

**Appendix B: Responses to the detailed comments arising from the draft Corporate Energy Strategy external consultation, 3<sup>rd</sup>-31<sup>st</sup> January 2017**

Question 1	Consultation Feedback	Officer Comment	Change made to the strategy
	<p>The purpose of the strategy and the introduction are very clear. The document clearly sets out why it important to act now (the opportunity as well as the risk that inertia would present to economic productivity).</p> <p>I understand that there has been a national shift in subsidies for renewable energy and this is negatively influencing innovation in the sector - Is this correct? Should this challenge be reflected in the strategy?</p>	<p>Noted.</p> <p>Include the challenge of changing subsidies and its negative impact on innovation</p>	<p>Updated section 4 under Feed in Tariff that business cases will reflect the FIT where they still apply. Updated table 3.1</p>
	<p>Too ambiguous if it is JUST for CCC and the CCC asset base or is it for Cambridgeshire in total; how does it fit (or replace) private sector initiatives. Getting CCC to be 'joined up' should be easy!</p>	<p>Check introduction to ensure the emphasis is on CCC assets.</p>	<p>Changes to section 1 introduction and purposes to reflect emphasis on CCC assets</p>
	<p>Is it about future proofing and transforming our local energy supply to meet low carbon demands or is it about minimizing supply disruption? Seems to be more about supply disruption but is this really an issue?</p>	<p>Noted. The emphasis should be on transforming local energy supply to meet low carbon demands.</p>	<p>Updated section 1</p>
	<p>But it's missing something. I don't think the strategy really defines the type of organisation that we are aspiring to be or sets out an overall aim. Currently, there are no targets.</p>	<p>Noted.</p> <p>A foreword is drafted to provide the political leadership for the strategy and define the organisational aspiration.</p>	<p>A foreword to the strategy from the Council leader has been drafted for agreement and inclusion in the strategy.</p>

		Targets are good idea. An action plan will be developed and the intention is to include targets in the action plan.	
	Yes but it misses completely the importance of sustainability in any modern energy strategy	Noted. Review strategy to strengthen the importance of sustainability in the introduction.	Updated section 1 to reflect energy sustainability.
	Would be good to link the strategic aims here into wider support for sustainable infrastructure investment beyond energy, so that water, transport, communications are also recognised.	Noted.	Updated purpose to better reflect the links. Section 1.
	Mostly clear although the final point about attracting investment needs more information, especially in relation to any risk to the council's assets	Noted. Risk assessment comes in at the individual project level.	No further action.
	As long as the strategy is supported by political will for example if the result of the consultation is to encourage energy from waste incineration then there must be the will to push it forward rather than bow to the will NIMBY groups.	Noted.	See foreword.
	It's riddled with jargon and gibberish. e.g. "delivery mechanisms to facilitate energy resilience."	Noted. Review of jargon to simplify text where necessary.	Section 1 simplified.
	For any new housing development going forward, (e.g Northstowe phase 2+, Borne Airfield etc) strong consideration should be given to district heating schemes, with land set aside for the energy assets (even if not deployed straight away). Addition of solar PV on roofs or integrated into roofs should also be considered, so the costs can be reduced for households to adopt, and stronger consideration given to aesthetics of lots of homes with solar added. Underpinning this needs to be having new homes which are energy efficient, like the code for sustainable homes which was recently removed. Planning	Noted.	This is included indirectly into the purpose of the strategy bullet 2.

