



Project No.	Council Area	Project	Strategic Focus Area(s)	Lead service, Decision Committee & key stakeholders	Investment Scale	Procurement Bracket	Risk impact (1 low-5 high)	Risk likelihood (1 low -5 high)	Risk Score (LxL)	Risk rating	Risk notes	Priority (1=high, 2=med, 3=low)	KPIs	Year 1	Medium-term (2-3 years)	Long-term (3+ years)	Actions 2018	Actions 2019	Status	Lead name	Updated by	Date Updated	
7	Cambridgeshire	Generation of heat (kWth) and power (kWh) for local communities using Cambridgeshire's waste  Number of tonnes of waste diverted into Energy from Waste (£ savings on landfill tax)	1. Low Carbon Energy ; 2. Local Generation and Supply	Adam Smith, Waste EIU to support	≤£5m	>£500k	4	4	16	High	High Risk a) Planning Risk b) Agreement needs to be reached with Amey or other party to provide EfW services. c) Risk that facility cannot attract funding or is not constructed. d) risk that project is delayed by objections, judicial review, call in by SOS etc. e) Risk that distribution network restricts/prevents local energy use. f) Risk that use of EfW is not cost effective g) PPA cannot be agreed to allow sleeving of energy for CCC's use h)Lack of uses for heat in the vicinity of EfW facility(s) i) Public perception of health risks Dependency - Amey or other Energy from	2	Tonnes of waste diverted from landfill should be convertible into cost saving too.	(i) Identify policy position for Waterbeach new development to off-take heat and power (ii) Identify opportunities to collaborate with Amey and others on the waste PFI	(i) Identify other waste streams that could support heat and power (ii) Explore the potential to get more waste into the Amey contract to generate more power					Not started			
8	Peterborough	Maximisation of the Energy from Waste plant Peterborough	1. Low Carbon Energy ; 2. Local Generation and Supply	PCC, EIU and Opportunity Peterborough		Unknown	4	3	12	Medium	Medium a) Planning Risk - disruption b) Agreement may need to be reached with UKPN. c) Risk that cost of connection or private wire may not provide a return. d) risk that project is delayed by objections, judicial review, call in etc. e) Risk that distribution network restricts/prevents local energy use.	1	Income generated/savings realised.	(i) Identify opportunities and further collaboration potential (ii) feasibility study (iii) funding opportunities	(i) Private wire arrangements or connections to UK Power Networks (ii) District Heat Networks	Potential to trade energy locally and/or power Council owned buildings							
9	Peterborough	Opportunities for Localised battery and cryogenic Storage	2. Local Generation and Supply	Fengate/ Green Energy Barns/ Opportunity Peterborough		Unknown	3	3	9	Medium	Medium risk (a) cost			(i) Procure consultants to review feasibility (ii) Identify revenue opportunities	(i) Develop outline business cases for two sites					Not started			
10	Both	Pilot the idea of energy centres at large existing schools to generate and supply renewable energy (kWh) to local customers	2. Local Generation and Supply	Schools, EIU, PCC						Medium	Medium Risk-uncertainty on viability, regulatory barriers and local energy market development	2	kWh generated, CO2 savings and potentially income above costs.	(i) Develop an indicative business case with a pilot school (ii) Test the business case with the Pilot school, local community and large local energy users (iii) Identify regulatory barriers	(iv) Explore joint venture opportunities (v) Identify PPA opportunities (vi) Work with schools to identify if existing schools have extra land not required for educational purposes but which could be used for local energy projects and buying and selling energy locally.					Not started			
11	Peterborough	Circular by Design - a Circular Economy project based on Pyrolysis technology	2. Local Generation and Supply	Opportunity Peterborough and PCC, with a wide consortia	≤£2m	>£500k	4	3	12	Medium	MEDIUM risk	2		(i) Develop the business Case (ii) secure funding (iii) Develop feasibility study	(i) Deployment and testing (ii) Education and dissemination					Not started			
						Unknown	3	3	9			2								Not started			

