

|                                    |   |
|------------------------------------|---|
| <b>Title of Report:</b>            | <b>Renewable Energy in West Berkshire</b> |
| <b>Report to be considered by:</b> | Greener Select Committee                  |
| <b>Date of Meeting:</b>            | 14 <sup>th</sup> December 2010            |
| <b>Forward Plan Ref:</b>           | N/A                                       |

**Purpose of Report:** This report is in response to two separate but related Council motions, dated March and September 2010, concerning renewable energy within West Berkshire and West Berkshire Council.

**Recommended Action:** 1) That the LSP Greener Partnership are best placed for taking on responsibility for, and producing, a West Berkshire Renewable Energy Strategy.  
2) That the Council Energy Team finalise an Energy Strategy, to include policy on renewable energy, for West Berkshire Council.

**Reason for decision to be taken:** To set out the Council's current position regards renewable energy in West Berkshire

**Other options considered:**

**Key background documentation:** 'The Energy Act 2008', 'The Climate Change Act 2008', 'The UK Renewable Energy Strategy 2009', 'Berkshire Renewable Energy - 2020, Evidence Base & Recommendations' 2010.

The proposals contained in this report will help to achieve the following Council Plan Priority(ies):

- CPP1 – Support our communities through the economic downturn** – to alleviate the impact on different communities and individuals who find themselves out of work and/or disadvantaged
- CPP2 – Raise levels of educational achievement** – improving school performance levels
- CPP3 – Reduce crime and the fear of crime**

The proposals will also help achieve the following Council Plan Theme(s):

- CPT1 - Better Roads and Transport**
- CPT2 - Thriving Town Centres**
- CPT3 - Affordable Housing**
- CPT4 - High Quality Planning**
- CPT5 - Cleaner and Greener**
- CPT6 - Vibrant Villages**
- CPT7 - Safer and Stronger Communities**
- CPT8 - A Healthier Life**
- CPT9 - Successful Schools and Learning**
- CPT10 - Promoting Independence**
- CPT11 - Protecting Vulnerable People**

- CPT12 - Including Everyone
- CPT13 - Value for Money
- CPT14 - Effective People
- CPT15 - Putting Customers First
- CPT16 - Excellent Performance Management

The proposals contained in this report will help to achieve the above Council Plan Priorities and Themes by:

| Portfolio Member Details                    |   |
|---|---|
| <b>Name &amp; Telephone No.:</b>            | Councillor Hilary Cole - Tel (01635) 248542 |
| <b>E-mail Address:</b>                      | hcole@westberks.gov.uk                      |
| <b>Date Portfolio Member agreed report:</b> | 01 December 2010                            |

| Contact Officer Details |                             |
|-------------------------|-----------------------------|
| <b>Name:</b>            | Adrian Slaughter            |
| <b>Job Title:</b>       | Building Energy Officer     |
| <b>Tel. No.:</b>        | 01635 503265                |
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## Implications

|                                      |   |
|--------------------------------------|---|
| <b>Policy:</b>                       | This report identifies a need for a West Berkshire Renewable Energy Strategy in support of UK targets and also explains that an overarching Energy Strategy is currently being developed for West Berkshire Council. Production of these Strategies / Policies will be done in consultation with local stakeholders and Council Services to ensure that implications for Council policy are clearly understood. |
| <b>Financial:</b>                    | The introduction of a Council Energy Strategy will improve the targeting of the Carbon Management budget, making this more objective.   |
| <b>Personnel:</b>                    | None identified at this stage   |
| <b>Legal/Procurement:</b>            | The introduction of a Council Energy Strategy will provide a more structured approach to the procurement of goods, services and specialist support.   |
| <b>Property:</b>                     | The introduction of a Council Energy Strategy should ensure that energy efficiency and renewables are considered as part of the scoping and design stages for building refurbishment and new building works where it is more cost effective.  |
| <b>Risk Management:</b>              | N/A   |
| <b>Equalities Impact Assessment:</b> | None identified at this stage   |

