

Report No: CAI.26 11/12

Challenge and Improvement Committee

29 November 2011

Subject: Renewable Energy Statement			
Report by:	Councillor Paul Howitt-Cowan		
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Purpose / Summary:	To ask the Committee to consider a Renewable Energy Statement from the Renewable Energy Task and Finish Group and to recommend that the statement and proposed actions be referred to the Prosperous Communities and Policy and Resources Committees for eventual agreement by Council early in 2012.		

RECOMMENDATION(S):

- 1. That Members consider the draft Renewable Energy Statement produced by the Renewable Energy Task and Finish Group and it is recommended that the agreed statement be referred to the Prosperous Communities Committee and the Policy and Resources Committee for onward referral for Council adoption in 2012.
- 2. That Members recommend that the Prosperous Communities and Policy and Resources Committees consider the proposed future actions referred to in the report and be asked to report back to the Challenge and Improvement Committee in April 2012 on their proposals.

IMPLICATIONS

Legal:

None identified as a result of this report.

Financial:

These would be identified once any actions to support the statement were agreed and an implementation plan agreed.

Staffing:

The impact on staff would depend on the agreement to an action plan to contribute to the deliver of the statement.

Equality and Diversity including Human Rights:

An impact assessment would need to be carried out if at a later date revised policies were produced as part of the action plan.

Risk Assessment:

If policies are not reviewed then there is a risk that they may not be fit for purpose.

Climate Related Risks and Opportunities:

Deliver of actions on renewable energy will have as a key aim the reduction CO2 emissions.

Title and Location of any Background Papers used in the preparation of this report:

Report CAI.04 11/12 to 21 June 2011 meeting of the Challenge and Improvement Committee. Accessed through WLDC website "Meetings, agendas, minutes and reports" <u>http://www.west-lindsey.gov.uk/your-council/decision-making-and-council-meetings/meetings-agendas-minutes-and-reports/</u>

Report CAI.20 11/12 to 25 October 2011 meeting of the Challenge and Improvement Committee. Accessed through WLDC website "Meetings, agendas, minutes and reports".

Report DM12 11/12 to 21 September 2011 meeting of the Development Management Committee. Accessed through WLDC website "Meetings, agendas, minutes and reports".

Renewable Energy Task and Finish Group meeting agendas and minutes. West Lindsey website link to renewable energy page <u>http://www.west-</u> <u>lindsey.gov.uk/your-council/decision-making-and-council-meetings/meetings-</u> <u>agendas-minutes-and-reports/committee-information-post-april-2011/challenge-</u> <u>and-improvement-committee/renewable-energy-task-and-finish-</u> <u>group/107623.article</u>
Draft report on Climate Change and Renewable Energy – Stephen Cirell Consultancy Limited. West Lindsey website link to renewable energy page <u>http://www.west-lindsey.gov.uk/your-council/decision-making-and-council-</u> <u>meetings/meetings-agendas-minutes-and-reports/committee-information-post-</u> <u>april-2011/challenge-and-improvement-committee/renewable-energy-task-and-</u> <u>finish-group/107623.article</u>

Centre for Sustainable Energy report on "Common Concerns about wind power". <u>www.cse.org.uk</u>

http://www.cse.org.uk/downloads/file/common_concerns_about_wind_power.pdf

Call in and Urgency:

Is the decision one which Rule 14 of the Scrutiny Procedure Rules apply?

Yes		No	X			
Key Decision:						
Yes		Νο	X			

1.0 Introduction

- 1.1 This report asks the Challenge and Improvement Committee to consider a renewable energy statement which would then be referred to the Prosperous Communities and Policy and resources Committees for onward consideration by Council. The statement referred to in section 9 of the report has been arrived at following work done by the Renewable Energy Task & Finish Group.
- 1.2 The statement has been developed by a Task and Finish Group of elected Members from the Council's Challenge and Improvement Committee.
- 1.3 The statement builds on the Council's previous commitment to managing climate change and carbon emissions which were articulated in the Council signing the Nottingham Declaration on climate change and agreeing to a carbon management (reduction) plan. This statement is a logical continuation of the work that has already taken place and links to the Green Council theme. The statement will feed into the

production and delivery of a Green Strategy and programme of work for the Council.

- 1.4 It has been produced following consideration of information on renewable energy that has been gathered from the Community and from some research. The statement will need to be kept under review as it may need to change to reflect more specific aspirations and plans that may emerge with further research and community feedback.
- 1.5 The statement will help to enhance the reputation of the council it will help in supporting local communities and will help to create a climate and culture of innovative thinking and the application of renewable energy projects in the District. There are a number of priority areas that have been identified for consideration and progression by the Prosperous Communities and Policy and Resources Committees and these are identified in section 10 the report.

2.0 Current position

2.1 A summary of what has so far been done in the Council in relation to climate change and carbon management is as follows:-

In January 2007 the Environment and Licensing Committee resolved to adopt the Nottingham declaration on Climate change.

In February 2010 the Community and Waste Services committee agreed the Councils Carbon Management Plan. In 2010 a budget reserve was created for Carbon management projects. In March 2011 the Community and Waste services committee were given an update report on the Carbon Management Plan. (The link to the WLDC website that refers to Carbon Management is as follows http://www.west-

lindsey.gov.uk/searchResults.aspx?qsearch=1&keywords=carbon+ management&x=31&y=25)

In July 2010 the Community and Waste Services Committee approved the Lincolnshire Affordable Warmth strategy.

In March 2011 Council agreed a framework for the Corporate plan with one of the themes "A Green District where people want to work, live and visit."

In June 2011 the Challenge and Improvement Committee considered a report on the Development of a renewable energy policy and agreed to establish a task and finish group.

In September 2011 the Council received a draft report on climate change and renewable energy from Stephen Cirell who was commissioned to do this work in the summer. (Should Members have questions about "What is meant by renewable energy?" then reference to the report from Stephen Cirell would be useful as it includes some very useful summaries relating to renewable technologies and for ease of reference these are included as Appendix 4 to this Committee report).