	authorities I believe, still have the power to insist homes can be built to these kinds of standards.		
	We are not sure that the title of the document reflects the purpose of the strategy. 'Corporate Energy Strategy' implies a focus on the energy use of an organisation from an asset management perspective, similar to the City Council's Carbon Management Plan. However, the strategy presented goes much further than this considering the wider role of the County Council in energy investment across Cambridgeshire with its associated social, environmental and economic benefits, an approach that is supported. A suggested alternative title could be "Low Carbon Energy and Investment Strategy for Cambridgeshire County Council".	Noted.	<p>The change of title was discussed internally and it preference to retain the existing title.</p> <p>However, the strategy has strengthened section 1 and a foreword has been drafted which should address this issue.</p>
Q2	Huge opportunity in this regard - I think the vision/strategy is well pitched to harness this opportunity to provide cleaner more resilient energy.	Noted.	No action needed.
	I think there may also be an opportunity to describe the way that sustainable energy can play a role in sustainable public services. My own view is that a council (or set of devo partners) which invests wisely in energy generation schemes that provide an ongoing financial return, is moving towards being self-financing and therefore more independent from Whitehall.	Noted.	Bullet point 1 & 2 under purpose of the strategy describes this.
	Benchmark activities with current best practice, especially comparable public authorities.	<p>Noted.</p> <p>Other public authority energy strategies reviewed as part of the development process of the strategy.</p>	No further action needed.
	Have you explored Hydro Electricity as we are an Island surrounded by water, also many rivers that could generate lots of energy without the need of sun or wind?	Noted. Small scale hydro included in table 3.1.	No further action needed as tidal energy is dealt with by the coastal authorities and national government.

	There is as always only emphasis on supply side initiatives; the phrase "energy efficiency" is not enough - of course we need efficiency - but we need policies/methods to simply use LESS ENERGY	Agreed.	Bullet point 2 includes service redesign to reduce consumption. Greater emphasis on reducing energy waste and consumption included in introduction paragraph.
	It could include a policy statement on what we won't do - I'd like to see this county and its partners (Northants, Peterborough - anywhere in which we share services) refusing to allow fracking.	Noted. There is very little opportunity for fracking in Cambridgeshire due to its geography. This was covered in a Committee meeting and a note on fracking circulated to all Members.	No further action.
	Nothing about sustainable energy sourcing in the above. Needs to be more explicit. Also how does 'prosperous' get covered - is it in community? Nothing about why we need energy.	Agreed. Purchasing sustainable sources of energy as part of our corporate contracts is included in section 3.3, opportunities to be explored (priority 4, middle column).	No further action required.
	Of course. Also require engagement / awareness from end users.	Noted.	Updated section 5 on engagement.
	<p>You have omitted the most important components of a sustainable energy strategy:</p> <ol style="list-style-type: none"> <li>1. Implement policies and processes which minimise energy use</li> <li>2. Work towards ensuring that all new energy generation and transmission infrastructure has a neutral carbon life-cycle. (That is to say that any saving in carbon emissions during use is not negated by additional carbon emissions during manufacture and construction)</li> </ol>	<p>Point 1 is addressed by bullet point 2 on the purpose of the strategy.</p> <p>Point 2, life cycle costing has not yet been addressed in the draft and should be</p>	<p>No further action.</p> <p>Included in figure 1, outcomes. Analysis of life</p>

		included in the updated strategy.	cycle carbon emissions on energy projects.
	Be cautious about exploiting new technologies. Some are gimmicky and can be of high energy consumption in setting up. The cost benefit ratio needs exploring	Noted.  As projects are developed it will be important to look at life cycle costing and cost benefit.	
	Liaise with Dept of Environment and land owners to develop micro generation from watercourses by selective damming. Tie this in to flood management and use IoT to manage water flows	Noted. Hydro schemes Included under table 3.1	Included in section 3.3 as an opportunity.
	There is a need to invest in PV on all public buildings - this reduces the reliance on the grid and also enables free energy for the council/income stream. This should be supported by the installation of batteries as well.	Yes, agreed. Seven council buildings already have solar PV and further projects to be developed.	No further action – already in section 3.3
	Make it obligatory for all new builds to have at least solar panels	Noted. National policy requirements.	No further action for the strategy.
	Making money should be much lower on this list.	Noted. However, generating finance from council's assets will help provide valued local services to the community.	No action needed.
	Please don't focus this just on Cambridge itself. The rural areas need help. They are very far behind with energy infrastructure and sustainability.	Noted. The strategy is for all Council assets which cover the whole county.	No further action needed.
	expand on the funding streams for Parish and Town Councils and give them some advice on how to get this funding.	Noted.	Update website to include advice for parish and town councils on how to get funding
	There is no mention of the cost of energy. Renewable energy is expensive and you need to balance income generation with the cost of the energy to the end user.	Noted. The cost of solar and wind renewable energy is now comparable to fossil fuel generation.	No further action.