**NOTE: The section below does not need to be completed if your report will not progress beyond Corporate or Management Board.**

| Is this item subject to call-in?   | Yes: <input type="checkbox"/> | No: <input type="checkbox"/> |
|--|-------------------------------|------------------------------|
| If not subject to call-in please put a cross in the appropriate box:               |                               |                              |
| The item is due to be referred to Council for final approval                       | <input type="checkbox"/>      |                              |
| Delays in implementation could have serious financial implications for the Council | <input type="checkbox"/>      |                              |
| Delays in implementation could compromise the Council's position                   | <input type="checkbox"/>      |                              |
| Considered or reviewed by Overview and Scrutiny Commission or associated           | <input type="checkbox"/>      |                              |
| Task Groups within preceding six months  |                               |                              |
| Item is Urgent Key Decision  |                               | <input type="checkbox"/>     |

# Executive Summary

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## 1. Introduction

- 1.1 This report is in direct response to two separate but related Council motions on renewable energy, dated March and September 2010, which were passed for consideration to the Greener Select Committee. The motions can be found in full in Appendix A and B respectively.
- 1.2 The aim of the report is to first put into context the national, regional and local policy and financial drivers for renewable energy. It will then provide a high level summary of the current level of renewable energy within West Berkshire Council and West Berkshire. Finally it will outline the potential next steps for consideration by the Greener Select Committee.

## 2. Background & Context

- 2.1 The last few years, and especially the last 6 months, have seen a number of developments relating to sources of renewable energy, encouraging administrations to adopt a more proactive stance at the national, regional and local level.
- 2.2 In 2007, the UK agreed with other EU Member States to an EU-wide target of 20% of the EU's *total energy consumption* to come from renewable sources by 2020. The UK share of this overall target is to achieve 15% of the UK's total energy consumption to come from renewable sources by 2020.
- 2.3 One of the drivers employed by the Government is greater financial support for renewable energy in the form of the 'Feed in Tariff' and the 'Renewable Heat Incentive'.
- 2.4 The situation with regards the South East Plan, referred to in Appendix A, is currently unclear. Revoked by the Communities Secretary, Eric Pickles, this action has, however, been successfully challenged in the High Court. The case was specifically concerned with housing targets but it means that the South East Plan is legally still in force.
- 2.5 Since late August 2010, when the Government removed the restriction on Local Authorities being able to take full advantage of the Feed in Tariff (FITs) the Energy team have been liaising with other Berkshire Local Authorities, external organisations, key West Berkshire Council Service Areas and renewable energy suppliers.
- 2.6 In order to move forward, there first needs to be greater clarity of where, as a Council and as a District, we are currently positioned with regards to renewables
- 2.7 Drawn from SEE-STATS and Department for Energy and Climate Change (DECC) figures, Table 1 in Appendix D shows the latest available information for Berkshire with regards the level of energy from renewable sources as a percentage of total energy consumption (3.1%). It also uses available planning information, and the assumption that all projects will be implemented, to predict a 'Business as Usual' scenario of 5.3% of total energy consumption in Berkshire coming from renewable sources by 2020.

- 2.8 As part of a larger piece of work across Berkshire started by the Berkshire Economic Strategy Board, the LSP Greener sub-partnership is currently undertaking a feasibility study for district energy schemes in West Berkshire.
- 2.9 Appendix D, Table 2, highlights that within West Berkshire Council there are a number of current sites with renewable energy generating technologies installed. The total peak capacity of all these technologies is 746 kW or 0.7 MW.
- 2.10 The Council is also working with 'Partnership for Renewables', an arm of the Carbon Trust, to review the potential for large wind turbine development on its own land. This study has now identified a preferred site and further consultation work is required to ensure that this is feasible and does not impact on any other Council strategy.

### **3. Conclusion and Recommendations**

- 3.1 With West Berkshire being part of the area covered by the overall target for the Thames Valley and Surrey region there is an absence of specific Local Authority targets within the South East Plan. There is therefore a requirement for a more detailed bottom-up study for renewable energy within West Berkshire. Encompassing the results of high level Berkshire studies already undertaken by Thames Valley Energy and potentially looking in more detail at those sites identified in Appendix C, it is recommended that responsibility for undertaking such a study best sits with the LSP Greener sub-partnership.
- 3.2 The Cleaner Greener group responsible for delivering the Council's Cleaner Greener agenda have made a request of the Energy Team for a generic high level Council Policy on renewable energy. To include policy and procedure for large and small scale implementation of renewable energy, this will be taken on as part of a more expansive piece of work to design and implement an Energy Strategy for West Berkshire Council