In September 2011 Council agreed the Corporate Plan which includes the Green theme.

2.2 The current position of the Council on issues relating to climate change and the green agenda mean that the Council is well placed to develop an approach to dealing with the specific area of renewable energy.

3.0 Why the Renewable Energy Task & Finish Group was established?

3.1 The background to why the council needs to produce an approach to dealing with renewable energy was referred to in the report that was considered by the Challenge and Improvement Committee in June 2011. For the sake of clarity that information is referred to as follows:-

Linking to the Corporate themes

The Council agreed at the meeting on 7 March 2011 the Corporate Plan framework and within this framework five themes were outlined. The topic of renewable energy has clear links with some of the themes and consideration of these themes helps to set the context for members to consider this topic.

One of these themes is "A green District where people want to work, live and visit". This theme covers the Council's ambition to be the greenest District and refers to our policies and how we help businesses and communities to be green. The priority that is being developed is that businesses and communities in West Lindsey operate and develop in a sustainable and responsible manner and that our environment is conserved or enhanced.

A second theme in the draft Corporate Plan relates to a Prosperous and Enterprising District. A priority in this theme is the creation of an environment where an increased number of businesses and enterprises can grow and prosper.

A third theme relates to the Entrepreneurial Council and key priorities will be transforming innovation into economic goals and to produce an income trading and Investment Strategy, and also to create a sustainable financial position.

Renewable Energy

The use of renewable energy sources/solutions such as ground source heat pumps, wind power, solar power, bio-fuel boilers, anaerobic digesters all have a place to play not only locally but also nationally in reducing carbon dioxide emissions and in increasing energy security.

Renewable energy developments in the district may create opportunities for businesses to develop. There are a range of businesses and enterprises that are associated with renewable energy.

In addition renewable energy presents opportunities for the Council to demonstrate community leadership, reduce its own carbon footprint, to address energy security concerns and could be part of an income, trading and investment strategy.

The development of renewable energy solutions presents a range of challenges including those relating to preservation of the natural environment and planning policies.

3.2 It is against this background that the Task and Finish Group was established.

4.0 The details of the work of the Task and Finish group

- 4.1 The group was first established in 2011 at the 21 June Challenge and Improvement Committee and consists of Councillors Paul Howitt-Cowan, Owen Bierley and Roger Patterson.
- 4.2 The minute from that meeting is as follows:-

The Director of Neighbourhoods and Health presented Paper D on the Development of a Renewable Energy Policy and the need to review the adequacies of our policies to encourage what is right for the district in terms of renewable energy. Mr Nicholson spoke about the Council's aspiration to be the Greenest District and renewable energy would be a key cog in the process towards that goal.

Members wished for a singular document which would set out a design for the district in regard to renewable energy which would tie in with the Parish Planning, Carbon Management Plans and Strategic Housing policies.

The Committee discussed the need for a task and finish group on this matter and the involvement of officers and the CLJSP (Central Lincolnshire Joint Strategic Planning) Committee.

RESOLVED that a Task and Finish Group be established composed of Councillors Patterson, Bierley, and Howitt-Cowan and that a clear remit would be established including an input from planning around policy.

4.3 Since June 2011 the group have been working on understanding more about renewable energy.

5.0 Information Gathering

- 5.1 The group have met on a number of occasions and the agendas and minutes from the meetings and also other information relating to renewable energy is on the Councils website and the link is as follows http://www.west-lindsey.gov.uk/your-council/decision-making-and-council-meetings/meetings-agendas-minutes-and-reports/committee-information-post-april-2011/challenge-and-improvement-committee/renewable-energy-task-and-finish-group/107623.article
- 5.2 The group is supported by officers and has been gathering information on renewable energy.
- 5.3 Attached as Appendix 1 is a list of some of the contacts and sources of information.
- 5.4 The group determined at an early stage that there were 2 aspects that they wanted to tackle:-

firstly in the short term an agreed consultation protocol for wind farm proposals so local community/individual views taken into account, and

secondly in the longer term an agreed approach covering the range of renewable technologies so that opportunities are created for businesses and land and property owners, to support income generation, local energy security and climate change/carbon management.

- 5.5 The group also agreed that they would wish to be able to feed into the Central Lincolnshire Core Strategy that is in the process of being developed.
- 5.6 The group considered a protocol for consultation with local communities and made a recommendation to the Development Management Committee which agreed to new arrangements for consultation.
- 5.7 In order to have an appreciation and an understanding around renewable energy the group agreed that some visits were necessary and a number of these have taken place :-
 - one to Hockerton near Newark to look at a sustainable community project. (This housing project was designed as the first zero energy residential system in the UK, it is essentially a self sufficient housing development that includes 2 small wind

turbines, photovoltaic solar panels, organic vegetable growing, composting, reed bed sewage treatment system, water harvesting and earth sheltering of the houses.)

- a second one to look at wind turbines at Trusthorpe near Mablethorpe. (There are 16 turbines which have a capacity of 10.8 MW. Planning permission was first granted in 2001 for 2 turbines with the last instalment of 6 turbines in November 2006. The site is South West of Mablethorpe between the villages of Thorpe and Maltby le Marsh. The group were given information on wind power and a publication from the Centre of Sustainable Energy called "Common concerns about wind power", this report identifies "that wind power can significantly reduce both the UK's carbon footprint and it's dependence on fuel sources that may become less secure in the future, or that present a costly and unacceptably hazardous legacy for future generations." The report goes on to say "However wind power is not appropriate everywhere, and we hope that by publishing this research communities themselves will engage constructively with the best available evidence to judge if there is a place for wind turbines in their own locality.")
- A third one to look at Branston Potatoe's anaerobic digestion plant. (The plant at their premises at Branston, which is a few miles South East of Lincoln, uses potato "waste" which is fed into a digester tank from which biogas is produced, the gas is then used to generate electricity. This is helping to reduce the carbon emissions and meet customer expectations. There are proposals for photovoltaic cells to be installed to help satisfy some of the electricity requirements of the refrigeration plant.)
- A fourth one to look at renewable energy at the Epic Centre at Lincolnshire Showground. (The design and construction of the centre was aimed at achieving high levels of sustainability and includes an earth wall, limited use of concrete, use of laminated wooden beams, a sedum roof (insulates and reflects heat), passive stack ventilation, motion sensitive lighting, light tubes, wood wool walls, recycled fibre board, clay based plaster, carpet from recycled carpet, biomass boiler using wood chip, 9m wind turbines, rain water harvesting. There are proposals for photovoltaic cells and also plans to treat waste water on site to reduce haulage of waste and recycle to reduce water consumption.)
- 5.8 The group also wished to find out views from the community on renewable energy and this has been taking place through the West Lindsey Website, press releases and also by information being included in the West Lindsey News which is due to be distributed in November. A verbal update will be provided on community feedback.
- 5.9 The group wished to specifically seek some views from young people and it was agreed that this would be done as part of the 11 November Young Persons Take Over day event being held at the Guildhall. Key