	With regards to energy supply and the infrastructure needed to supply local energy to consumers, there is a need to make the grid fit for purpose through investment in smart technology.	Agreed. Government is investing in research projects to improve the management of the grid through smart technology.	No further action.
	Suggest that the strategy also seek to attract investment from third parties to develop new energy infrastructure not just upgrade the existing infrastructure?	Agreed. Section 2, Our Vision, bullet point 6 describes this recommendation.	No further action.
	Business cases need to be built on the documents strategy of local generation and local usage. Any business case should stand up without any current incentives. For example, FIT is expected to disappear by 2020. Consideration should be given to non-CCC assets. For example, could CCC set up energy company that also does PPA on commercial roofs?	Where finance incentives are available for technologies these will be accessed until a point when projects are viable without incentives. For example, nuclear is financially incentivised for the next 30 years. In section 3.3, CCC will explore the options for an energy company.	No further action
	<p>However, there needs to be a careful balance between the aims of maximising commercialism and ensuring that energy generation and low carbon projects do not have a negative impact on the environment and Cambridgeshire communities. We would suggest words to reflect this need for balance are added to the second bullet point.</p> <p>In addition, while the vision makes reference to low carbon energy sources, it does not specifically reference renewable energy sources, which are considered elsewhere in the strategy. We would suggest that the first bullet point at the top of page 4 under 2.0 be reworded to read "helping to secure renewable and low carbon energy supplies...."</p>	<p>Agreed.</p> <p>Agreed.</p>	Section 2, Our Vision, bullet point 1 and 2 updated to reflect comments.

	<p>East Cambridgeshire District Council support the need for a clear energy strategy to be adopted.</p> <p>However, what is not made clear in the strategy is a mechanism as to how the County Council will work with Local Authorities to deliver the strategy, particularly onshore Wind Farms.</p> <p>ECDC Local Plan policy LP24:</p> <p>"Wind Energy</p> <p>In line with national policy wind energy developments will only be permitted if following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing."</p> <p>It will be essential for the strategy to succeed to ensure that a mechanism for engaging with the communities is developed and must demonstrate how it has complied with Local Plan policies such as the one identified above.</p>	<p>Noted.</p> <p>Agreed.</p>	<p>Section 5 updated to include how the local authorities will work with national and local plan policies and demonstrate engagement with local communities.</p> <p>Further advice being sort from Community Engagement colleagues at CCC</p>
Q3	<p>I agree with all of these priorities - Maybe there is scope for us to work more with the private sector to bring forward innovative solutions. Having innovative energy-tech providers on board and helping to provide a test bed to pilot their tech feels like it could be a win-win.</p> <p>Also - I know the University does a lot in looking at sustainable business ecosystems and it would be good if CCC can access some of their findings.</p> <p>Of course we have seen large advances in greener vehicle technology (buses, cars) - Should the energy strategy do more</p>	<p>Agreed. Section 3.3., priority 6 identifies partnerships with the private sector to test new ideas.</p> <p>Agreed.</p>	<p>No further action.</p> <p>Section 3.3 priority 6 updated to include electric vehicle charging for buses project.</p>