#### **Recommendations**

- 3.3 **That the LSP Greener Partnership are best placed for taking on responsibility for, and producing, a West Berkshire Renewable Energy Strategy.**
- 3.4 **That the Council Energy Team finalise an Energy Strategy, to include policy on renewable energy, for West Berkshire Council.**

# Executive Report

---

## 1. Introduction

- 1.1 This report is in direct response to two separate but related Council motions on renewable energy, dated March and September 2010, which were passed for consideration to the Greener Select Committee. The motions can be found in full in Appendix A and B respectively.
- 1.2 As there is considerable overlap between the two individual motions it was agreed with the chairman of the Greener Select Committee that they could be dealt with in one report.
- 1.3 The aim of the report is to first put into context the national, regional and local policy and financial drivers for renewable energy. It will then provide a high level summary of the current level of renewable energy within West Berkshire Council and West Berkshire. Finally it will outline the potential next steps for consideration by the Greener Select Committee.

## 2. Background and Context

- 2.1 The last few years have seen a number of developments relating to sources of renewable energy, encouraging administrations to adopt a more proactive stance at the national, regional and local level. This section reviews the key policies and drivers that will impinge on West Berkshire and sets the context within which any renewable energy strategy will have to be delivered.

### National

- 2.2 In 2007, the UK agreed with other EU Member States to an EU-wide target of 20% of the EU's *total energy consumption* to come from renewable sources by 2020. The UK share of this overall target is to achieve 15% of the UK's total energy consumption to come from renewable sources by 2020.
- 2.3 The UK Renewable Energy Strategy, 2009, outlines the path to achieving this target by 2020 and the size of the challenge.
- 2.4 One of the drivers employed by the Government is greater financial support for renewable energy in the form of the 'Feed in Tariff' and the 'Renewable Heat Incentive'.
- 2.5 Introduced in April 2010, the 'Feed in Tariff' scheme (FITs) guarantees a minimum payment for all electricity generated by certain types of microgeneration technology up to 5 MW, as well as a separate payment for the electricity exported to grid. The tariff levels vary depending on the microgeneration technology installed and any payments are in addition to the bill savings made by using the electricity generated on-site.
- 2.6 The technologies covered by FITs are:
  - (a) Solar Photovoltaics,

- (b) Wind,
- (c) Hydro,
- (d) Anaerobic Digestion, and
- (e) MicroCHP (limited to a pilot at this time).

2.7 Within the recent Comprehensive Spending Review (CSR), it was confirmed that in the next formal review of FITs, due in 2012, the scheme will be refocused on the most cost effective technologies. The Government have also reserved the right to undertake an earlier review if take up is greater than expected. At this moment in time it is unclear what impact this may have but it could involve changing the tariff levels for each technology.

2.8 The CSR also confirmed that the Renewable Heat Incentive (RHI) will go ahead in June 2011. This scheme is similar to FITs in that it guarantees payment for heat generated by certain types of renewable heat technologies. Unlike FITs, there is no export tariff as there is no 'national grid' for heat. However, there is no upper limit on the size of the technologies that can be employed and therefore the scheme is open to large community type projects such as combined heat and power (CHP).

2.9 The technologies covered by RHI are:

- (a) Air source heat pumps,
- (b) Ground source heat pumps,
- (c) Solar thermal heat and hot water,
- (d) Biomass heat generation and CHP
- (e) Anaerobic digestion to produce biogas for heat generation, and
- (f) Liquid biofuels (but only when replacing oil fired heating systems).

2.10 More detailed information on FITs and RHI can be found on the Department for Energy and Climate Change website.  
([http://www.decc.gov.uk/en/content/cms/what\\_we\\_do/uk\\_supply/energy\\_mix/renewable/renewable.aspx](http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/renewable.aspx))

### **Regional**

2.11 The situation with regards the South East Plan, referred to in Appendix A, is currently unclear. Revoked by the Communities Secretary, Eric Pickles, this action has, however, been successfully challenged in the High Court. The case was specifically concerned with housing targets but it means that the South East Plan is legally still in force.