points that were raised at that event are summarised in Appendix 2. It is clear that the 14 young persons that attended the event had knowledge of the range of renewable energy technologies and also had an understanding around some of the issues they presented. Views were expressed that renewable energy was part of the Green agenda and that we should be making the most of the natural resources and the "free" and sustainable energy that comes from renewables.

- 5.10 The group were very conscious that in order for the most to be made of renewable energy opportunities that the development management framework would need to be appropriate to support this. In order to do this the group asked for support from the Central Lincolnshire Joint Planning Unit (CLJPU) that delivers that work that the Central Lincolnshire Joint Strategic Planning Committee requires to have done to produce a core strategy for central Lincolnshire.
- 5.11 A workshop event took place on 7 October which considered the results of the Renewable and Low Carbon Energy study for Central Lincolnshire. Information on this study is available through the Central Lincolnshire Joint Planning Unit website. The workshop identified the key drivers for carbon reduction are the national targets to have 15% of energy needs met from renewable energy sources by 2020.
- 5.12 The study identified that there is significant potential for renewable energy to be generated in the District with major sources likely to be wind power, agricultural energy from waste, biomass and anaerobic digesters. It was identified that to turn the potential "theoretical" renewable energy opportunities into reality that there needed clarity over which organisations and groups could and would want to deliver projects.
- 5.13 The workshop discussed how the best could be made of the opportunities created by Renewable and Low Carbon Energy and how delivery could be driven forward through a range of partners. The workshop identified that the Energy Developers were those with the greatest potential to deliver but that they would need to have support through the planning policies of Councils and also there would need to early engagement with local communities. Another priority was seen as the creation of Energy Services Companies, for example to deliver on district heating schemes.
- 5.14 The summary from the workshop is included as Appendix 3. The draft Core Strategy policies that are in the process of being determined that have an impact on Climate change.

6.0 Green waste

6.1 The group also considered the topic of green waste. The reason why the group were specifically asked to look at this follows on from a

question raised by councillor Anne Welburn that went to Council on 18 July 2011 the extract from the Council minute is as follows :-

"Councillor Irmgard Parrot read out a question submitted by Councillor Anne Welburn to the Chairman of the Challenge and Improvement Committee.

"Green Waste Re-cycling Sites.

I have twice brought up the question of holding a Full Council review on the building of green waste sites in our District. I think that by having a full discussion on the subject, listening to the views of our residents and obtaining some facts and figures from people with experience West Lindsey would be able to formulate a policy for reacting to applications for the building of these sites and not be caught unawares as happened with the proposed plan for a site at Fiskerton. Do you agree that this exercise would be useful and if so can a date be diaried in the near future?

If successful the Council could consider extending the debate to other important subjects."

Councillor Alan Caine responded by stating that he would like to thank Councillor Welburn for her question and he agreed that it would be a valuable topic to be considered. He appreciated that Councillor Welburn had previously raised this topic when the Performance Management and Scrutiny Committee were considering future items of business. As Chair of the Challenge and Improvement Committee under the newly formed Committee structure he had been considering priority issues and policies that could be included in the workplan for the Committee and this topic would fit well with other work such as the review of policies relating to renewable energy.

He would ensure that this topic was covered by the Challenge and Improvement Committee."

6.2 The group invited Councillor Anne Welburn and Councillor Chris Darcel to a meeting of the Task and Finish group where the topic of green waste was considered the extract from the minutes of the group meeting is as follows :-

"GREEN WASTE

Councillors Welburn and Darcel joined the meeting specifically for this agenda item. It was identified that there were community concerns about composting sites from residents who may live close to locations where sites were proposed. The Group discussed WLDC's (West Lindsey District Council) position as to Green Waste and whether we have much more community involvement seeking views from the community. Green Waste as a renewable energy source would be dealt with by CLJPU and Waste would be dealt with by LCC (Lincolnshire County Council) (as the Waste Authority). LCC had completed the initial consultation stage – it was not clear how they would deal with Green Waste at the moment. It was suggested that Green Waste could be put on the Area Forum agenda.

WLDC input to the CLJPU and LCC was vital to help influence the shaping of policies. CLJPU had commissioned consultants to undertake a detailed study.

It was suggested broadening the November newsletter press article to cover Green Waste composting/renewable energy source.

A national policy statement for renewable energy set out the issues, including wind farms.

Councillor Darcel agreed to produce some information on costings for an anaerobic digester plant."

6.3 Since that meeting of the group Councillor Darcel has carried out some research into the opportunities that green waste and other types of organic waste such as food waste and agricultural waste could present as a feedstock for local anaerobic digestion plant. The group considered this topic at the meeting on 11 November 2011 and suggested that the Policy and Resources Income and Trading Group could give this consideration. As there will be a review of the Councils Waste Strategy early in 2012 it is suggested that consideration be given to the wider options for handling/processing and disposing of waste in the context of ensuring that value is derived from the wastes. It is considered that every stage in the waste chain is explored and given careful consideration.