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12	Both	Identify energy infrastructure supply models for new schools	2. Local Generation and Supply	CCC schools capital programme, PCC, EIU	≥£100K	£100k-£500k	3	3	9	Medium	Medium risk - identification of appropriate legal mechanisms Impact on appointment of Academy sponsor.	2	Outcome not KPI	(i) Explore how the schools capital programme and energy programme can collaborate on energy projects for new schools. (ii) Run a workshop with the Multi- Academy Trusts to share this idea and get buy-in to the idea (iii) Develop a Committee paper to agree energy infrastructure funding arrangements for new schools (iiii) Establish and "opt-in" programme for schools to manage their energy procurement	(iii) Identify the legal mechanisms to facilitate selling energy to new schools (iv) Develop and agree Investment Grade proposal for new school energy infrastructure (v) Identify risks to the Schools Capital programme including principal design and contractor role when more than one contractor on site			(i) Establish planning process for new schools - and identify interventions to the process. (ii) Facilitate a discussion / workshop to shape process. (iii) Committee paper required to recommend model.	In progress	Claire Julian-Smith	Claire Julian-Smith	12/02/2019
13	Both	Work with partners to assess the benefit of a utility infrastructure company to support growth aspirations. The Utility Infrastructure Company would look to invest in utility infrastructure upfront on new development sites.	2. Local Generation and Supply	EIU, PCC, Opportunity Peterborough, PECT, Farm Estate, Finance, Legal, CPCA, Las	≥£50K	£25k-£100k	2	2	4	Low	Low risk	2	Outcome not KPI	Work with Partners to discuss the benefits of a Utility Infrastructure Company, the most appropriate scale and how to progress this for new housing growth.	Assess the value of a multi-partner public sector MUSCO (proposed by GCGP LEP)			Presentation to CPCA and development of an Innovate UK bid to include the development of this concept.				
14	Both	Identify new ownership and income models for street lighting for new growth sites	3. Energy Efficiency	PCC, Opportunity Peterborough, CCC Street lighting, EIU	TBC	Unknown	3	3	9	Medium	Medium risk - development of a new business model brings uncertainty including: costs to developers for lamppost infrastructure and operation arrangements for new lampposts	2	£ revenue saving on energy CO2 reductions £'s Income generation		(i) Scope the opportunity for including EV charging or smart sensors for air quality on lampposts for new growth sites (ii) identify the arrangements for new lamp poststo be delivered outside the Lighting PFI (iii) develop a committee paper to set up policy arrangements for smart lampposts	(iv) Identify the regulatory and other barriers to taking ownership of street lighting for new developments (v) Develop an outline business case for a pilot growth site on new delivery and ownership models for street lighting (vi) Develop Committee paper on key principles for smart lampposts			Not started			
15	Cambridgeshire	Pilot Retrofit EV chargers into residential streets with no off road parking	6. Sustainable Growth	Gary BaldwinTraffic Policy and Regulation, Highways and EIU	≥£1m	>£500k	3	2	6	Medium	Medium risk -	1			Scope the business case for retrofitting 15 EV chargers and apply to OLEV for grant funding.				Investigating options			
16	Both	Reduce energy consumption on Council buildings	3. Energy Efficiency	PCC, CCC, Opportunity Peterborough, PECT, Energy Management, EIU	≥£1m	>£500k	1	2	2	Low	Low risk	1	£ revenue saving on energy CO2 savings		(i) Agree governance of £1million Energy Efficiency Fund (ii) Develop the pipeline of buildings for energy efficiency improvements	(iii) develop business cases for approval	Deliver reduced energy consumption	Second set of LED Lighting project sites. Create further pipeline of works. Request extension to fund.	In progress	Sarah Wilkinson	Sarah Wilkinson	13/02/2019
17	Both	For service process redesigns identify energy reductions (e.g. new transport arrangements, equipment specifications, IT requirements )	3. Energy Efficiency	Transformation team in collaboration with IT, facilities management, procurements	≥£5K	£2k-£25k	2	2	4	Low	Low risk	3			(i) Scope how procurement can encourage the low carbon and energy agenda (II) update procurement policy to help differentiate proposals on the basis of sustainable energy policies	(iii) Develop standard templates to include sustainable energy criteria (iv) develop cross cutting OCR reviews on energy			Not started			

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18	Both	Identify energy reduction as a priority in all new relevant procurement specifications for Council products and services	3. Energy Efficiency	Procurement, legal	0	<£2k	2	1	2	Low	Low risk	2				Include standard wording for new tenders to include energy reductions and energy generation where this is relevant.			Not started			
19	Both	Upgrade all pool cars to electric vehicles and provide electric vehicle charging on site	6. Sustainable Growth	Facilities management? Travel for Work?	≥£200K	£100k-£500k	2	2	4	Low	Low risk	2	£ revenue saving on energy/petrol costs (can we measure total miles driven?) CO2 reductions.		Scope electric vehicles and best practice with other authorities	Develop the business case for electricpool cars and the provision of EV charging on site for decision			Not started			
