2011 and 1st February 2012, over 5,000 renewable electricity installations were added to the Feed-in Tariff register of projects in Dorset, totalling an additional 17.48MW of installed capacity⁹, (in January 2011 there were 578 (1.49MW) PV installations). It is expected that this trend will slow significantly since the Government announced a reduction in solar PV Feed-in Tariff rates which will take effect from 3 March 2012 and changes to the scheme eligibility from 1 April 2012.

In 2010/11, the area also nearly doubled its installed capacity from heat pumps, with 0.37 MW added from 52 projects. The Renewable Heat Incentive (RHI) and Renewable Heat Premium Payment is expected to result in a rising number of renewable heat installations but as this is a new scheme it is difficult to predict the exact impact this will have.

Proposed larger schemes

Larger schemes tend to be more complex and potentially controversial which mean they take longer to develop and to proceed through the planning process. A number of recent large scale projects have received planning permission and are awaiting completion and it is assumed that these will be implemented, adding to the renewable energy generation in the area. These include:

- 2 biogas plants at Piddlehinton (approved) and Blackmore Vale (opened July 2011).
- 3MWe biomass plant at Parley near Christchurch (approved).
- A 10MW energy from waste pyrolysis plant at the Dorset Green Technology Park, Winfrith (approved).
- A 1.2MWe biogas plant at Poundbury, Dorchester with biogas injection into the gas grid (under construction).
- Several solar farms (approved).

⁹ Correct as of 6th February 2012. There is a lag between projects being installed and appearing on the published register so this figure is likely to increase.

2 wind farms (9.2MW Alaska wind farm at East Stoke, near Wareham and 9.2MW wind farm at Silton near to Gillingham) have also come forward in Dorset and were refused planning permission in 2011. Both of these applications are currently subject to appeal. These have not been included in the business as usual assumptions.

In addition falling costs for solar PV are likely to result in an increase in large scale solar farms coming forward for planning permission.

Taking into account the current renewable energy installations and expected future trends described above and a reduction in the contribution from landfill gas by 2020 it has been estimated that around 155GWh of energy is likely to be generated from renewable sources in Dorset by 2020, a small increase against current levels. This is likely to be from all technologies but with the largest contributions from biomass and a two thirds reduction in the contribution from landfill gas.

Business as usual with national contribution Figure 4.1 shows what could be expected in Dorset by 2020 based on a 50% contribution from national renewable energy resources and the projected 'business as usual' growth in local installations. This would be the expected level of renewable energy deployment if no further action was taken locally and the national contribution was assumed.



Figure 4.1 Predicted business as usual growth with national contribution

As can be seen from figure 4.1 this assessment indicates that the area is likely to fall a long way short of meeting a 15% local target if the "business as usual" trajectory was to be maintained to 2020, even with a significant contribution from national resources, and that further local renewable energy resources will need to be deployed if Dorset is to achieve such a target.

4.6 What local renewable energy resources are available?

A detailed assessment of potential local renewable energy resources in Dorset has been carried out following a standard national methodology (SQW). This assessment estimates a maximum technically available resource for each type of renewable energy technology. It can be used to understand the scale of resources available in the areas, help to understand the relative potential of each technology using local resources and help to determine whether an aspirational target for renewable energy generation could be achievable for the area. The results of the assessment are shown in figure 4.2 and detailed in the accompanying 'Renewable Energy Resource Assessment for Dorset'

The assessment also indicates that using a combination of resources and technologies and assuming a 7.5% national contribution that a 15% target could be achieved in Dorset (right hand column of Fig 4.2).



Figure 4.2 Theoretical maximum available renewable energy resources for Dorset

The resource assessment is not intended to prescribe a level of deployment of any particular technology and it is important to realise that, in practice, these theoretical maximums tend to be over-estimates. While the assessment has taken account of some constraints for each technology, such as landscape and environmental designations, proximity to residential properties or availability of south facing roofs, further constraints need to be considered.

The actual, realistic renewable resource that could be utilised will depend on a variety of economic, technical and social factors. For example it may not be economically or technically feasible to extract all the available wood resource, or environmentally or socially acceptable to exploit all the available wind resource. In reality this means that each technology type is likely to be deployed at a level significantly below the maximum estimated potential.

4.7 Using a technology mix in Dorset

Rather than prescribing a technology mix to meet a target, the resource assessment exercise has been used to open the debate on which mix of technologies might be suitable for Dorset. The right hand column of Figure 4.2, illustrates how a range of technologies will be needed if a 15% or greater target is to be achieved - no one technology on its own, even at maximum deployment, can be relied upon to reach the target. In reality, the exact type, size and location of technologies installed on the ground will be determined by the individual planning applications and projects that are brought forward by developers, individuals or communities. A number of key partners noted, through the consultation, the need to encourage renewable energy in Dorset with the least visual impact.

The scale of technology deployment is also a key factor. Table 4.3 aims to illustrate the average energy generating output of different types and sizes of renewable energy installations.

Table 4.3 Typical generating outputs from renewable energy installation

	6kW hydro turbine	15kW wind turbine	2.5MW wind turbine	2kW solar PV panel	2.5MWe WID compliant CHP	2MWe AD
Output (MWh)	26	30	5913	2	24333	19467
Number of homes equivalent powered	5.5	6.3	1234.9	0.4	5082	4065.6

Electricity Generation

Heat generation

	150 kW biomass boiler	20kW biomass boiler	6kW heat pump	2.5MWe WID compliant CHP (heat output)	2MWe AD (heat output)
Output (MWh)	262.8	17.5	5.3	48666.7	23360
Number of homes equivalent heated	18.7	1.0	0.4	3472.1	1666.6

The accompanying document 'Unpacking Renewable Energy Technologies for Dorset' provides more detailed information on how different renewable energy technologies work, what the constraints are and where they are best suited. Some of the key issues for Dorset are summarised below.