	to support this agenda? Government has been keen to promote more energy efficient buses for instance.		
	As above, energy efficiency means using as much energy but more efficiently. Beware the Jevons paradox, we may end up using MORE energy, although efficiently! We need a priority to REDUCE energy needs and demands.	Noted.	No action needed.
	Generally ok but some strange definitions. Why is a prosperous economy just about creating energy jobs or making money? Surely it's more than that (and what type of jobs?).	Noted. A prosperous place is also defined in the strategy as generating and using its own energy locally and creating the jobs to manage this.	No further action.
	I think they're the right ones, although I'm not sure that they're in the right order?	Noted. The priorities are currently all equal in the strategy but highlighting energy efficiency may be an option.	Energy efficiency is highlighted as a key issue in the strategy in section 2.0.
	1. Economic growth is not a priority outcome. As society, our economic model needs to change to one where scarce resources are carefully husbanded and willingly shared. The growth model is not sustainable. 2. The reason energy usage and efficiency are so important to human survival is the damage that the carbon dioxide and methane emissions that result from our energy use are doing to our small blue planet. Hence the number 1 priority of any modern energy strategy should be the MINIMISATION OF CARBON DIOXIDE AND METHANE EMISSIONS.	Agreed.  Section 2, Our Vision includes carbon reductions in bullet point 2 and 5.	Updated section 2, our Vision, bullet point 4 to include make better use of scarce resources.  Updated strategy to include methane reductions in section 2, bullet point 5
	Reference to adapting to and mitigating climate change could be more explicit in the priority areas. Suggest "supporting sustainable growth" as better title for 6th	Agreed.	Priority 6 updated to supporting sustainable growth
	Cheap energy is the key.	Noted.	No action needed.
	The only viable energy generation is small scale nuclear, and I can't see that on the Council's list.	Noted.	Members to agree if small scale nuclear be included on the list of technologies and fuels?



	I think priority 3 could be swapped with number 2.	Noted. All priorities are equal in the strategy.	No further action.
	Suggest the inclusion of attracting investment and financial support	Noted. Included in section 1, the purpose of the strategy and section 2 our vision, bullet point 6.	No further action.
	<p>Wind Energy</p> <p>In line with national policy, wind energy developments will only be permitted if following consultation it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.</p>	Noted.	Included in section 5, paragraph 3 compliance with national and local plan policies.
	The priority areas are correct, however priority 3 (energy efficiency) has to underpin priority 1	Agreed.	Strategy to emphasise the importance of energy efficiency under section 2.
	<p>We would like to also see reference to supporting the energy efficiency and resilience of businesses and individuals, especially actions to address fuel poverty. While there is reference to energy efficiency, generation, and working with district authorities it would be good if (where possible) there was an aspiration to provide a joined up approach with energy efficiency activity being undertaken by all Cambridgeshire authorities and it would be good if any related energy opportunities could be considered for the benefit of all our priorities e.g. across the different tenures, domestic sector, commercial sector, and priorities like fuel poverty.</p> <p>With regards to energy supply and the infrastructure needed to supply local energy to consumers, there is a need to work towards smarter energy grids to help alleviate the critical issues surrounding the capacity of current grid infrastructure, working with UK Power Networks and the National Grid. As such, reference to attracting investment to help upgrade local energy infrastructure is supported.</p>	<p>Noted. CCC set up the collective switch scheme for Cambridgeshire residents to help manage energy bills. And section 5, paragraph 3 identifies a joined up approach to delivery to bring benefits to the communities we serve.</p> <p>Noted.</p>	No further action.

Q4: Are there any local fuels missing in table 3.1	<p>I'm no expert but the least looks reasonable to me.</p> <p>For interest sake - here's an interesting article about generating very small amounts of energy from human movement. Every little helps</p> <p><a href="http://www.popsci.com/environment/article/2009-01/harvesting-energy-humans">http://www.popsci.com/environment/article/2009-01/harvesting-energy-humans</a></p>	Noted.	No action needed.
	Once again Hydro turbines to generate energy without these unsightly wind turbines that are a blot on the landscape and blade turning disturbance. Who wants to live near them? With Hydro the water is already there it just needs adapting.	Noted.	No further action.
	Possible river-based low-head hydro (not sure of the economics?); Solar thermal is not to be rejected if warming occurs? Technologies for 'demand response' are useful; Are we thinking about local distributed DC grids?	Noted.	Included demand response in table 3.1
	<p>Should there be a need to grow non wood-based biomass fuel crops, and in the event that planting to develop the wood based fuel crop will take place on the county estate, please note that these crops can have deleterious consequences for archaeological remains. Cost to conserve the significance of archaeological assets (in NPPF terms - i.e. to excavate and record) must be factored in to the costs of any land use or new crop change scheme.</p> <p>Also, Geothermal heating - especially ground source heating has archaeological consequences, where vast coils or vertical ducts are excavated through sites. Beware of excavation &amp; publication costs.</p>	Noted.	Included in table 3.1 under biomass and geothermal challenges
	Groundsource heat (certainly for some larger infrastructure) and possibly run-of-river hydro?	Noted. Included in table 3.1 already.	No further action.
	I have no idea because it was impossible to access the document referred to from the questionnaire link or from the Council web site. However I suspect that no thought will have been given to the carbon lifecycle analysis of any of the listed	Noted. Energy efficiency is one of the six key priorities for the strategy.	No further action needed.