7.0 The Wider Context of Climate Change

7.1 West Lindsey engaged a consultant, Stephen Cirell, to produce a report on Climate change and renewable energy and linking to the entrepreneurial Council. There are a number of extracts from the report that set the broader context for Climate Change and renewable energy and these are reproduced below:-

The Position on Climate Change

7.2 "Climate change is rapidly moving up the importance league for local government. The advent of new targets for reducing greenhouse gas emissions (enforced on local authorities under the CRC Energy Efficiency Scheme) coupled with new financial incentives for renewable

energy projects has given this new impetus, with the recession and the need to find local growth a spur rather than a negative factor.

- 7.3 The Climate Change Act 2008 is now in force and under that legislation, the Government has committed the UK to achieving emissions cuts of 80% by 2050 as against a 1990 baseline. It is widely recognised that the only way in which these targets will be achieved is by a step change in the way in which energy is generated in the UK and the attitude of the public, private and commercial sector in how energy is used.
- 7.4 Local Authorities are in a pivotal position in relation to renewable energy in that they are part of the communities that they serve, and the individuals who live within them; but are also in close liaison with their regions, central government and the EU. As such, they are most ideally placed to really make a difference in this area. The role of the local authority is to offer community leadership and lead by example, to communities and the people, whilst influencing central government and European Union policy on climate change.
- 7.5 West Lindsey District Council has been committed to action in this area for some considerable time. It has taken the preliminary and most obvious steps, such as signing the Nottingham Declaration for local government. It has developed a good carbon management plan, approved by the Carbon Trust, and has set a budget to fund carbon projects. It has already reduced its carbon footprint, in line with targets it has set for itself. This bodes well.
- 7.6 The Council also has aspirations to undertake more ambitious capital projects and to include green elements in these (such as the swimming pool, leisure centre and Trinity Arts Centre).
- 7.7 Including the green agenda in the Council's corporate plan demonstrates that these steps are not merely box ticking, but the Council does have a serious and long-term intention to grapple with this agenda. The development of a renewable energy policy and tenyear plan will be a good signal of this.

Renewable Energy

- 7.8 The amount of energy from renewable sources required to meet national targets is extensive. The EU has agreed a target for renewables of 20% by 2020, of which the UK has to contribute 15% on its energy use. The Committee on Climate Change was recently asked whether this target needed to be raised but decided that it was already sufficiently challenging to the UK. This is against a background of only 6% of electricity currently coming from renewable sources.
- 7.9 So the UK needs to generate vastly more energy from renewable sources and this is why the government has introduced new financial

incentives – to help along that process. These are considered further below.

- 7.10 All types of renewable technologies are required, but some are further along the line of development than others. Already in the 'commercially proven' list are solar photovoltaic energy, hydropower, wind energy and some biomass heat production. Still in the more experimental phase are geothermal energy, wave and tidal energy and a number of others such as gasification.
- 7.11 Each local authority should consider its own position and what technologies are possible in its area, in order to determine what works for it. Solar PV is widely available and so is wind. Obviously, some of the others require a specific position, such as coastline or access to water."
- 7.12 The consultants report identified that the Council was in a very good position as there was already a good understanding of the issues and the importance to the green agenda and that the council had collected much of the data it needs and has strong political and managerial support. The report identified that the council needs to act in relation to the green agenda and in relation to the financial situation. The Council needs to join up the various activities into a cohesive climate change and renewables strategy and plan and identify its main priorities and move forwards to delivery.

8.0 Affordable warmth

- 8.1 Fuel poverty is a key issue in West Lindsey with approximately 23% of households being in fuel poverty. A key way that this is being tackled is through a Countywide approach. The Lincolnshire Affordable Warmth Strategy seeks to support local authorities to provide affordable warmth for all households in Lincolnshire by developing a program of actions and engaging a range of partners to eradicate fuel poverty and to support a reduction in carbon emissions from our housing stock.
- 8.2 The strategy has been developed in 2009 by the Lincolnshire Energy Forum (now known as Home Energy LINCs Partnership HELP) and stakeholders throughout the county in the context of existing local services and initiatives, and prevailing strategy and policy commitments at a local and county level. It will be an essential part of the county's efforts to tackle the causes and effects of climate change.
- 8.3 A countywide climate change strategy is in preparation which will link affordable warmth work to that wider goal.
- 8.4 One of the five strategic themes in the strategy refers to renewable energy and is as follows: Theme 5: Improving access to fuel services and renewable energy

Households off the gas network are likely to be paying more for their fuel as they are reliant on electricity, oil, solid fuel or bottled gas. In these cases feasibility studies on what would be the best fuels for the area should be considered, in relation to the mains gas network and the practical and financial feasibility of installing renewable technologies into homes.

- 8.5 One of the objectives relates to promoting and securing funding for renewable energy. It is clear that there is scope for properties that are not on the mains gas network to be supported to use renewable energy opportunities.
- 8.6 The group considered that it was important to ensure that there were links between renewable energy and action to tackle fuel poverty.

9.0 Renewable Energy Statement

9.1 After the Task and Finish group had given consideration to the issues and information that they had obtained on renewable energy they arrived at the following statement:-

9.2 Aim of the statement

The aim of this statement is for West Lindsey to clearly state what its vision and position is on renewable energy. This would then allow the community to clearly understand what WLDC thinks about renewable energy. The statement will then allow consistent messages to be communicated.

9.3 The Statement

"West Lindsey supports the use and application of renewable energy technology within the District, provided that any adverse impacts are made acceptable.

The Council will use its best endeavours to encourage both individuals and businesses to consider and use renewable energy technology to reduce the carbon emissions from the activities that take place in the district.

The Council will consider in its own use of energy using energy from renewable sources.

The Council will consider installing renewable energy generation systems on its own assets.

In supporting renewable energy the Council will ensure the principle of the right technology and renewable energy solution is applied in the right location."