Declining landfill gas

Landfill sites are filling up and being closed without new sites being added, as national and local policy is diverting waste away from landfill. Renewable energy production from existing landfill sites has a lifetime of about 15 years, as the organic elements of the waste degrade over time. It is estimated that production at a typical landfill site will fall between 5% and 10% per annum. On this basis landfill capacity in the area could typically decline to some 9.4MWe in 2015 and 5.5MWe in 2020. As a result, renewable energy generation from landfill gas could be estimated to be approximately 38.5GWh in Dorset in 2020. According to estimates from the Department for Energy and Climate Change, nationally the contribution from landfill gas will have dropped to 0 by around 202710.

Rural vs urban

More built-up urban areas will tend to have fewer renewable energy resources available yet have a higher energy demand, so they will find 15% a more stretching target than rural areas which have a lower total energy demand and more resource potential. For urban areas, retrofitting microgeneration technologies such as solar PV, solar thermal and heat pumps to homes and businesses is likely to provide the greatest area of opportunity, but equally energy from waste and district heating schemes could play a major role. It will be important that urban areas focus on energy efficiency to reduce overall demand.

Role of onshore wind

Onshore wind is identified as the single largest theoretically available resource in Dorset. Although some constraints including landscape designation were applied to the resource assessment it is recognised that further constraints need to be considered which will limit this resource in practice. This will need to be considered through the planning process and will include the cumulative effect of large scale wind turbines or site specific issues such as grid connection, wildlife species, RADAR etc.

However, it is also clear that even if all other resources are deployed at maximum capacity, and renewable energy resources defined as 'national' meet 50% of a local target, there would still need to be some deployment of onshore wind in Dorset. This Strategy therefore proposes a proactive approach to accommodating such development where it would be most acceptable via a process of landscape sensitivity analysis. This can be applied to identify the most appropriate locations for such development, and avoid the most sensitive locations, and also to assess the scale of development which might be appropriate for different locations (see planning actions section 6 - priority area 3).

Role of offshore wind

Offshore wind, such as the major wind farm being proposed off the Dorset Coast (Navitus Bay), is considered a 'national' renewable energy resource by the Government. As a national infrastructure project not subject to a local planning application, there will be limited local influence over whether or not Navitus Bay will be approved. Such a development could have substantial economic benefits to the area, through the creation of local jobs, development of the supply chain and potentially the creation of community funds.



¹⁰ http://www.decc.gov.uk/assets/decc/What%20we%20do/UK%20energy%20supply/Energy%20mix/Renewable%20 energy/policy/renew_obs/1834-review-costs-potential-renewable-tech.pdf

Micro generation technologies

Micro generation technologies have a significant role to play in Dorset. However, compared to larger renewable energy technologies their contribution is likely to be relatively limited, as can be seen in table 4.3. However the wider benefits to individuals and communities from installing micro generation schemes are significant and they will continue to be vigorously promoted by the Strategy.

Biomass and Bio-fuels

Biomass is recognised as one of the most important technologies for rural Dorset due to the availability of local biomass resources but also the added potential benefits for the environment, communities and the economy from developing the local supply chain. A specific 'bio-energy' working group has been progressing this area. In particular the use of local sustainable biomass fuel sources is directly in line with the aims of the Strategy.

Imported bio-fuels used for energy

generation are considered a 'national' renewable energy resource by the Government, but it was clear from the consultation exercise that the provenance and environmental impacts of imported biofuels was a particular issue of concern for local residents.

Energy from waste and anaerobic digestion have some potential but are limited by the relatively small locally available resource and a number of plants already in planning or approved are likely to utilise much of the available resource.

Hydro power

This technology will be able to play a small role in delivering renewable energy due to the limited number of rivers in the area with sufficient head/flow.

Wave and Tidal

Current economic viability and likely future viability within the timescale covered by the Strategy seem to be limited for these technologies. However, it is recognised that this is an area of increasingly Government interest and viability may change within this timescale. Changes to Renewable Obligation Certificates (ROCs) and future funding opportunities should also result in increased support for tidal current and wave energy. Further research and development and incentive schemes could improve their viability.

5. Vision, Aims and Target

The existing vision and aims of the Dorset Renewable Strategy (2005) have been tested through the consultation for this revised Strategy and consultation suggests that their retention has widespread support. However, a new aim on energy security is proposed to address the growing concern about this area.

In addition to providing the strategic direction for the Strategy, the five aims should also be seen as guiding principles for all future renewable energy development locally, confirming that renewable energy development should be environmentally, socially and economically sustainable. The vision and aims are as follows.

Our Vision

"For the community of Dorset to play our part in mitigating climate change by using energy more efficiently and harnessing our viable renewable energy resources. We wish to maximise the local economic, environmental and community benefits that doing this can bring."

Aims

- 1. To maximise the potential for local economic benefit and diversification.
- To facilitate renewable energy development that is appropriate to Dorset's environment and communities.

- To encourage a high degree of community involvement, understanding and benefit from using energy more efficiently and developing Dorset's renewable energy resources.
- To enable Dorset to play its part in reducing greenhouse gas emissions in line with local, regional, national and international targets.
- 5. To provide local, affordable and secure renewable energy supplies.

Whilst the aims are numbered this does not mean that they are in any priority order, rather they are all considered to be equally important.

5.1 Strategy Targets

The Strategy will adopt a twin-track target:

A twin-track target

Taking into account the national commitment to legally binding targets, local policy commitments to tackle climate change, the assessment of available resources and the level of ambition evidence in the responses to consultation, the Strategy proposes an aspirational target of at least 15% of Dorset, Bournemouth and Poole's total energy needs to be met from renewable sources (electricity, heat and transport) by 2020. However, to reflect the expectation that approximately 7.5% of this will be delivered via renewable energy resources considered by Government as 'national' resources, regardless of local action, this Strategy will focus on delivering a secondary target of a

minimum of 7.5% of Dorset's energy needs to be met from local renewable energy resources over which we have more influence and control.

This would equate¹¹ to the area using enough local renewable energy resources to generate just under 1200 GWh of energy per year - enough to power about 250,000 homes or to heat around 85,000 homes¹².

¹¹ These figures are indicative only to give an impression of the scale that 1200 GWh represents. The number of homes powered or heated represents more than 7.5% of the area's 345,340 homes because there are other types of energy use making up total energy use in the area from which the 7.5% target is calculated - including commercial and industrial heating, power and processes, and transport energy use.