	<p>'fuels'. Professionally speaking, as a Chartered Environmentalist and Member of the Society for the Environment, I am horrified that none of the so-called green energy sources being promoted today has an accurately measured carbon life-cycle let alone a sustainable one. Wind turbines increase carbon dioxide emissions by 10% per MWh. Current silicon Solar Panels are only carbon neutral if installed in regions of continual high sunlight. Electric cars generate at least twice as much CO<sub>2</sub> as petrol ones when the remote energy generation, transmission and battery storage losses are taken into account and so on, and so on. The most cost effective and carbon effective strategy the council can follow is the promotion of reduced energy consumption.</p>		
	<p>Could also consider options related to biosolids from water recycling and CHP etc</p>	<p>Noted. Biosolids are currently mainly used for soil nutrition which save carbon emissions from energy intensive processes to produce inorganic fertilisers from water recycling.</p>	<p>Water recycling is not included in the strategy but certainly the issue of saving energy from this process is important. This point needs to be communicated to the water industry. Action: email water companies.</p>
	<p>Shale gas.</p>	<p>Noted. Shale gas is a fossil fuel and so not for inclusion in this particular strategy.</p>	<p>No further action.</p>
	<p>Rural villages to the north of the County have inadequate roads to cope with the large lorries transporting the maize used for Biomass. The transportation of the maize causes disruption to the rural community and should cease until adequate infrastructure is in place. There is no financial benefit to the local community to compensate for the disruption whereas cheaper electricity is available for residents from the wind turbine farms together with a community grants scheme.</p>	<p>Noted.</p>	<p>Included in table 3.1 as a challenge for larger biomethane schemes.</p>

	If companies can produce their own Woodchips they should not be charged for being able to do this. Look at bureaucracy surrounding this - it's not local council bureaucracy but small companies need support over this.	Noted. Thank you for bringing this to our attention.	
	Suggest including waste from food production, processing and retail supply chain	Noted.	Included in table 3.1 as an opportunity under the waste section
	Under geothermal energy and extraction of heat from air, a useful addition here may also be reference to the use of water source heat pumps.	Noted.	Included in table 3.1 under geothermal energy opportunities.
Q5	I may have missed this but I think there is potential to work with innovative private sector energy companies to trial new technology and initiatives in our area.	Noted. This is included in section 3.3 priority 6.	No further action
	See above - joining with next-door Counties may give us scale for really big Storage and Demand Response thinking?	Agreed.	Included in section 3.3 under future opportunities
	Land and buildings owned by parish councils	Noted.	Included in section 3.3 under priority 6 opportunities. Check with Members.
	The UK is a relatively small country and we have to balance land usage between the requirements for housing, industry, leisure, agriculture etc. I do not believe we should be creating green field solar electricity farms until every roof in the county has solar panels.	Noted. We support your view that more buildings need to include solar and battery storage too across Cambridgeshire.	No further action.
	Good start but its only the start. Many more similar projects possible but all need capital investment.	Noted.	No further action.
	Explore wider scale DHN, particularly relative to larger scale new communities	Noted. Included in section 3.3, priority 1 opportunities.	No further action.
	Links to legislation. E.g. EPC rating to achieve solar FITs, minimum energy efficiency standards for the letting of property	Good point. Noted.	No further action.
	Promotion of energy reduction	Noted. One of our key priorities in the strategy.	No further action.