20	Peterborough	Reduce number of illuminated Highways Assets	3. Energy Efficiency	PCC		Unknown	2	3	6	Medium	Medium Risk	2							Not started			
21	Both	Energy Performance Contracting to support existing schools	3. Energy Efficiency	EIU	≤£5m	>£500k	2	1	2	Low	Low risk - tried and tested business model	2	Feed into KPIs as individual projects come through.m Perhaps consider number of schools engaged?		(i) Manage the existing energy performance contracts with schools (ii) Build the pipeline for further schools to engage in EPC	(iii) Develop business cases for approval and investment (iv) Implement energy measures and monitor performance of energy measures	with existing programme. Development of pipeline of schools participating in Energy Performance Contracting in 2019/20.	In progress	Chris Parkin	Claire Julian-Smith	12/02/2019	
22	Both	Reduce overall cost of residents bills through Collective Switching	4. Managing Cost	EIU Lead with support from Communications Team for Cambridgeshire, PCC for Peterborough	≥£5k	£2k-£25k	1	1	1	Low	Low risk	2			Deliver Collective Switch auctions to help residents lower their energy bills	Deliver further Collective Switch auctions in 2019/20	Collective switching launch comms twice a year.	In progress	Emily Bolton	Sarah Wilkinson	13/02/2019	
23	Cambridgeshire	Reduce energy costs (£) and (kWh) through evolving the current traffic signals platform.	4. Managing Cost	Signals team and transport	TBC	Unknown	2	1	2	Low	Low risk - current contract arrangements will need to be understood to identify opportunities for change	3	Reduce consumption kWh kWh would be a better measure as the cashable saving depends on cost of energy which we can't control but I'm sure Memebers would rather see the savings directly		Communicate with peer authorities to share ideas and identify best practice.  Influence existing contractors to identify potential cost saving ideas.  Continue to ensure use of LED technology throughout the asset.	Identify grants to support the change process  Continue to ensure use of the most efficient technology throughout the County.			Not started			
24	Both	Review electricity and heat supply tariffs for Council buildings and contracts	4. Managing Cost	Energy Management Team, Opportunity Peterborough, PCCand CCC	0	<£2k	2	1	2	Low	Low / medium risk	1	Tonnes of CO2 'saved'		(i) Identify opportunities to source local low carbon energy and renewable energy supplies for public sector buildings (ii) Identify energy from waste opportunities related to the Waste PFI	(iii) Review energy procurement processes (currently through ESPO) in line with supply requirements.			In progress		Sarah Wilkinson	13/02/2019

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25	Cambridgeshire	Identify income generation (£) opportunities from using existing IT assets as battery storage	5. Generating Income	EIU to discuss with Amanda Askham (Beth Isaacs), transformation team, IT services (Chris Stromberg)	≥£30K	£25k-£100k	3	2	6	Medium	Medium risk - identify how this impacts IT services	3	Income generated above capital costs of infrastructure		Scope 'demand response' opportunities using cloud based software and the internet of things to identify Virtual Energy Storage (VES) options that help balance the national grid earning revenue for the authority through the use of existing batteries on computers and other devices.				Not started			
26	Both	Data Analytics	4. Managing Cost	Opportunity Peterborough, PCC, CCC, EIU		<£2k	1	1	1	Low	Low Risk	1			Developing energy intelligence to reduce costs and maximise income	(i) Existing Assets review			Not started			
27	Both	Digital Energy	4. Managing Cost	Opportunity Peterborough, PCC, CCC, EIU		Unknown	1	1	1	Low	Low Risk				Exploring the opportunities provided by technology in the energy market (for example IoT)				Not started			
28	Peterborough	Energy efficiency and cost reduction for individuals and businesses	4. Managing Cost	PECT, Opportunity Peterborough		Unknown	2	1	2	Low	Low Risk				Ongoing work							
29	Both	Sharing Services & Collaboration	4. Managing Cost	PCC, CCC		Unknown	2	1	2	Low	Low Risk				Identify opportunitiees to share skills and develop projects. Assess which other organisations can offer capacity and skills for large projects.				Investigating options			