¹² Based on a local domestic consumption average of 4,800kWh of electricity and 14,000kWh of heat (from DECC produced local consumption figures http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/regional/ regional.aspx

6. Taking action

This Strategy aims to set the agreed direction of travel for renewable energy in the local area to 2020. It sets out the priority areas where effort needs to be focused to help us meet our aspirations for renewable energy together with a number of strategic actions which need to taken forward within each area. These remain high level to enable partners to develop more detailed actions around them and to be flexible enough to allow a sensible reaction to any new opportunities that arise or unexpected national / international policy changes.

Priority areas for action

The six priority areas for action that have been identified are:

Priority 1: Supporting the development of community renewable energy.

Priority 2: Maximising the local economic benefits of renewable energy generation.

Priority 3: Creating a more supportive planning system for renewable energy.

Priority 4: Developing locally appropriate technologies.

Priority 5: Delivering leadership and partnerships that support renewable energy.

Priority 6: Improving renewable energy communications and learning.

Each priority area represents a topic area where concerted effort is required across

multiple partners in order to bring about a step change in renewable energy generation locally up to 2020. Under each of these headings the Strategy outlines the current national and local position, what action is already underway in the area and barriers and opportunities for further action. These particularly draw from the research and evidence gathered, and the responses received, through the consultation process.

Strategic Actions

A number of strategic actions are given for each priority area. Detailed actions are not included within this Strategy update as these can very quickly date and do not allow for the development of responses to unexpected future opportunities which may present themselves. The exact actions that are needed to achieve the priority areas for action will be determined in more detail through action planning sessions by the Dorset Energy Partnership Group's working groups.

Priority Area 1

Supporting the development of community renewable energy

Context

Community renewable energy is an area of growing interest across Dorset with a range of community energy groups having established over the last few years. The Feed-in Tariff has made renewable electricity projects a viable investment for community groups and has raised awareness of the potential. The Renewable Heat Incentive



is likely to have a similar impact for heat technologies.

Community energy projects can have significant beneficial impacts for the community, including improving energy security, reducing carbon emissions, tackling fuel poverty and improving comfort levels, generating income for the community and increasing community cohesion. Where community energy projects produce an income for the community there is a multiplier effect on community cohesion: with financial benefits from renewable projects supporting further community activities such as community facilities or events that bring the community together.

In addition, renewable energy schemes offering significant levels of community benefit or led by the community are more likely to be acceptable to and supported by the local community and so may find it easier to gain planning permission. The Localism Act's proposed Neighbourhood Plans and more local decision making on planning applications may mean that there is a greater need for renewable energy developers to engage proactively with local communities to gain their support.

Progress to date

 The 3-year Local Area Agreement (LAA) reward project was completed by Dorset County Council Property Management Division in March 2009. This innovative project delivered 54 renewable energy installations on public and community buildings across Dorset with a combined installed capacity of 750kW. The success of the project also secured a £750,000 reward grant which was re-allocated by the Dorset Strategic Partnership. A proportion of this has further supported energy efficiency and renewable energy.

- A number of well attended community sustainable energy training seminars have been delivered in Dorset by the Energy Saving Trust through their "Green Communities" programme.
- A very successful Dorset Community Sustainable Energy Conference was held in April 2010 to raise awareness of community based energy projects in Dorset and further afield, including presentations from Totnes and Lewes (Sussex). A key outcome from the conference was support for setting up a local community energy web resource.
- A Dorset community energy web resource was developed in 2011 to enable community groups and individuals to share details of projects and services in Dorset. It includes details from local Transition Town groups, Dorset Energy Advice Centre, Dorset County Council, Energy Saving Trust, and Communities for Renewables.

Current issues and opportunities

To be successful in developing community renewable energy projects community groups need adequate, independent technical and financial support at all stages from the initial idea to installation. Currently there is a lack of information and understanding of financial mechanisms and models that may suit and allow community level renewable schemes. As a result, there is a need to offer further support and advice to community groups within Dorset, extending the reach of the current advice services and partnering with third sector providers to deliver on the ground support.

The huge national interest in community renewables at present means that there are a number of grant funding streams available to offer support and advice directly to community groups. Communities tend to need professional support to apply for these sources of funding.

Opportunities to share knowledge and financial, business and expert technical guidance between community groups need to be explored. For example, a community energy network could be established to make better use of social media, undertake community road shows, train community champions, publish case studies and produce renewable energy good news stories for the press. More communities need to be inspired to develop their own community energy projects. Exemplar demonstration sites could be created to inspire communities and show what can be achieved.

A local authority resource, such as a Community Renewables Officer, could drive the community energy agenda across the whole area, identifying funding streams for communities, improving communications and signposting to appropriate advice providers. However, there is a lack of public funding available to provide professional support to community groups. All support provision should be able to demonstrate the business case for investing the resources.

The 'localism agenda' is likely to have major, but as yet uncertain impacts on the way that renewable energy scheme planning applications are made and determined. Neighbourhood planning is likely to have more emphasis on local decision making and may offer opportunities for communities to become more engaged in renewable energy schemes and pro-actively engage with developers, potentially resulting in an increased number of community scale schemes which benefit local people. Parish Councils are likely to have a key role in initiating neighbourhood plans and commenting on planning applications.

Strategic actions – Priority Area 1:

- 1.1 To support communities to work together to promote community action, improve communication and share best practice and advice, building on the existing energy web resource.
- 1.2 To build a business case, seek funding and partners to support the development of community renewable energy advice delivery across Bournemouth, Dorset and Poole.
- 1.3 To work with local communities to encourage renewables and maximise funding opportunities.
- 1.4 To enable the effective networking of organisations and individuals on renewable energy and energy efficiency across Dorset.

Priority Area 2

Maximising the local economic benefits of renewable energy generation

Context

Dorset currently spends over £800million per year on energy from fossil fuels (including transport fuels) and nuclear power. The vast majority of this expenditure is lost to the local economy. Developing local renewable energy resources creates skilled local jobs and can help to retain energy spend in the local economy. For example, estimates from autumn 2011 assessed that the Feed-in Tariff had generated total net income of £400,000 per annum to householders in Dorset from solar PV systems already installed. (By January 2012, due to the sharp increase in PV installations over the last year this sum is now over £4 million). Jobs in the renewable energy sector in the South West have grown strongly year on year with the number of direct full time jobs rising from 2,900 in 2008 to 5,160 in 2010 according to a report from Regen SW¹³. This is against overall shrinkage in the UK economy of 3.4%.