### **Berkshire**

2.12 One of the key Strategic organisational groups in Berkshire is called Climate Berkshire. This is a partnership of Local Authorities and other key organisations from across Berkshire. Working to address the challenges and opportunities

associated with climate change at a strategic level across the County, the partnership reports to the Berkshire Economic Strategy Board. Its mission is to provide leadership through encouraging organisational commitment, providing and informing strategic direction and assisting in the delivery of projects. It will pave the way to the development of a market in low carbon technology in Berkshire.

- 2.13 Working very closely with a local renewable energy consultancy, Thames Valley Energy, Climate Berkshire has produced two reports on renewable energy in Berkshire. The second of these reports, titled 'Berkshire Renewable Energy – 2020 Evidence Base & Recommendations', identifies a number of renewable energy opportunities across Berkshire representing an initial high-level scan rather than a bottom-up scoping. The list representing those opportunities in West Berkshire is reproduced in Appendix C.

### **West Berkshire**

- 2.14 Within the district of West Berkshire, as part of the development of a Local Development Framework for West Berkshire, the West Berkshire Planning Service has proposed a Core Strategy for 'Sustainable Construction and Energy Efficiency' (CS16). This strategy outlines new development target values for carbon dioxide emissions associated with renewable energy in all major residential and non-residential development. This is based on the estimated carbon dioxide emissions of the development after the installation of energy efficiency measures related to either the Code for Sustainable Homes, BREEAM or equivalent has been applied.
- 2.15 The Local Development Framework, and CS 16, referred to in paragraph 2.14 has very recently undergone an independent review by the Planning Inspector. The review has been suspended and results will not be known until the report is published later in 2011.
- 2.16 The Town and Country Planning Association have recently published two guides regarding community energy 'Urban Planning for a Low Carbon Future' & 'Planning, Development and Delivery'. These guides provide some of the information needed for West Berkshire to recognise and understand the opportunities for decentralised energy in the District.
- 2.17 The Government's White Paper introducing the Localism Bill, entitled "Local Growth: realising every place's potential", was published this month. When the Localism Bill becomes law, local communities may start bringing forward proposals themselves, possibly in the form of Community Land Trusts, which are mechanisms for public bodies to hold land on behalf of a community. The Council may wish to investigate the most appropriate financial vehicle that would assist the development of renewable energy technologies in the District, such as an Energy Services Company (ESCO). This information/research could be used to help develop and build on the existing Core Strategy policy CS16, which could be included in the Council's forthcoming Site Allocations and Delivery Development Plan Document.
- 2.18 Although FITs were introduced in April 2010, see paragraph 2.5, it wasn't until late August 2010 that the Government removed the restriction on Local Authorities taking full advantage of the scheme by being able to sell electricity back to the national grid. Since August the Energy team have been liaising with other Berkshire Local Authorities and some of the potential scheme suppliers who have appeared since the introduction of FITs.

- 2.19 Research led by Reading Borough Council, and supported by Climate Berkshire and Thames Valley Energy, has looked at different Solar Photovoltaic investment options currently available on the market for implementation within a Local Authority. The three options considered were 'private investment', 'Council investment' and a combination of the two.
- 2.20 One of the issues arising out of this research is that there are a number of 'leaseback' or financial loan schemes on the market targeted specifically at Schools. Under current Department for Education guidance, with the exception of loan schemes run by the Local Authority, it appears that governing bodies may only borrow money with the written permission of the Secretary of State.

### **3. Where are we now?**

- 3.1 In order to move forward, there first needs to be greater clarity of where, as a Council and as a District, we are currently positioned with regards to renewables. Given the timescales it is not possible within this report to provide a detailed study of current and planned renewable energy installations. Instead it will use historical studies undertaken by Thames Valley Energy, available planning information, and local knowledge to provide a high level indication of current levels of renewable energy in West Berkshire Council and West Berkshire.

#### **Berkshire**

- 3.2 Drawn from SEE-STATS and Department for Energy and Climate Change (DECC) figures, Table 1 in Appendix D shows the latest available information for Berkshire with regards the level of energy from renewable sources as a percentage of total energy consumption (3.1%). It also uses available planning information, and the assumption that all projects will be implemented, to predict a 'Business as Usual' scenario of 5.3% of total energy consumption in Berkshire coming from renewable sources by 2020.

