

EXETER CITY COUNCIL**EXECUTIVE
23 NOVEMBER 2010****SCRUTINY ECONOMY COMMITTEE
11 NOVEMBER 2010****A SUSTAINABLE ENERGY FUTURE –
A STRATEGIC PARTNERSHIP WITH E.ON****1.0 PURPOSE OF REPORT**

- 1.1 Exeter City Council and East Devon District Council are working with E.ON to deliver a combined heat and power plant at Skypark to serve both the employment park and the new community. Building on this work E.ON is keen to work with the Exeter and East Devon New Growth Point and to enter into an energy partnership agreement with Exeter City Council. This signals an intent by E.ON to work with the City Council to create Exeter as a thriving, low carbon place where residents and businesses can and will take actions to reduce their own carbon emissions. In doing so, it will enable the City to deliver our economic ambition and will help support business growth and long term sustainability.
- 1.2 The proposed partnership is not a formal legal contract; it seeks to capture a commitment from all parties to work collaboratively to drive forward the low carbon agenda. The idea is that the partnership will pool expertise and resources to scale up delivery of an agreed programme. The work naturally builds on the resolutions agreed in February by Executive and the significant body of work that has been undertaken by the City Council to tackle carbon reduction. East Devon District Council would be a potential partner given their work on the Growth area.

2.0 BACKGROUND

- 2.1 In February this year Executive approved a long term strategy for reducing carbon emissions in the City. This recognised the considerable challenge facing the City and County Councils in securing the major reductions in carbon use. Members endorsed the development of a sustainable energy supply strategy for the City's growth areas. Included within the papers considered by Executive was the experience of Freiburg in South West Germany, which has gained a reputation as Germany's ecological capital and most prominent solar city. A number of European cities are providing leadership in driving the agenda to de-carbonise the economy and to tackle the challenges posed by climate change.
- 2.2 The Local Government White Paper 2006 stresses the pivotal role that local government has in achieving sustainable development and mitigating and adapting to climate change. It gives local government new opportunities to drive local action on climate change mitigation and adaptation. The government also stresses that local authorities are critical to the success of the UK Climate Change Programme "Local authorities are uniquely placed to provide vision and leadership to local communities, raise awareness and help change behaviour. In addition, through their powers and responsibilities e.g. housing, planning, local transport, powers to promote well-being and through activities such as their own local procurement and operations, they can have significant influence over emissions in their area".

3.0 INTRODUCTION AND VISION

3.1 Local authorities are uniquely placed to act on climate change mitigation and to alleviate fuel poverty. They can take action on their own estates and housing stock but can also play a key role in motivating the wider community to take action, based on their understanding of local priorities, risks and opportunities. The Council's Carbon reduction strategy is targeted at:-

1. Raising the energy efficiency of buildings, including the Council's own stock
2. Reducing transport linked emissions
3. Reducing emissions linked to waste disposal
4. Providing community leadership
5. Taking measures to adapt to climate change

3.2 The City Council has more recently initiated work on reducing carbon emissions across the city, to look at areas of particularly high impact, focusing on Exwick and the industrial estates.

3.3 This proposed strategic partnership with E.ON provides a practical vehicle to drive the City's agenda of making Exeter a low carbon city.

4.0 WHY A PARTNERSHIP?

4.1 For the cities and regions to develop in a sustainable way they must reduce their dependency on carbon based fuels. This includes looking at how progress can be made on sustainable energy and how best to prepare for peak oil.

4.2 Given the known financial pressures in the public sector it will be necessary, more than ever, to partner with the private sector and develop longer term partnerships to deliver against this agenda. This will require embedding carbon reduction in the delivery of those services the region deliver internally and those that are outsourced.

4.3 To achieve this, the sub-region' approach will need to ensure they:

- Work with local people to facilitate behaviour change and action through communication, engagement, marketing and learning programmes;
- Work in partnership with key players, particularly the NHS, universities, transport providers and major private sector businesses;
- To plan, co-ordinate and build new energy infrastructure with the private sector;
- Proactively identify funding opportunities from national and international funding streams and develop local funding opportunities;
- Design and implement a low carbon economic plan that promotes the Exeter area as a leading centre for low carbon innovation ;
- Systematically invest in carbon reduction measures across the Council's property and transport functions.