Within Dorset a 'Green Knowledge Economy'¹⁴ model was adopted in 2009 by the Bournemouth, Dorset and Poole Multi-Area Agreement (MAA) to drive local economic growth. Within this model, there is a role to develop "strong economic communities of interest" around renewable energy, as well as to support all businesses to embrace renewable energy and energy efficiency.

This thinking has informed the Prospectus of the Dorset Local Enterprise Partnership which has succeeded the MAA. It will be important that the Green Knowledge Economy focus is continued and strengthened, so that renewable energy opportunities can be integrated into the area's economic plans.

Progress to date

There has been limited progress locally to maximise the local economic potential of renewable energy. Key activities include:

 In September 2010 the Dorset Energy Group hosted a successful Local Authority and Social Housing 'PV for Free' seminar to enable local authority officers and business partners to better understand and compare offers to install PV systems for free on Local Authority owned land and buildings and in social housing. The seminar focused on PV for free offers for land (i.e. surface car parks) and roof mounted installations, with finance provided by the installer.

- As a result of the Feed-in Tariff, there were over 70 registered solar PV installation companies within the local area by December 2011 - the second highest number for any County in the South West – employing an estimated 250 people.
- Work has been undertaken by RegenSW to explore the local economic opportunities from the proposed Navitus offshore wind farm. This work included a supply chain seminar held on Portland in 2011.
- Advice and support to local renewable energy developers by Dorset County Council's Renewable Energy Development Officer.

Current issues and opportunities

Integrating renewable energy into the work of the Local Enterprise Partnership provides an opportunity to incubate green technology jobs and encourage innovative manufacturing of renewable technologies. There are opportunities to create networks of green technology businesses to share knowledge and create business opportunities. There is also the need for support and advice to be provided to other businesses about opportunities to invest in renewable energy on their premises.

The local economic benefits of renewables are not well understood, communicated or realised. There is a need for greater information gathering and dissemination about the economic benefits to support the case for investing in renewables.

Current interest in solar PV, other microgeneration technologies and renewable

¹³ Regen SW (2010) The Economic Contribution of the Renewable Energy and Energy Efficiency Sectors in the South West of England, http://regensw.s3.amazonaws.com/1282046376_675.pdf

¹⁴ The term Green Knowledge Economy is explained in a note for the Bournemouth, Dorset and Poole Multi-Area Agreement by Geo Economics http://www.investindorset.co.uk/downloads/The%20GKE%20Framework.pdf

heat offers opportunities for local skilled jobs. However, there is a lack of training available locally in the practical skills needed to install renewable energy technologies as well as a general lack of awareness of what courses are already on offer locally. At Bournemouth and Poole College, courses are offered in plumbing and electrics that can support microgeneration skills but there are currently no colleges in the area that specialise in skills for renewables. Greater cooperation between colleges, universities, professional bodies, the private and public sector is needed to facilitate adequate training provision on renewables within the area. Links between industry and training providers need to be strengthened to ensure training provision meets the industry's requirements.

There is a limited tidal resource around Portland Bill that future developments in tidal current technology may open up. At present there are no suitable shoreline wave development sites in the area. There remain some opportunities for investment in the research and development of wave and tidal technologies in regional companies and universities. The planned 900MW Navitus Bay wind park has the potential to bring substantial economic development to the area, with construction and maintenance jobs potentially being created locally both onshore and offshore. There are opportunities to enhance local port infrastructure at Portland and Poole to enable them to serve as maintenance bases for this offshore development.

Strategic actions – Priority Area 2:

2.1 To work with the Dorset Local Enterprise Partnership to maximise the potential economic benefits for the area from renewable energy and a green knowledge economy.

- 2.2 To support the creation and growth of a local network of renewable energy installers, suppliers and manufacturers to share knowledge, learning and facilitate partnerships.
- 2.3 To gather and disseminate information about the local economic benefits of renewables.
- 2.4 To feed into plans for developing and delivering future education and training for the renewables sector.

Priority Area 3

Creating a more supportive planning system for renewable energy

Context

A supportive planning system has a major impact on the level of renewable energy delivered in an area. Proactive planning officers with a supportive policy environment are able to work with renewable energy developers, often at a pre-application stage, to shape schemes to be locally appropriate. Planners can also work with housing and commercial site developers to facilitate the delivery of developments that maximise appropriate opportunities to integrate renewables into sites.

There has been a significant change in national planning policy with the introduction of a new National Planning Policy Framework in March 2012. Planning policy will now be delivered through the development of Local Plans and Neighbourhood Plans.

Local planning authorities will need to ensure that they have appropriate policies in place to ensure that a robust planning process can be followed, leading to good quality decision making.

Permitted development rights for domestic micro generation technologies were updated in August 2011. Clarity on what is and what is not permitted development (i.e. does not require planning permission) needs to be communicated effectively to the public.

The Chancellor announced in the 2011 autumn budget statement that permitted development rights for solar PV on nondomestic buildings will be introduced at a future date.

Progress to date

- Training opportunities for planning officers and Councillors and a toolkit to support sustainable energy targets in Core Strategies have been developed across the region by working with Regen SW
- Permitted development rights for domestic solar panels have been clarified and subsequently promoted to ensure a consistent approach across all of Dorset's local authorities.
- A leaflet was published in March 2009 on the landscape impacts of energy crops.
- A series of training events/seminars have been delivered in Dorset over the last 3 years targeted at Planning Policy, Development Control and Building Control Officers, on the Code for Sustainable Homes, an Introduction to Renewable Energy and a low carbon district heating seminar (organised in partnership with Regen SW).
- West Dorset District Council, working with Regen SW, have developed a Local Energy Plan for the district, analysing energy consumption and renewable resources on a spatial basis to gain a

greater understanding of the potential for renewables in the area.

- District heating feasibility studies have been undertaken in Dorchester and Bournemouth.
- A methodology has been developed within Dorset to undertake landscape sensitivity analysis to understand whether sensitive areas are capable of accommodating the visual impacts of renewable energy installations.