30	Both	Procure energy service skills to develop engineering designs, build and constrcut schemes	4. Managing Cost	EIU, LGSS procurement	≥£40K	£25k-£100k	2	2	4	Low	Low risk	1	Project developme nt - no KPI		(i) Develop specification for post 2020 energy services	(ii) Run a procurement to secure a service provider for minor energy works on schools and other buildings (ii) Procure additional partners for bespoke energy projects where appropriate	Project Initiation Document written, other LA procurement approaches reviewed and potential partners invited to participate in procurement of a post April 2020 contractor.	In progress	Chris Parkin	Chris Parkin	11/02/2019	
31	Cambridgeshire	Scope the options for the setup of an energy company that facilitates the generation, selling and buying of electricity locally	5. Generating Income	Lead: Finance and legal Support from the EIU and Farm Estate	≥£50K	£25k-£100k	4	1	4	Low	Low Risk -	2	No KPI, outcomes to ID more projects		(i) Assess corporate structure options and the conditions under which this is best pursued (ii) identify licensing arrangements and the thresholds that apply at different levels of energy generation and selling (iii) open discussions with ESPO to identify any potential collaboration opportunities	(iii) Take options paper to Committee for next steps			Investigating options			

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32	Cambridgeshire	Pilot the selling of local renewable energy generated on St Ives Park and Ride via a Smart Energy Grid Project	5. Generating Income	EIU lead with support from Finance and legal	£3.6m	>£500k	3	2	6	Medium	Medium risk - customers do not agree the price of electricity	1	Income generated above capital costs of infrastructure		(i) Identify customer for the local renewable energy (ii) Draft a Power Purchase Agreement for selling renewable energy to local customers (iii) Identify the licensing arrangements for selling energy to more than one customer and the thresholds that trigger requiring a license	(iii) Conclude negotiations with customers on PPA			In progress	Emily Bolton		
33	Peterborough	Maximisation of the EFW plant - DHN	5. Generating Income	Opportunity Peterborough and PCC		Unknown	3	2	6	Medium	Medium risk - would be a funded project, but funding must be secured	2			(i) 2 Calls for District Heat Networks - feasibility and development				Not started			
34	Cambridgeshire	Develop a network of Smart Energy Grids on park and ride sites	5. Generating Income; 5. Sustainable Growth	EIU lead with support from Finance and legal and connecting Cambridgeshire	>£5m	>£500k	3	2	6	Medium	Medium risk	1			(i) Seek in principle support for a network of Smart Energy Grids from CCC, GCP and CA	(ii) Scope individual projects and develop business cases for approval	Identify and narrow down potential sites to Babraham Rd and Trumpington. Develop outline business cases, liaise with C&I Committee, P&R team, expand internal resources, secure development budget	Apply for planning permission and grid connection, develop Investment Grade Proposal	In progress	Cherie Gregoire	Cherie Gregoire	11/02/2019
35	Cambridgeshire	Identify energy projects on the One Public Estate Programme	6. Sustainable Growth	Paul Welbourn	0	Unknown	2	2	4	Low	Low risk	2	Project development - no KPI		Scope the opportunities for including energy measures into Community Hubs, Children Centres and the new district delivery model for educational facilities				Not started			
36	Cambridgeshire	Identify which Greater Cambridge Partnership, City Deal, transport projects can include energy generation and selling of renewable energy	6. Sustainable Growth	Tanya Pascual, MID	0	Unknown	3	2	6	Medium	Medium risk -	2	Project development - no KPI		(i) Review the list of transport projects to identify which projects have potential for energy generation (ii) Identify the mechanisms for agreeing scope for energy projects	(iii) Review Park and Ride schemes on A1307 and Western Orbital J11/12 for Smart Energy grid potential	Initial discussions held with GCP about timing of new park and rides.		In progress	Cherie Gregoire		11/02/2019
37	Peterborough	Scope potential for Electric Waste Vehicles	6. Sustainable Growth	PCC, CCC		Unknown	3	2	6	Medium	Medium Risk	1			(i) Identify the scope for electric vehicles and how these can be supported via grants or other funding (ii) Identify how the EFW or other generation methods could accommodate the charging of electric vehicles				Not started			