9.4 **Reasons for the statement**

The reasons why the Council supports renewable energy generation and use is for the following reasons:-

- 1. to demonstrate that the Council is committed to it's aspiration to be the greenest council
- 2. to demonstrate the links to the Central Lincolnshire Joint Strategic Planning Committee work on developing a core strategy that includes the potential for the expansion of renewable energy and low carbon technologies
- 3. to help achieve the Central Lincolnshire Core Strategy renewable energy and low carbon targets once these are agreed
- 4. to support the deliver of the green council theme in the corporate plan
- 5. to support communities and individuals that are concerned about renewable energy and to support increased sustainability and the Councils approach to localism
- 6. to support those who experience fuel poverty
- 7. to reduce the carbon emissions in the area and to reduce the potential adverse impact on climate change
- 8. to support the Government's target for a greater contribution of renewable sources in energy generation and usage
- to reduce the reliance on energy that is produced from sources and locations where there is a risk that energy security could be compromised
- 10. to encourage land and property owners to make the most of their assets and the financial opportunities that renewable energy creates
- 11. to support businesses in the district that are being encouraged by their customers to demonstrate their reduced carbon footprint
- 12. to encourage new businesses that are involved in renewable technology to develop in the area so that job opportunities are created.
- 13.to make the most of the Council assets and to generate income from renewable sources where the business case supports this
- 14. to ensure that recognition is given that not all locations in the district are suitable for each and every type of renewable energy generation project, it has to be the right technology in the right location
- 9.5 For clarity this statement is not intended to be used to predetermine any individual planning applications that may be submitted for renewable energy generation in any specific locations for different technologies. Every planning application will be considered on its merits and take into account the Central Lincolnshire Core Strategy Policies which include Renewable and Low Carbon Energy solutions. The acceptability of locations where developments will take place are planning decisions and the Development Management Committee are aware of the need to consider the impact on local communities and the environment.
- 9.6 The statement would need to be subject to regular review and monitoring of the agreed actions would need to take place to ensure that the delivery took place.

10.0 Actions

- 10.1 There are a range of actions that the Council is already taking that relate to renewable energy and these are summarised below:-
 - The Development Management Committee agreed to publicity procedures for development proposals received by West Lindsey for wind farms.
 - Proposals for photovoltaic cells to be installed at West Lindsey Leisure Centre and other locations are to be considered by the Policy and resources Task and Finish group.
 - The council has in place a carbon management plan which deals with the reduction in CO2 emissions from Council activities. The Council has reduced emissions from 2,111 tonnes in 2008/9 down to 1,658 tonnes in 2010/11 and is continuing to reduce emissions. With West Lindsey having the lowest carbon emissions of all the Lincolnshire District Councils.

10.2 Proposed future actions

Renewable energy is a key aspect of the Council's overall approach to the green agenda. The Council is working on a green programme with topics such as agile working, energy efficiency, carbon management, action to address fuel poverty and the opportunities to improve the housing stock all being considered. As part of this development of a green programme projects will be considered which could include:-

- how new build can have a low/zero carbon impact,

- how we can encourage businesses to come into the district because of our approach to energy generation and usage,

- how we could establish a zero fossil fuel target in the way we use our buildings and land etc.

10.3 Over the next 12 months it is intended that as part of delivery of the Green council a range of projects be scoped and developed. In addition to the above ideas there are a range of actions that the Council could consider taking that could contribute to delivering the renewable energy statement. However it would be necessary for both the Prosperous Communities Committee and the Policy and Resources Committee to consider the proposed actions. These two Committees may wish to ask a Member or number of Members to work with officers on the proposed actions or on other actions that the Committees may feel are possible that would contribute to the delivery of the vision presented in the statement. The committees could then receive a report back from the Member for consideration and agreement. It is suggested that these committees report back on their intended actions to the Challenge and Improvement Committee in April 2012.

The table below details a number of proposed actions.

Proposed Action	Proposed Timescale	Council Operation or Community/ District wide and Partners to be involved	Expected outcome	Deliverability and possible barriers to overcome
Business cases need to be developed and considered for renewable energy to be generated on the Councils assets and or on others assets. Include business case for anaerobic digesters and a crematorium	ongoing	Council Operation -Renewable energy suppliers - Third party asset owners	More renewable energy generated on Council assets and others assets in the District. Consideration by WLDC of establishing an energy services company	Community concerns Planning issues for specific developments, Finance available Availability of suitable partners
Work on an aspirational target for future years that sets an aim of zero fossil fuel usage on WLDC land and buildings	6 months	Council, Occupiers of Council assets	Reduced carbon emissions from WLDC operations	Practicalities of changing Technology and energy generation, financial implications of change, lack of opportunities to offset carbon emissions
A communications and education – promotion plan needs to be agreed to ensure the Councils approach to renewable energy is explained and developed. Include website development, possible renewable energy awards scheme, regular features in West Lindsey News, the scope for providing advice and information	3 Months	Council operation - Local media	More Community knowledge and interest and development of renewable energy projects, increased media interest and coverage	

Engagement with Communities to understand local needs and interest, through - Area Manager working, area profile development to include information on local generation of renewable energy	Commence with Area summits Jan 2012	District wide - Parish Councils Community Groups	Communities more involved and engaged and influencing what happens in their areas.	Area Manager time, lack of interest from communities
In the decision making process renewable energy aspects and impact assessment be taken into account- Council Committee reports including Development Management determinations on Planning Applications	3 months	Council	Renewable energy demonstrated at the heart of Council decisions	
Explore the opportunities for funding and contributions to be used to increase the generation and use of renewable energy in the District e.g. section 106 contributions/ the Community Infrastructure Levy, localism funds	6 months	Council in Partnership with Central Lincolnshire authorities through the work of the JPU	More funding to renewable energy projects	Restrictions on use of funds for this purpose, other demands on the funds
Explore the opportunities for Communities to benefit from any funding that Renewable Energy Developers provide.	6 months	Energy developers Local community	Communities receiving benefit from renewable energy	Communities not interested, lack of interest from Energy Developers in WL area
Detailed work needs to be done to identify the actions that the Council can take to link renewable energy with helping address the issue of fuel	9 months	Council, Owners and tenants of properties, Housing	Fewer households in fuel poverty	Funding availability

poverty in the District. Explore the options of retrofitting houses to improve energy efficiency and use of renewable energy. Explore options for new build neighbourhoods to be low carbon		improvement Organisations. County Council		
Annual review of the statement and regular reporting on performance in delivering the agreed actions.	Jan 2013	Council	Demonstration to the Community of Council Commitment	