Current issues and opportunities

Changes to the planning system present an opportunity to develop locally specific policies that support and facilitate the delivery of renewable energy and low carbon development. Paragraph 97 of the NPPF suggests a role for local authorities to use the DECC resource assessment work¹⁵ to map and understand their renewable energy resources in order to take a more proactive approach to planning for renewables. Local energy planning, as piloted by Regen SW in West Dorset, is an example of this mapping approach in action. Other local planning authorities within Dorset could adopt a similar approach. Even where renewable resources have been mapped, the exact type, size and location of technologies installed on the ground will be determined by decisions on individual planning applications.

The opportunity exists to use the landscape sensitivity analysis methodology developed in Dorset more widely across the area to understand which areas could accommodate renewable energy installations and the scale of development appropriate in the landscape.

There is the potential for a greater degree of pre-application interaction between planners and developers to ensure that developments

¹⁵ In the south west, this work was commissioned by Regen SW according to the DECC methodology and used to underpin the resource assessment for this strategy

are delivered that maximise renewable energy opportunities and that renewable energy applications are locally appropriate. These discussions could be supported by planning performance agreements. In addition, there is the potential for more detailed information about energy demand and carbon emission reduction to be included on planning applications for new developments.

Local authority planners are often well placed to facilitate and coordinate the planning of district heat networks, both on new developments and in existing areas – through planning policy, opportunity mapping and by facilitating discussions with developers.

To ensure that supportive policies are continued or introduced, there is a need for training and information for planners and councillors about the opportunities, benefits and impacts of renewable energy in their area. Then, for example, local planning guidance could be developed, as it has in Cornwall, to promote understanding about the different scales of wind power so that small 15 metre high turbines are not subject to the same planning considerations as large multi-turbine wind farms. Other technologies could also benefit from similar guidance for planners.

There is currently no commonly agreed method for recording renewable energy planning applications across the local planning authorities in the area, although individual authorities may have their own systems. A common system would improve understanding of issues of cumulative impact, as well as provide opportunities to share learning both within and between local planning authorities about planning applications. For example, an officer who has dealt with a small wind turbine application in one authority could share the knowledge they gained with officers in other councils.

The introduction of the Community Infrastructure Levy (CIL – the collection of money from new development) is likely to provide limited opportunity for renewable energy in many parts of Bournemouth, Dorset and Poole, as the majority of funding raised is likely to be required for transport and nature conservation. However, the introduction of 'allowable solutions' as part of the government's zero carbon homes initiative, may provide more opportunity to support renewable energy and energy efficiency. At present it is unclear how this may operate.

Strategic actions – Priority Area 3:

- 3.1 To prepare for forthcoming changes in the planning system, which may present new opportunities and challenges in the development of renewable energy.
- 3.2 To develop local energy plans and/ or other forms of mapping for identifying the renewable energy opportunities across Dorset.
- 3.3 Seek to employ the landscape sensitivity analysis methodology across the area.
- 3.4 To develop innovative approaches to working with developers – such as planning performance agreements or support for developers and consultants submitting planning applications to better understand current renewable energy technologies and best practice.

- 3.5 To improve information about energy use and carbon reduction on planning applications.
- 3.6 To explore opportunities for local authority planners to facilitate district heat networks.
- 3.7 To consider developing guidance for planners about different scales of wind energy and application requirements for other technologies.
- 3.8 To inform development managers and members about renewable energy technologies, sharing records of planning applications and learning within and between authorities.
- 3.9 To provide ongoing training/ briefing for officers and councillors so that they are aware of the benefits and impacts of different technologies and can make objective assessments of the opportunities.
- 3.10 To develop an up to date resource for sign posting for information and legislation for use by planners, members, developers, Parish and Town Councils and local communities

Priority Area 4

Developing locally appropriate technologies

Context

The resource assessment undertaken to support the development of this Strategy shows that there is potential for all renewable energy technologies to be delivered to some extent within the area of Dorset and that a mix of technologies will be required if the 15% aspirational target is to be achieved.

Due to the rural nature of Dorset, the county has large opportunities for supplying and using locally grown biomass, with the potential of offering local economic benefits through the development of a local supply chain. Onshore wind also has significant potential as a renewable energy resource. However, the area's unique landscape and large number of environmental designations can make onshore wind applications controversial. There is also some limited potential for anaerobic digestion in the area using food and animal wastes. Solar PV installations of all scales could also make a contribution to the area's renewable energy deployment.

The urban areas (Bournemouth and Poole and the urban centres of the Dorset County area) have greater opportunities for deploying microgeneration technologies, such as solar PV and district heat networks. This distinction between urban and rural areas is useful to provide focus to support activities but is not a clear cut distinction. There are urban farms, and rural areas are also suitable for microgeneration technologies and smaller-scale district heat networks.

In terms of offshore, there is a limited tidal resource around Portland Bill that future developments in tidal current technology may open up. At present there are no suitable shoreline wave development sites in the area. There is a planned 900MW Navitus Bay wind park that is being developed. Further offshore wind sites may be available in the future but lead-in times are long, and it would be many years before these could be installed.

Progress to date

Work in the area has particularly focused on biomass and micro generation technologies for the reason previously mentioned. Progress on installations in the area has been noted in previous sections. Key activities undertaken by the Dorset Energy Group have included:

- Completion of a wood resource assessment for the area and research into opportunities for wood fuel supply for Dorset County Council and Purbeck District Council.
- Development of projects to support local wood fuel supply including partnerships with RSPB and 'Direct from Dorset' accreditation schemes for wood suppliers.
- Increased installation of micro renewable technologies and demonstration schemes on LA property particularly schools.
- Partnership working and feasibility studies to explore opportunities for district heating and to bring forward schemes such as solar PV on local authority estate and social housing. A Community Interest Company has also been set up in Poole as a partnership between the Council, Bournemouth University and Transition Town (Poole) to investigate the renewable energy generation from the resources in Poole Harbour
- The Borough of Poole was funded through the Low Carbon Framework programme to research the potential to reduce CO₂ emissions from different approaches to the management of municipal waste¹⁶. The assessment which used the Waste and Resources Assessment software Tool for the Environment (WRATE) included an evaluation of an autoclaving process developed by a local company Aerothermal, whereby unsorted black bag waste is treated with high temperature steam to produce clean recyclables such

as metals, glass and plastics and a liquid slurry rich in the organic fraction of waste which can be used as feedstock for a conventional biogas (anaerobic digestion) plant.