#### **West Berkshire Partnership**

- 3.3 As part of a larger piece of work across Berkshire started by the Berkshire Economic Strategy Board, the LSP Greener sub-partnership is currently undertaking a feasibility study for district energy schemes in West Berkshire. The initial desk top study has now been focused on one potential village where further detailed investigation is being undertaken.

#### **West Berkshire Council**

- 3.4 Appendix D, Table 2, highlights that within West Berkshire Council there are a number of current sites with renewable energy generating technologies installed. The total peak capacity of all these technologies is 746 kW or 0.7 MW.
- 3.5 The Council is also working with 'Partnership for Renewables', an arm of the Carbon Trust, to review the potential for large wind turbine development on its own land. This study has now identified a preferred site and further consultation work is required to ensure that this is feasible and does not impact on any other Council strategy.
- 3.6 A very recent development is that the Energy Team have been contacted by a number of developers enquiring about the potential for Solar Parks on Council

owned land. A number of other Local Authorities have been investigating the potential for Solar Parks and notably Cornwall County Council have reached the stage where they have identified land and a preferred partner organisation with whom they will work with to develop the sites.

#### **4. Conclusion & Recommendations**

- 4.1 The full impact of the financial incentives introduced by the Government, FITs and RHI, are yet to be seen as they have either only just been introduced or will not come into play until 2011. There is also the added complication that not all renewable energy schemes require planning permission, raising concerns regards how the necessary detailed and accurate information could be sourced.
- 4.2 There is a degree of uncertainty surrounding the long term viability of the South East Plan, the current situation is that CALA Homes has won its latest legal wrangle with the Government and the court has placed a temporary block on the Government's claim that its plans to abolish Regional Strategies must be regarded as a material consideration in planning decisions.
- 4.3 With West Berkshire being part of the area covered by the overall target for the Thames Valley and Surrey region there is an absence of specific Local Authority targets within the South East Plan. There is therefore a requirement for a more detailed bottom-up study for renewable energy within West Berkshire. Encompassing the results of high level Berkshire studies already undertaken by Thames Valley Energy and potentially looking in more detail at those sites identified in Appendix C, it is recommended that responsibility for undertaking such a study best sits with the LSP Greener sub-partnership.
- 4.4 Coming out of this study, would be a Renewable Energy Strategy for West Berkshire and associated local targets that will be transparent, repeatable, meaningful and support the national target of 15% of the UK's total energy consumption to come from renewable sources by 2020.
- 4.5 As alluded to in paragraph's 2.18 to 2.20, the Council's Energy Team are currently proactively engaged with other Berkshire Local Authorities, external organisations / suppliers, and internal Service Areas in looking at the potential implementation of renewable energy in the Council's estate.
- 4.6 The Cleaner Greener group responsible for delivering the Council's Cleaner Greener agenda have made a request of the Energy Team for a generic high level Council Policy on renewable energy. To include policy and procedure for large and small scale implementation of renewable energy, this will be taken on as part of a more expansive piece of work to design and implement an Energy Strategy for West Berkshire Council.
- 4.7 Any specific renewable energy policy has to be in context of the current situation and where the Council wishes to position itself with regards renewable energy technologies in a developing and evolving market. The question that needs to be answered is 'does the Council wish to adopt a high risk strategy by being seen as a leader, implementing relatively new technologies in potentially untested situations?', or, 'does it prefer to adopt a low risk strategy by following the market, allowing others to take the risk?'

- 4.8 There also needs to be an understanding that renewables is not the only solution to energy concerns and that they need to be considered as part of a balanced strategic approach to energy reduction and efficiency.