Appendix 1 Renewable Energy -Contacts/Information

Planning Advisory Service (PAS) Local Government Group, Local Government House, Smith Square, London SW1P 3HZ Link to PAS Councillor Briefings: http://www.pas.gov.uk/pas/core/page.do?pageId=714986

Central Lincs Joint Planning Unit (CLJPU) c/o North Kesteven District Council, 5th Floor, City Hall, Beaumont Fee, Lincoln LN1 1DF <u>http://www.central-lincs.org.uk/</u> <u>http://www.central-lincs.org.uk/energystudy</u>

Hockerton Housing Project The Watershed, Gables Drive, Hockerton, Notts NG25 0OU <u>www.hockertonhousingproject.org.uk</u> email: <u>hhp@hockerton.demon.co.uk</u>

Ecotricity Group Ltd Axiom House, Station Road, Stroud, Gloucs GL5 3AP <u>http://www.ecotricity.co.uk/</u> email: <u>Robert.Miller@ecotricity.co.uk</u>

Branston Potatoes Mere Road, Branston, Lincoln LN4 1NJ http://www.branston.com/ email: jbaker@branston.co.uk

Epic Centre The Showground, Grange de Lings, Lincoln LN2 2NA http://www.lincolnshireshowground.co.uk/epic_centre/ jsouthall@lincs-events.co.uk

Centre for Sustainable Energy <u>www.cse.org.uk</u>

Centre for Sustainable Energy report on "Common Concerns about wind power". <u>www.cse.org.uk</u> <u>http://www.cse.org.uk/downloads/file/common_concerns_about_wind_power.</u> <u>pdf</u>

Defra anaerobic digester information <u>http://www.defra.gov.uk/publications/files/anaerobic-digestion-strat-action-plan.pdf</u>

Appendix 2

Views of young persons on renewable energy and green strategy from 11 November 2011 Young Persons Take Over day event. Key points that were raised at that event are summarised as follows:-

What do you think of when you hear the words Renewable Energy?

- Reusing natural sources
- ✤ Wind, water, sun
- Heat water, Reduce Electricity (Solar Panels)
- Geothermal
- Photovoltaic
- Sustainable source
- Less Polluting
- Natural more readily available
- Source itself = free BUT initial costs = HIGH

What are your thoughts / ideas on different types of Renewable Energy?

- Wind Turbines too big, too powerful, too noisy, wasteful, impact on wildlife, off shore, solar
- Solar power
- ✤ Wind
- Tidal (hydroelectric) Kinetic energy
- Energy from Waste Anaerobic digestion to produce biogas
- Nuclear
- Geothermal (ground source heat pumps and air source)
- Fuel Sources which don't run out
- Biomass boiler
- Reduce greenhouse gasses
- Lower carbon footprint
- Wind Power Controversial spoiling views, noise, habitats
- Unreliable

What do the words Green Agenda mean to you?

- Pre planning energy resources
- Sustainability
- How best to use resources
- Recycle garden waste composting fertiliser
- Working better in different seasons
- Feeding tariff
- Over shadowing
- ✤ Water (H2O)
- Nuclear Environmental impact, dangerous, Japan, National Security
- Policy, put together to address environmental issues (by government)

- Ideas that will decrease size of our carbon footprint
- Increase recycling
- Less energy wastage maximise use of energy energy efficiency
- Use more public transport
- Minimise wastage
- Biodiversity
- Eat less meat
- Less use of resources
- Insulation
- Green Transport
- Reducing pollution
- Planting trees
- Preserving the countryside
- Sustainable communities
- Health impact

What more can you do as individuals and the council do to help the Green Agenda?

- Turn lights off timers
- Better recycling facilities
- Insulation Boiler Jackets
- Smart meter
- Public Transport / walking
- Shop mobility team
- Biomass Boiler
- Recyclable bags
- Energy efficient light bulbs
- Turn off / Standby
- Use turning tap
- Dyson Hand dryers
- Video conferencing / social media
- Electric cars
- Don't use unnecessary carrier bags / reuse carrier bags
- Don't take as long in the shower
- Buy locally
- Use less paper write smaller
- Grow your own
- Improve insulation

<u>INDIVIDUAL</u>

- Energy efficiency switch off lights etc
- Good insulation
- Use public transport/cycle/carshare
- Local produced / less packaging
- "Big Society" picking up litter etc
- Recycling

<u>COUNCIL</u>

- Promotion campaigns to encourage energy efficiency
- Recycling policies

- Bin collection weekly & fortnightly
- Enforcement on littering

*

What ideas/thoughts/suggestions or comments do you have on these topics?

- Geo Thermal quite efficient = not much waste
- Gas Energy state gasses, carbon capture & storage
- Making the most of natural resources
- More Campaigns for litter
- PCSO's need more authority to deal with dog waste
- Increase on-the-spot fines for littering
- Reduce packaging campaign businesses
- Widely recycle different waste kitchen waste & that which cant currently be recycled
- Council backing Renewable Energy Schemes Solar Power Schemes
- Publicise more things
- Encouragement to do it gives you a better quality of life
- Education

Appendix 3

Summary Central Lincolnshire Low Carbon and Renewable Energy Study Workshop 2

On 7 October 2011, AECOM and the Central Lincolnshire Joint Planning Unit (JPU) hosted a workshop with key stakeholders from the Central Lincolnshire authorities (West Lindsey District Council, City of Lincoln Council, North Kesteven District Council and Lincolnshire County Council), and representatives from local communities and businesses. The purpose of the workshop was to

share the results of the Renewable and Low Carbon Energy Study for Central Lincolnshire and explore possible actions that will help local partners to increase their delivery of renewable and low carbon energy in Central Lincolnshire.