Current issues and opportunities

Despite the recent boom in solar PV installations, there remains significant potential for further installations of this and other microgeneration technologies across the area. The number of installations is limited predominantly by the availability of personal capital for householders - only a small proportion of the population is likely to have the funds available to invest in solar PV or other microgeneration technologies on their property. The proposed cut in the Feedin Tariff for solar PV is likely to have reduced the number of people able to invest, as the rate of return is now relatively uneconomic for any person needing to borrow capital to finance an installation. However, opportunities remain to raise awareness amongst householders, businesses and communities about microgeneration technologies, as well as to support them in purchasing good quality equipment from local, reputable installers.

There is the potential to enlarge the local biomass supply chain for renewable heating, using sustainably produced, indigenous wood and energy crop supplies, bringing additional jobs to the area, offering biodiversity benefits, providing green infrastructure and increasing the security of energy supplies. The consultation process for this Strategy highlighted concerns about the sustainability of using imported biofuels and biomass to deliver renewable energy and the aims of this Strategy specifically support the use of **locally** sourced biomass.

There is a large untapped onshore wind resource in the area with opportunities for small, medium and large turbines. However, onshore wind remains a topic of much debate,

¹⁶ http://www.poole.gov.uk/environment/sustainability-and-carbon-reduction/carbon-management-programme/

with both pro and anti groups in existence. The on-line opinion survey undertaken with the Dorset Citizens Panel as part of this Strategy found that onshore wind polarised opinion to the greatest extent with 26.6% of respondents against or strongly against onshore wind but over 55% supporting or strongly supporting it. Greater provision of objective information about onshore wind is needed to enable people, planning officers and councillors to make a considered assessment of its benefits and impacts.

The potential visual impacts of wind turbines within Dorset's unique environment has been raised as an issue of particular concern. Individual planning applications will continue to be considered on a caseby-case basis, with consideration given to the appropriateness of a project's scale and design in that location. The landscape sensitivity analysis methodology developed within Dorset to understand whether sensitive areas are capable of accommodating the visual impacts of renewable energy installations should be used to ensure wind developments are appropriately sited in the landscape. Smaller schemes or schemes with limited visual impact tend to be more readily accommodated in sensitive landscapes.

New opportunities for energy from waste plants are limited in the area by the relatively small locally available resource and the existing planning permission for a 10MW energy from waste pyrolysis plant at the Dorset Green Technology Park in Winfrith. Anaerobic digestion presents an opportunity for the area, but again there are a number of sites already in planning that are likely to use a large proportion of the available food waste resource. There is some potential for smaller anaerobic digestion plants using farm wastes and energy crops. The current Feed-in Tariff and Renewable Heat Incentive present financial incentives for farmers interested in developing on-farm anaerobic digesters and there are loans available from WRAP to support capital costs. There is an opportunity to support rural land owners to understand the opportunity that anaerobic digestion and other renewable energy technologies currently present.

Strategic actions – Priority Area 4:

- 4.1 To support householders and businesses in understanding the opportunities of microgeneration technologies and encouraging them to buy from local, reputable installers
- 4.2 To support the development of the local sustainable biomass supply chain, with local authorities, landowners, businesses and community groups.
- 4.3 To provide objective information to the public, planning officers and councillors about the pros and cons of renewable energy technologies.
- 4.4 To raise awareness amongst rural landowners of the opportunities for renewable energy technologies and energy crops.

Priority Area 5

Delivering leadership and partnerships that support renewable energy

Context

The Dorset Energy Group (now the Dorset Energy Partnership) has already successfully led the way on renewables across the area, delivering activities against the Dorset Renewable Energy Strategy (2005). The development and delivery of this new Strategy will provide an opportunity to review the governance of the Group to ensure that it is still fit for purpose.

Progress to date

- Dorset Energy Group already works effectively as a partnership and has a strong regional reputation, which provides a sound basis for improved cooperation and delivery against actions in the future.
- A Local Authority Councillor network has been established to provide regular updates to local decision makers and has been supported by training and seminars.
- Dorset's local authorities have been leading by example in the installation of renewable energy demonstration schemes, particularly within the schools' estate. Dorset County Council's Local Authority Area reward grant project resulted in over 50 installations.
- Dorset County Council had also planned a £1 million investment programme to deliver solar PV installations on 30 schools between December 2011 and March 2012. The unexpected changes to the Feed-in Tariff for solar PV have unfortunately changed the business case for this programme, which is now on hold.

Current issues and opportunities

The review process has highlighted the need for effective governance and accountability for the Dorset Energy Group (now Dorset Energy Partnership), its strategies, delivery projects and action plans. This will be important to ensure that there is support at both a political and professional level within partner organisations for delivering the Strategy. There is also a need to bring in additional stakeholders from across the public, private and community sectors to support delivery of the revised Strategy. The public sector has great potential to lead the way on renewables, working with the private sector to develop innovative networks and partnerships that deliver real projects. The public sector can also facilitate commercial sector projects by raising awareness of renewable energy opportunities and bringing potential partners together. Economic Development Officers and the Local Enterprise Partnership (see 7.4.2 above) could play a key role in developing these partnerships.

In order for local authorities to lead on renewables in the area, there needs to be ongoing training for officers and councillors so that they are aware of the benefits and impacts of different technologies and can make objective assessments of the opportunities.

The decision in August 2010 to allow local authorities to be able to sell renewable electricity to the grid has opened the door for larger renewable energy projects to be led by local authorities. European funding streams and other grant funding sources are available to the public sector to cover the non-capital costs of developing projects. Demonstration schemes led by the public sector can raise awareness about renewable energy to the wider community, as well as delivering environmental and economic benefits. There is the potential to learn from other local authorities outside the area that have been successful in developing large scale demonstration schemes, such as for biomass district heating and CHP. There is a need for the public sector across the area to assess or re-assess the relative technology options for installing renewables on their own estates, including county farms, following the Feed-in Tariff review, in light of the introduction of the Renewable Heat Incentive and once the details of the Green Deal have been made clear.