### **Recommendations**

- 4.9 **That the LSP Greener Partnership are best placed for taking on responsibility for, and producing, a West Berkshire Renewable Energy Strategy.**
- 4.10 **That the Council Energy Team finalise an Energy Strategy, to include policy on renewable energy, for West Berkshire Council.**

### **Appendices**

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Appendix A – Council Motion dated March 2010

Appendix B – Council Motion dated September 2010

Appendix C – West Berkshire selected site opportunities

Appendix D – Renewable Energy Statistics

### **Consultees**

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**Local Stakeholders:** Cllr Hilary Cole

**Officers Consulted:** John Ashworth, Gabrielle Esplin, Philip Newton, Alistair Buckley, Anthony Armitage, Andy Green, Andrew Deacon

**Trade Union:** N/A

## **Appendix A – Council Motion dated March 2010.**

1.1 At the meeting of Council on 4 March 2010 the following motion was submitted in the name of Councillor Royce Longton:

1.2 “This Council notes:

(a) That generation of energy from renewable sources must be a significant factor in any realistic solution to the problems posed by climate change;

(b) That the South East Plan sets targets for renewable electricity generation in the Thames Valley and Surrey of 140 MW by 2010 and 209 MW by 2016;

(c) That indicative targets for West Berkshire, derived from these figures by Thames Valley Energy, are 12.5 MW by 2010 and 18.5 MW by 2016;

(d) That the renewable electricity generating capacity in West Berkshire at the end of 2009 was only 0.4 MW, or approximately 3.5% of the 2010 target, a lower percentage than achieved by any of the other Berkshire authorities.

This Council therefore resolves:

(a) To take urgent and concerted action to stimulate renewable electricity generation within West Berkshire with the objective of achieving the 18.5 MW target by 2016;

(b) To be equally vigorous in seeking to meet emerging targets for the generation of heat and other forms of energy using renewable technologies.”

1.3 The motion was put to the vote and passed and subsequently passed to the Greener Select Committee for consideration.

## **Appendix B: Council Motion dated September 2010.**

This Council:

1. Welcomes the recent statement from Climate Change Secretary Chris Huhne that local authorities are to be allowed to sell surplus electricity generated by renewable technologies to the national grid;
2. Notes that early estimates from the LGA suggest that across the country this could yield anything up to £100 million per year;
3. Also notes that this will drastically reduce any disincentive to investing in photovoltaics and other renewables on Council buildings, currently imposed by the high capital cost, and indeed that it could provide a valuable source of income assisting the Council in maintaining its services in these difficult financial times;
4. And therefore resolves to move swiftly towards maximising the potential to generate environmentally sustainable green energy on its offices, schools, leisure centres and other property.”

## Appendix C: West Berkshire selected site opportunities

The following information has been reproduced from a high level study undertaken by Thames Valley Energy into renewable energy in West Berkshire and identifies sites with potential that may be worth further more detailed investigation.

- Biomass CHP (new mixed) –
  - AWE Aldermaston – 12 MWe, 46 MWth
  - AWE Burghfield – 4 MWe, 14 MWth
- Biomass CHP (existing high demand) –
  - Southern Refining, Membury – 1.1 MWe, 4 MWth
- Onshore wind (cluster large turbines) – *site to be advised* – 4 MWe
- Onshore wind (single on-site) – New Greenham Park – 2 MWe
- Landfill gas electricity – Beenham landfill – 0.1 MWe
- Bio/sewage gas electricity – *site to be advised* – 0.5 MWe
- Hydro electricity –
  - Streatley weir – 0.1 MWe
  - Aldermaston Wharf – 0.07 MWe
  - Old Mill Hotel – 0.03 MWe
  - Newbury centre sites 1 & 2 – 0.02 MWe
  - Thatcham & Colthrop – 0.02 MWe
  - Brimpton Mill – 0.02 MWe
- Solar PV (LA arrays) – Faraday Road & *other sites* – 0.04 MWe
- Solar PV (existing homes) – 879 existing homes – 0.9 MWe
- Landfill gas waste heat – Beenham landfill – 0.02 MWth
- Solar thermal (new/existing homes) – 1,046 homes – 2.9 MWth
- Biomass heat-only (large residential/district heating) –
  - Cold Ash 2,176 residents, hotel, 3 schools – 5 MWth
  - Aldermaston 927 residents, 2 hotels, 2 schools – 2 MWth
  - Lambourn 2,955 residents, 1 vets, 1 hotel, 1 school – 7 MWth
  - Kintbury 2,086 residents, 1 hotel, 1 school – 5 MWth
  - Mortimer 3,099 residents, 2 schools – 8 MWth
  - Hermitage 1,537 residents, 2 schools – 4 MWth
  - Compton 1,407 residents, 2 schools – 4 MWth
- Biomass heat-only (medium residential/hotels/schools) –
  - Padworth 228 residents, 1 hotel, 2 schools – 0.6 MWth
  - Bradfield 520 residents, 2 schools – 1.3 MWth
  - E. Ilsley - *tba* residents, 1 hotel, 1 school – *tba* MWth
  - Yattendon - 331 residents, 1 hotel, 1 school – 0.8 MWth
  - Woolhampton - 684 residents, 2 schools – 1.7 MWth
  - Streatley - 307 residents, 1 hotel, 1 school – 0.8 MWth
- Biomass heat-only (small residential/schools) –
  - Snelsmore Common - *tba* residents, 1 school – *tba* MWth
  - East Garston - 532 residents, 1 hotel – 1 MWth
  - Midgham - 371 residents, 1 hotel – 1 MWth
  - Great Shefford - 970 residents, 1 school – 2 MWth
  - U. Bucklebury - 914 residents, 1 school – 2 MWth
  - Beenham - 796 residents, 1 school – 2 MWth
  - Stockcross - 679 residents, 1 school – 2 MWth
  - Chieveley - 587 residents, 1 school – 1 MWth
  - Hampstead Norreys - 541 residents, 1 school – 1 MWth
  - Enborne - 492 residents, 1 school – 1 MWth