AECOM were commissioned by the Central Lincolnshire JPU to study and review the potential for low carbon and renewable energy in Central Lincolnshire as part of the evidence base for the emerging Core Strategy. The objectives of the study were to:

1. Understand the current and future carbon profile for Central Lincolnshire

2. Review and update the regional renewable energy resource assessment to better reflect local circumstances in Central Lincolnshire

3. Provide advice on the factors which will affect the realisation of higher levels of deployment and consider scenarios

4. Provide recommendations on policy and targets for the Core Strategy

5. Analyse a set of strategic sites and development typologies to determine how much potential can be delivered by new development

6. Outline an action plan for delivery

The workshop summarised the results of an audit of the amount of renewable energy that has already been delivered in Central Lincolnshire compared with neighbouring authorities. While it was noted that this was substantially less than the surrounding authorities, when projects in the planning process or awaiting construction are considered, Central Lincolnshire fares considerably better.

The technical potential, opportunities, and constraints for each of the renewable and low carbon technologies was then discussed. The largely rural areas of North Kesteven and West Lindsey have a high potential to deliver energy crops, as well as wind power. The higher density urban areas, on the other hand, can meaningfully contribute to renewable energy through the installation of Combined Heat and Power (CHP) and district heating networks. The focus of the workshop was to examine what each stakeholder group could do to maximise delivery of renewable and low carbon energy in Central Lincolnshire. After presenting the study's conclusions about the amount of renewable and low carbon

energy each stakeholder group was likely to deliver in an 'optimised' and a 'business-as-usual' scenario, the workshop attendees were asked to interrogate the findings and suggest how they could work towards achieving the 'optimised' scenarios for each delivery partner.

After being separated into four

- delivery partner focussed groups -
- private sector, public sector,

- community groups, and energy
- developers

 each group was given a list of actions that could work to improve uptake of renewables. They were then asked to rank actions on two scales: ease of implementation, and level of impact. Once priority actions were mapped, based on

these criteria, attendees were asked to 'vote' on what they personally believed were the most effective actions that could be taken to support local delivery. As a group, attendees discussed the most important actions and questioned how these could be undertaken, by whom, by when and what support was needed. The top 5 actions required to increase renewable energy in Central Lincolnshire are as follows:-

- Implementing clear and supportive planning policies for renewable energy Action- Council with support from waste department, communities, and
- the Environment Agency
 Engaging early with the community in an open and transparent manner on energy projects. Action--Energy developers and public sector coordination
- Creating a public energy services company Community leader
- Co-ordinating a funding pot for public sector projects. Action-Public sector leader.
- Establishing partnerships between community groups and energy developers Action-Proactive energy developers, and community groups with

council support.

While there was a lively discussion on all priority actions, much of the discussion focused on the merits of establishing a public sector owned Energy Services Company (ESCo) so as to benefit the community financially as well as environmentally with a more resilient, and sustainable mix of energy sources.

To conclude the workshop, attendees were asked to write down one commitment they will personally make in the next 6 months to support delivery of low carbon and renewable energy in Central Lincolnshire and post it on the wall. Overall, the workshop provided an important venue for stakeholders to understand and

discuss the potential for renewables and consider how they might make strides towards a more resilient Central Lincolnshire.

The Renewable and Low Carbon Energy Study for Central Lincolnshire will be available to view and download from www.central-lincs.org.uk by the end of October 2011

Appendix 4 – Summaries on Renewable Energy technologies Extract from report from Stephen Cirell Consultancy Solar Power

This is a mainstream area now in local government. There are two types of solar panels: solar photovoltaic (that create electricity) and solar thermal (that heat water).

So far as solar PV is concerned, local authorities all over the country are looking at the opportunities offered by the fitting of solar panels to land and buildings. An example that I gave is a project with which I am involved in Wrexham, where the Council is borrowing north of £20m to put solar PV on approximately 3,000 council houses. The business case for such a project is very strong, delivering a profit of over £15m tax free across the contract period.

There is sufficient light in Lincolnshire to produce electricity (though the amount will be less than further south) and solar panels are unobtrusive, low maintenance and generally acceptable in planning terms. Councils own a lot of land and buildings, that are suitable for siting PV installations.

The business case will be key and may be what will decide it for you. This depends on the working of the new Feed in Tariff introduced by the Government in April 2010. This works on the basis of payment of money for each unit (kwh) of energy that is produced.

There is a table in the FIT Order which sets the amount of money that will be payable. As an example, a domestic sized system that is 4kwp would have attracted 41.3 p per kwh of energy produced, when the FIT was first introduced in 2010, but this has now been increased by RPI (rates go up each year) and is now over 43p per unit of energy.

The two parts of the FIT are the *generation* tariff and the *export* tariff. The former is a payment just for the creation of the power (even if you use it all yourself); the latter is the payment (set at 3 p per kwh) you receive if you feed the electricity created back into the national grid.

The key to the system is payback periods. On solar PV, the payback is now less than 10 years; on wind it is even better at 5 years on average. As FIT payments are guaranteed by HM Treasury for 25 years for solar installations, and 20 years for wind, that means a surplus is made over the years following the payoff of the initial capital outlay.

There are two types of solar PV installations, which are land based and buildings based. The land-based systems are known as solar farms and an example is Cornwall Council which has a plan for a 5 MW solar installation near Newquay airport based on land it owns.

There are complications with land based systems now as the Secretary of State undertook a review recently and as a result, the FIT on these systems has been radically reduced (from nearly 30 pence per kwh to just 8.5 pence). As a result of this, it is probably not a good time to consider such a scheme, but the time will arise later when this should be reviewed, particularly if the Council has available land with no other uses planned for it.

The other use for solar PV is buildings based and this is proving popular. Most local authorities have many buildings and are therefore well suited to solar PV projects, as discussed below.