Strategic actions – Priority Area 5:

- 5.1 Establish effective governance and accountability for the Dorset Energy Partnership, its strategies, delivery projects and action plans.
- 5.2 Promote closer involvement of other key staff, for example, economic development officers, within future local renewable energy work and provide training for officers and councillors.
- 5.3 Assess and develop opportunities for renewable energy on the public sector estate across the area.

Priority Area 6

Improving renewable energy communications and learning

Context

The development of this Strategy was accompanied by an on-line public opinion survey, using the Dorset Citizens Panel. The results are published as the 'Survey of Public Opinion on the Development of Renewable Energy in Dorset'. There were 557 respondents to the survey from a range of areas, age groups and backgrounds. Over 85% of respondents said they strongly supported or supported the development of renewable energy in the County. The majority of respondents also indicated that they had good levels of understanding of renewable energy technologies.

Renewable energy is a technical and fast developing area and there remains a large amount of misleading and false information about costs, benefits and application of renewable energy technologies in the public domain. To enable informed and unbiased debate there is a need to communicate the pros and cons of renewable energy effectively and to raise awareness amongst individuals, businesses, the public sector and communities about the opportunities that renewable energy can offer for them.

This priority area underpins the other priority areas identified in this Strategy and it is critical that both energy efficiency and renewable energy awareness are promoted together.

Schools are also a focus of activity as they offer not just significant opportunities to raise awareness of school pupils but also the wider community. In addition schemes such as Eco-schools enables renewable energy to be considered as part of a wider drive to tackle energy, carbon emissions and climate change and provide the opportunity to build renewable energy into the curriculum.

Progress to date

- The 8 sustainable energy information sheets, originally produced by the Dorset Energy Group in 2006, have been revised to include details of the new Feed-in Tariffs which support domestic and community scale renewable electricity installations from April 2010. Several thousand copies of these popular leaflets have being printed for free distribution through partners and community group and are available to download from Dorset County Council's website.
- Demonstration schemes within schools in Dorset have helped to raise general awareness and provide a significant opportunity to build renewable energy into the curriculum. In Dorset this approach is supported by an eco-schools and a carbon management programme for schools.

- A number of sources of independent advice and support are available for business and community sectors on renewable energy and energy efficiency these include the Improve Your Resource Efficiency (IYRE) business advice, Dorset Energy Advice Centre (DEAC) and the Energy Saving Trust (EST).
- A number of conferences have been held to raise awareness of renewable energy including a conference held at Kingston Maurward College in 2007.
- The first Newsletter was developed in July 2011 to update on progress and raise awareness of schemes and opportunities in the area.
- Development of internet and web based resources to include a Dorset community energy web resource (outlined under priority area 1: community).

Current Issues and Opportunities

There is a need for a coordinated approach to communicating renewable energy issues and opportunities. The development of a communications' plan for the area would ensure that consistent and effective messages are disseminated, reaching a wider range of stakeholders, sharing learning and promoting good practice. At present, the lack of signposting to a single organisation for specialist renewables advice means that the public do not know where to go for information or who to trust. A shared and jointly agreed communications strategy on renewables will strengthen the public message and improve understanding of the options locally, this needs to be closely tied to currently available and future sources of renewable energy advice such as that provided by the Energy Saving Trust.

Sharing information, pooling resources and improving cross boundary working will also help improve cost effectiveness and efficiency, removing duplication of effort, so that organisations are not reinventing the wheel.

Information provided needs to be regularly updated. The use of existing communication channels, such as websites, newsletters and council tax mail outs, should be explored to inform the public and businesses about renewable energy. The use of existing materials such as 'renewable energy information leaflets' or the 'Unpacking Renewable Energy Technologies for Dorset' paper accompanying this strategy should be maximised.

Existing local community and business networks could be used to promote renewable energy opportunities, for example through guest speakers and technical presentations. At present, there is little training or consistent information available to inform parish councils about renewable energy.

There are opportunities to work with the private sector, including renewable energy companies, to deliver updates and events, including market place style events. In addition, lifelong learning routes and links to colleges and training providers could be explored.

Strategic actions – Priority Area 6:

- 6.1 To develop and implement a communications plan, to ensure wider engagement with public, business and community promote best practice and provide advice and information.
- 6.2 To work more closely with partners and local educational establishments to develop and deliver the appropriate education and training to meet local needs for renewable energy development, for example, local renewable energy companies could host technology demonstration events and presentations.
- 6.3 To ensure that renewable energy continues to be an integral part of the eco-schools programme and to develop exemplar demonstration projects within schools.

7. Delivering the strategy– next steps

Endorsement and action planning

Following the endorsement of the Strategy by stakeholders the Dorset Energy Partnership will be responsible for its delivery. Initially this will involve translating each of the strategic actions identified in each priority area into annual action plans, by the Dorset Energy Partnership working groups and other partners.

Working groups will be required to develop plans ensuring existing actions from the 2005 strategy that are still relevant are rolled forward and engaging other community, business and public sector partners as appropriate. Plans will be updated annually.

Each working group will be responsible for leading on actions within each priority area, and will be supported by the Renewable Energy Development Officer, as follows: As part of this process the Dorset Energy Partnership will seek to engage with individuals, communities and organisations who can influence and assist in the delivery of the Strategy.

Governance

The Dorset Energy Partnership will be responsible for coordinating and monitoring delivery of both the Renewable Energy Strategy and Energy Efficiency Strategy. The partnership is currently made up of an Executive, including representatives from all the local authorities in the area as well as other delivery organisations, and a number of working groups involving wider stakeholders from public, private and community sectors.