Q6	No expert but maybe there are other opportunities through future devolution deals - the suggestion from Government being that future monies could be more flexible.	Noted. Section 5, paragraph 1 identifies devolution plans as an opportunity.	Included in section 3.3 under priority 6 and future opportunities.
	I'm not sure if this is really right or not - but it seems to me that this strategy should also act as a bit of a brochure for anybody that is looking to invest in sustainable energy, and therefore should be a bit more aimed towards attracting investment approaches?	Agreed.	Promote the strategy when it is agreed through our website and other media to attract interest.
	Bio Methane is using fuel to transport the grain it uses as the tractors that are needed to move it are always up and down the road about 20 or more times a day it's defeating the object of generating power by this method.	Noted. Table 3.1 identifies the issue of carbon emissions through transportation of biofuels over distance.	
	Co-investment with the private sector should be considered; there are investors (not just in UK) who might see the "tech-centric- energy county of Cambridgeshire a good investment?	Agreed.	Section 4, Co-investment paragraph updated to include private sector funding not just from the UK
	Consideration of environmental impacts of schemes needs to be mentioned and how national/international policy will be followed to mitigate these where found to be present. Archaeological impacts can range from physical harm to affecting the historic environment setting of designated sites (scheduled monuments, listed buildings, conservation areas....)	Agreed.	Section 5 has been updated to include national policy.
	Greater emphasis on insulation. Domestic take-up of grants has been poor and would have been better used on local government facilities.	Noted.	No further action.
	projects wholly funded by the private sector	Noted.	No further action.
	Business cases should not count on the medium-term availability of FiT/renewable incentives, or should front load projects to ensure these are available. The Government has talked about renewables standing on their own two feet by the end of 2019. Therefore, business cases can be built if	Noted. Business cases will be brought forward for individual projects based on the merits of the projects and what is available in terms of finance incentive.	No further action.

	generation is near the load, or generation is used to help with grid balancing.		
Q7	Have already done so Hydro Electricity would be more efficient.	Noted.	No further action.
	Funding opportunities from Department for Business, Energy & Industrial Strategy	Noted. The Industrial Strategy is currently open for consultation. There are funding opportunities for heat networks that will be explored.	No further action.
	Energy Performance Contracts - covered under co-investment? Could be more obvious? Council's Invest to Save money - ability to fund smaller scale improvement measures	Noted.	No further action.
	As one of the key learning centres of the world, Cambridge could do the planet a favour by using its technical and scientific skills to establish a 'carbon database of things and processes'. If the carbon lifecycle of every manufactured object (EAN numbered goods?) and implementation and usage process were measured and assembled in a publicly accessible database, carbon lifecycle analysis would gradually become cheap and easy to perform. This would lead to gradual improvements in design, manufacture and usage of goods and services from a carbon emission viewpoint. It is an obvious use of 'big data' leading to modelled and actual environmental improvement. However, it needs the kind of brainpower and expertise that resides in our City and it needs funding.	Agreed. A good idea for a research project for one of our Universities.	No further action.
	As well as innovative companies there are departments in the university engineering faculty which could advise. You might also contact Warwick University which is working on energy conservation	Noted. The Council collaborates across a number of departments with our Universities. Contact with Warwick University is a good idea too.	No further action.
	Could skills and support available from DECC, DEFRA or Local Partnerships?	Local Partnerships are engaged in energy	No further action.

		performance contracting and waste projects. BEISS and DEFRA may have relevant skills to link with.	
	There could be links between some of the projects being considered as part of the strategy and the development of local skills in relation to the priorities for energy generation and energy efficiency priorities working in partnership with local organisations such as Cambridge Regional College and the SmartLIFE Centre. Projects delivered as part of the Strategy could include requirements related to local apprenticeships and training opportunities. Also – strategy should be linked with LEP, Combined Authority and/or City Deal as sources of strategic direction (and potentially funding) and the local plans of the Cambs districts.	Agreed.	New paragraph added into section 5 on the collaboration with strategic bodies and local authorities local plans.