Turning to solar thermal energy, this is mainly from solar thermal panels, which are again normally roof based, and from other equipment, such as ground, air and water source heat pumps. Solar thermal panels on a roof work in a similar fashion to PV, except that there is a liquid running through the panels, which then goes to a tank where it is used for heating water. This might be relevant to some of the Council's buildings, or indeed the swimming pool or leisure centre.

Wind Energy

Wind energy is the other main commercially proven form of renewable energy and so needs full consideration. Wind energy is more lucrative than solar energy but it is also more controversial, in that it is generally more difficult in planning terms to get planning permission for a wind turbine, compared to other technologies, such as solar panels.

Wind energy is excellent in the UK and wind should be part of any local authority's renewable energy strategy. It is important that any local authority is able to overcome the idea that wind is a 'bad thing' or that you will never get a scheme through due to local opposition. There has never been a truly 'civic' wind project in the UK and such a project would be seen in a completely different light.

In order to make a wind project work, you need land, planning consent and a grid connection. It is a relatively straightforward task to survey your land and to do a 'desk top' study as to which land might be suitable. Thereafter, a preliminary business case is required, which would set out the projected income and expenditure for a wind scheme in this area.

The two types of wind project are major developments in more rural locations and smaller wind turbines on other land, such as in a school's grounds. Generally, the larger turbines are more efficient and therefore generate more energy (and income). It is also regarded to be just as difficult to get planning consent for a medium sized turbine as a large one. It is this that has prompted Preston City Council to aspire to a full 9 MW wind scheme on Council owned land by the estuary in Preston.

The Council seems to have land at its disposal, including land that is not used for other purposes and is remote. This is the ideal sort of area for wind power.

Biomass

Biomass is the third area of renewables that is already developed, particularly when talking about pellet burning boilers and Combined Heat and Power schemes. However, biomass covers many different processes and not all are in this category (for example, anaerobic digestion, gasification and the like).

In simple terms, the term "biomass" applies to any recently living organic matter. Biomass fuels are those that can be converted to energy. As mentioned above, there are two categories of biomass: *dry* biomass (eg woodchip) and *wet* biomass eg agricultural slurries. The best example of wet biomass is pig slurry being turned into gas, via anaerobic digestion process (AD is mentioned below). The best example of dry biomass is sawdust or other wood being turned into wood pellets and burned in biomass boilers.

If a local authority had looked at this area several years ago, it might have been put off by the costs of such a scheme and the strength of the business case supporting it. However, as mentioned below, the Renewable Heat Incentive has now been announced and is due to come into force this year. This will mean that a payment is made for every unit of heat produced by a biomass boiler, thus improving the business case substantially.

The potential for biomass in every rural / county area is simply huge. When I led the climate change function for Cornwall Council in 2009 and 2010, we looked carefully at this area and concluded that it held considerable promise. These were the key areas:

- The adoption of a biomass boiler strategy that would see mainly oil fired boilers being replaced with biomass (much of Cornwall is off the gas grid);
- The use of the Council's considerable land bank to grow energy crops, such as miscanthus, willow and short woodland coppice (these are already being grown in Lincolnshire);
- The building of a supply chain within the Council that would have supported biomass boilers within all of the Council's properties but also a CHP capability for the generation of electricity and production of heat for a district heating scheme(s);
- The supply of biomass to the public, as part of a county wide strategy to persuade them to move to biomass boilers;
- Joint ventures with local companies / industries for similar purposes

and with joint operations in mind.

The key here is the supply chain. It is not sensible to have a biomass boiler replacement strategy without some assurance as to the supply chain for the biomass fuels. If this is not in place, biomass prices could rocket, leaving the Council equally vulnerable to price changes, as it is now with oil. However, Councils in rural areas have the capacity to develop all aspects of the supply chain and therefore give themselves complete security of supply, whether alone or in conjunction with other authorities, such as the County Council. In so doing, it will also utilize the Council's land, reduce its carbon footprint and provide community leadership.

In Cornwall, the ambition was to grow energy crops on the Council's land (as long as this did not displace food production); then to develop or acquire a pellet making mill to process the wood into pellets; this would then require specialist transport to get it to the delivery points; finally, the boilers need to be fitted to use the pellets and create demand.

All of this is possible in Lincolnshire. Even though much of the land is of sufficient quality for food production, there will still be areas that do not threaten food security. It also gives the advantage of using productively land that might be idle at present. The Council needs to implement a boiler replacement plan to replace gas, oil and coal boilers with biomass and with the relevant 'load' established, the other elements of the supply chain could be put in place easily, creating value and jobs in the process.

If this was of interest, an overarching plan examining the concept and the way it would work could be produced in a relatively short period of time and for minimal cost. This would give the Council a base from which to build.

Whilst a number of local authorities have looked at such plans, there is no local authority leader in this field yet and so the way is open for a leading edge policy and process.

Anaerobic Digestion

Anaerobic digestion is another key form of renewable energy relevant to land. There are various feedstocks that AD plants can operate on, but one of those that is growing fast in local government is food waste plants. This is because food waste currently goes to landfill and creates a number of problems by so doing. Firstly, the relevant waste disposal authority (here the County Council) has to pay landfill tax on all the waste transferred to landfill sites. Obviously, every tonne avoiding landfill saves money and the tax is being ramped up by the Government, for environmental reasons. Food also gives off methane as it rots and so this is a particular problem for the carbon footprint of landfill sites.

The County Council already has its general 'energy from waste' project in operation.

There are AD plants for food waste operating across the country but one of the largest ones is on Lower Reule Farm in the Midlands, which processes a large amount of local authority food waste.

The other type of AD plant is that working on energy crops. The Severn Trent Water company operates an AD plant in Stoke Bardolph in Nottinghamshire which uses 37,000 tonnes of maize each year. This is grown on the agricultural land surrounding its sewage treatment plant. The business case on this plant is considered below.

It might be that that Council has insufficient land or motivation to undertake an AD project itself. However, rural areas offer excellent opportunities to collaborate with other parties, and here the County Council and the other districts that comprise the County of Lincolnshire offer excellent prospects.