Priority Area	Groups leading
Priority area 1: Supporting the development of community renewable energy	Community Sustainable Energy Working Group
Priority area 2: Maximising local economic benefits	Dorset Energy Partnership Executive
Priority area 3: Creating a supportive planning system	Sustainable Energy Planning Working Group
Priority area 4: Developing locally appropriate technologies	Renewable Energy Development Officer and the Bio-Energy Working Group
Priority area 5: Delivering leadership and partnership	Public Sector Sustainable Energy Working Group and Local Authority partners
Priority area 6: Improving communications and learning	Dorset Energy Partnership Executive and the Public Sector Sustainable Energy Working Group

As noted within priority area 5, the governance of the Executive group and its membership has been reviewed to ensure it continues to be fit for purpose.

Measuring and monitoring

Progress against the Strategy will be monitored and reported on a regular basis. This will include:

- Regular monitoring of working group action programmes and reporting to the Executive group
- Annual progress reporting to internal and external audiences – detailing ongoing actions, successful projects and progress of the working groups
- Annual monitoring of energy generation and installed capacity within each local authority area through the Regen SW annual surveys.
- Annual monitoring of economic benefit of renewable energy in the area by measuring investment in local renewable energy projects, income retained in the local economy through renewable energy supply and accumulative new job creation.

It is envisaged that the Strategy will be reviewed and, if required, updated after five years.



Summary of strategy development process

Production of this Strategy has been funded by the Department for Communities and Local Government (CLG), which in 2010 selected Bournemouth, Dorset and Poole as one of only 9 local authority areas in the UK to pilot Local Carbon Frameworks, in recognition of their ongoing achievements and strong partnership work in the area of sustainable energy.

Regen SW, an independent, not for profit organisation, specialising in sustainable energy, were awarded the contract to review and update the Renewable Energy Strategy(2005).

The Strategy update started in September 2010 and was undertaken in two phases. Phase 1: Evidence gathering and research, Phase 2: Consultation and strategy development. These stages are outlined below.

Phase 1: Evidence gathering and research

This included:

- a review of the policy context affecting renewable energy,
- a public opinion survey, by over 500 local residents, covering attitudes to renewable energy,
- an analysis of progress against the original 2005 Strategy,
- an assessment of the potential renewable energy resources available locally and development of different

possible scenarios for renewable energy generation to 2020.

This first stage was summarised by an 'Issues Paper', produced in March 2011, which outlined the evidence and research gathered, a summary of an initial analysis of strengths, weaknesses, opportunities and threats (a SWOT analysis) and set out a number of priority areas for action.

It was supported by a technical appendix, giving further details on the renewable energy resources available in Bournemouth, Dorset and Poole.

Stage 2: Consultation and strategy development

A stakeholder consultation event was held in Dorchester in March 2011 to gauge views on the level of ambition for renewable energy within Dorset and to test and refined the potential priority areas for action.

A consultation draft Strategy was produced in May 2011. This was then subject to a four month public consultation period, lasting until early October 2011.

The consultation attracted comments from nearly 200 respondents. All comments received have been considered and a number of amendments have been made as a result within this final version of the Strategy. A summary of responses is available on Dorset for you.

Fig1: Outline of strategy development process

Phase 1:

Review and analysis including:

- Review of policy context and its implications
- Spatial analysis of renewable energy resources
- Public opinion survey of over 500 people using citizens' panel
- Review of progress against original strategy

Output: Issues paper that summarises the findings of the review and analysis process, including the resources available, key opportunities, issues and barriers

Phase 2:

Consultation event in March 2011



Draft strategy (May 2011)



Four month public consultation (June 2011 to October 2011) Nearly 200 responses



Final strategy developed based on all input received



Endorsements with Caveats

Christchurch Borough Council

Endorse the Strategy noting that nothing in the Strategy affects the council's position, yet to be determined, regarding the proposed Navitus Bay Windfarm.

Dorset AONB Team

The team as technical advisors to the AONB Partnership Board, are happy with the intention and content of this strategy. The Board are unable to endorse it as a body as many of their constituent members are needing to run the strategy through their own internal processes. The Dorset AONB Team is happy that this strategy does not encourage excessive impact on the area's natural beauty, but rather promotes appropriate renewable energy generation; we believe that the protected landscape can contribute well to the targets by applying the right scheme at the right scale in the right place.

East Dorset District Council

It is expected that whilst the strategy provides a technical assessment of Dorset's renewable energy resource potential, further work will be required to refine this to ensure an accurate picture of technologies most appropriate to each local authority area and those with the least environmental impacts. It is also noted that this further work could impact on the delivery of the aspirational target for renewable energy.

Encouragement is given to progressing the stronger landscape assessment work referred to in the Strategy.

East Dorset FoE

Endorse the strategy as a statement of local commitment to the ideals of fostering greater energy self-sufficiency but urge the responsible authorities to continuously review and update this strategy and to seek to produce a more ambitious and coherent policy within the next two years.

Environmental Theme Action Group, East Dorset Community Partnership

Endorse the strategy subject to proposals ensuring no adverse impact on species of nature conservation interest.

North Dorset District Council

To adopt the Bournemouth, Dorset and Poole Renewable Strategy to 2020, except those parts which seek to identify/set a strategy target, namely:

- (a) an aspirational target of at least 15% of Bournemouth, Dorset and Poole's energy needs to be met from all renewable sources by 2020; and (b) a secondary target of a minimum of 7.5% of Dorset's energy needs to be met from local renewable energy resources; subject to:
 - (i) officers seeking to agree to undertake joint work, where necessary, with other Councils to clearly establish the need, opportunities and realistic scope for delivery of renewable energy opportunities in Bournemouth, Dorset and Poole in the light of environmental constraints; and

- (ii) in any event, further work being undertaken to more clearly establish the need, opportunities and realistic scope for delivery of renewable energy opportunities in North Dorset; and
- (iii) the review of the Bournemouth, Dorset and Poole Renewable Energy Strategy, following the completion of such further studies, including the suitability / desirability of incorporating targets.

All such work to include further landscape sensitivity analysis and a subsequent resource assessment. Subject also to amendments to the Priorities as follows:

Priority 1: Supporting the development of community renewable energy.

Priority 2: Maximising the local economic benefits of renewable energy generation subject to identifiable constraints being satisfactorily addressed.

Priority 3: Creating a more supportive planning system for renewable energy.

Priority 4: Developing locally appropriate technologies.

Priority 5: Delivering leadership and partnerships that support renewable energy.

Priority 6: Improving renewable energy communications and learning.