Chaddleworth - 482 residents, 1 school – 1 MWth  
Beedon - 440 residents, 1 school – 1 MWth  
Inkpen - 382 residents, 1 school – 1 MWth  
Brimpton - 357 residents, 1 school – 1 MWth  
Brightwalton - 350 residents, 1 school – 1 MWth  
Aldermaston Wharf - 320 residents, 1 school – 1 MWth  
Ufton Nervet - 317 residents, 1 school – 1 MWth  
Englefield - 303 residents, 1 school – 1 MWth  
Curridge - *tba* residents, 1 school (+existing boiler) – *tba* MWth  
Wickham - *tba* residents, 1 school – *tba* MWth  
Southend - 765 residents – 2 MWth  
Upper Lambourn - 431 residents – 1 MWth  
Beech Hill - 311 residents – 1 MWth  
Aldworth - 308 residents – 1 MWth  
Eastbury - 293 residents – 1 MWth

## Appendix D: Renewable Energy Statistics

**Table 1: Summary of current renewable energy in Berkshire, as a percentage of consumption. (taken from report by Thames Valley Energy, Feb 2010)**

|                   | <b>End 2008</b> | <b>End 2009</b> | <b>2020, business as usual planned</b> |
|-------------------|-----------------|-----------------|--|
| Electricity       | 7.2%            | 7.3%            | 8.9%                                   |
| Heat              | 1.1%            | 1.1%            | 1.2%                                   |
| Transport         | 2.0%            | 3.2%            | 8.3%                                   |
| <b>All Energy</b> | <b>2.6%</b>     | <b>3.1%</b>     | <b>5.3%</b>                            |

**Table 2: Summary of current renewable energy in West Berkshire**

|   | <b>Solar PV</b>                  | <b>Wind</b>  | <b>Biomass</b> | <b>Solar Thermal</b> | <b>Ground Source Heat Pumps</b> | <b>CHP</b>                         |
|---|----------------------------------|--|----------------|----------------------|---------------------------------|------------------------------------|
| <b>West Berkshire Council</b>             | 2 sites with another in pipeline | 1 site under investigation for potential large scale wind turbines | 3 sites        | 2 sites              | 2 sites                         |                                    |
| <b>West Berkshire Council Contractors</b> |                                  |  |                |                      |                                 | 1 site (Northcroft Leisure Centre) |
| <b>West Berkshire Partnership</b>         |                                  |  |                |                      |                                 | 1 site (Brightwalton Village)      |
| <b>District*</b>                          | 6 sites                          | 13 sites   | 3 sites        | 2 sites              |                                 | 1 site                             |

\* data for the district is based on approved planning applications and current local knowledge.