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38	Cambridgeshire	Scope the potential for the provision of electric buses on the Guided Bus route using the Smart Energy Grid at the St Ives park and ride to host the bus charging infrastructure and energy supply	6. Sustainable Growth	CPCA, EIU and Greater Cambridge Partnership	≥£5k	£2k-£25k	2	3	6	Medium	Medium risk - the details for running and operating an electric bus scheme on the guided busway need to be developed.	1	Project development - no KPI		(i) Identify the scope for electric buses along the guided busway and how these can be supported via grants, City Deal or other funding (ii) Identify how the Smart Energy Grid could accommodate the charging of electric buses from its Smart Energy Grid and the costs for a PPA	(iii) Scope interest of bus operators to lease and operate electric bus services on the guided busway (iv) Secure the PPA to supply the electric buses	Participate in development of Project Brief GCP drafted for study of electric bus roll-out across C'shire and review drafts of study. Study and subsequent discussions revealed that bus companies, when they convert buses to electric, would prefer to add their own electric charging infrastructure to the depots than use opportunity charging at the park and rides.		No further work	Cherie Gregoire	11/02/2019	
39	Peterborough	Fengate and Redbrick Farm - Energy innovation zone	6. Sustainable Growth	Opportunity Peterborough and PCC		Unknown	3	3	9	Medium	Medium risk	1			(i) Bid submitted for funding and awaiting response				Stalled			
40	Both	Unlock the market barriers to local energy generation connecting to the distribution network - Grid capacity constraints restrict the ability to access distribution networks and effects growth and productivity.	6. Sustainable Growth	EIU, Opportunity Peterborough, PCC, GCGP LEP, Greater Cambridge Partnership, Combined Authority, Local Authorities	≥£5k	£2k-£25k	4	1	4	Low	Low risk	1	Project development - no KPI		(i) Work with the GCGP LEP and Cambridgeshire Local Authorities to influence the Local Energy Investment Strategy for BEIS	(ii) Work with the Combined Authority to identify strategic priorities for energy infrastructure for inclusion in the Non Statutory Spatial Plan	GCP and CCC procurend consultatnts to analyse the local electricy network. Results identify that a tripling of capacity on the network is needed.	Investigating options				
41	Both	Sign up to UK100 and commit to 100% clean energy for our communities by 2050	6 Sustainable growth	EIU + Opportunity P'boro		Unknown	1	1	1	Low	low risk	1			Work with UK100 to idnetify the key steps to signing up to work towards 100% clean energy				In progress			
42	Both	Provide advice and guidance on energy via Libraries	3. Energy Efficiency; 4. Managing Cost; 6. Sustainable Growth	Library services	£500	<£2k	1	1	1	Low	Low risk	1							Not started			
43	Both	Use gamification on facebook to communicate messages about local buying and selling of energy	3. Energy Efficiency; 4. Managing Cost; 6. Sustainable Growth		£2K	£2k-£25k	1	1	1	Low	Low risk	2							Not started			
44	Both	Support communities to develop sustainable energy projects for their towns and villages	6. Sustainable Growth	EIU, Rural Estates team, Greater Cambridge Partnership, Combined Authority, Local Authorities, Parish Councils	>£5m	>£500k	2	3	6	Medium	Medium risk	1	No of communities supported		(i) Support one community to access BEIS/HNDU funding for local heat network infrastructure (ii) develop case studies with parish councils to show how to develop community energy projects (iii) signpost government funding for community eenrgy schemes	(i)Work with Swaffham Prior community to develop a community heat project that is replicable for other communities and reduces carbon emissions	Swaffham Prior Community heat scheme has accessed BEIS HNDU funding to develop a water source heat pump and community heat network.	Drilling of a test borehole to identify water flow rates and work with the community to build buyin to the proejct.	Investigating options			
45	Both	Planning Policy Changes for sustainable development (roof direction, local generation for shared use such as lighting etc)	6. Sustainable Growth			Unknown	2	2	4	Low	Low risk	2	0		Implementation of Near Zero Energy Building Regulations for Public Buildings january 2019	Support LPAs in their development of near zero energy standards for local plans	Workshop held with Officers and members 24/05/19 and paper to C+I Committee	In progress				

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46	Both	PECT offers various services to residents and businesses including an environment management services which includes resource auditing and behaviour programmes, Investors in the Environment accreditation, environment education in schools and Local projects	3. Energy Efficiency; 4. Managing Cost; 6. Sustainable Growth			Unknown	2	1	2	Low	Low risk	2								Not started		
		Dependent upon the individual business case and appetite for risk; there are three options available for taking opportunities forward on rural estates:																				
		a) lease only (with the Councils acting as the Landlord), b) Joint Venture arrangement or c) self-development of the scheme																				