5.0 WHY E.ON?

5.1 E.ON's vision to "change energy" focuses on people, society, climate and customers. E.ON believes energy must be affordable, secure in the long-term

and increasingly lower carbon. Meeting these three objectives simultaneously is perhaps one of the greatest challenges of the 21st century.

- 5.2 E.ON UK is fully vertically integrated, meaning they have the end to end knowledge and capabilities to deliver each element of the energy value chain and can provide the peace of mind that only comes through working with Europe's largest investor-owned energy company. As a technology-agnostic organisation, E.ON can ensure that only the most appropriate solutions to any challenge is proposed; E.ON have no particular constrained supplier relationships, or dogmatic adherence to particular carbon or energy 'theories'. E.ON's commitment is to their clients first, with a strong track record of working collaboratively and in partnership to deliver only what meets the set objectives.
- 5.3 E.ON has a reputation for delivering technically advanced and spatially appropriate generation options in sometimes complex, multi-organisational partnerships.
- 5.4 The Council could seek alternative partners. Currently there is no other energy company looking to commit to this type of programme. Indeed, the Exeter area would be only the fifth such partnership agreement in the country and would represent a significant coup for the area.

6.0 THE PARTNERSHIP AND THE BENEFITS

- 6.1 The Energy Partnership Agreement is a non-legally binding commitment to working collaboratively to identify, monitor and achieve specific targets. This partnership will pool the expertise, resources and financing options within the respective organisations to scale up the delivery of identified opportunities/projects. Please see Appendix 1 for a typical EPA and governance structure.
- 6.2 The agreement is neither exclusive nor restricted and is open to other interested partners within the Exeter and East Devon growth area. It is an aspiration to build on the existing partnerships delivering key services to the Councils in the delivery of carbon reduction.
- 6.3 A distinct benefit of the partnership is the strengthening of the economy through the promotion, retention, diversification and creation of local jobs. The partnership will endeavour to resource all projects with local people wherever possible and invest in the training requirements to fill any identified skills gaps. Most importantly, the partnership approach will ensure that the intelligence and knowledge gained through the implementation of projects is retained with the people.
- 6.4 The partnership approach truly represents the community and will bring efficiency, best value and focus to the challenge of carbon reduction. The benefits are numerous and will grow throughout the evolution of the partnership. Six overwhelming early benefits the partnership can support and deliver on are listed below:-
 - 1) The fundamental regulatory requirements and compliance (such as those under the Climate Change Act, inc the Carbon Reduction Commitment);
 - 2) Responding to Government expectation of authorities having a key role to play in the delivery of national aims and objectives, such as the delivery of renewable energy and carbon targets;

- 3) The development and growth of a sustainable, low carbon economy within the region, supporting inward investment and retention of skills, expertise and the flow of finance;
- 4) Increased community environmental awareness and responsiveness to related social needs specifically fighting fuel poverty;
- 5) Access to E.ON's energy investment funds and exploit its increased capability to the faster capture of grants / funds from Government and European sources;
- 6) Accelerated learning and retention of know-how retained within Council officers including shared learning with regional based educational institutions/Universities/ colleges and schools.

6.5 The partnership will become even more effective at solving the areas carbon challenge, as the partnership learns and deepens its relationship with the community and key government agencies. By way of example, this approach responds positively and directly to the future requirements of sustainable communities and the single conversation being developed between the Exe authorities and the "Homes and Communities Agency "

7.0 THE OPPORTUNITIES

- 7.1 Continued economic growth and regeneration requires a strategic approach to the challenges of climate change and will depend on low carbon, affordable and secure energy, with sustainable approaches to transport and housing.
- 7.2 Cities and Regions are keen to promote themselves as locations of choice for the environmental technologies sector. Providing secure, low carbon and competitively priced energy will give a competitive advantage in attracting new business and inward investment.
- 7.3 E.ON has identified key target areas where the partnership can make a significant impact and derived short, medium and long term objectives and projects that can help towards meeting obligations and visions across the following sectors:-
- Housing;
 - Business;
 - Transport ;
 - Community engagement and Education;
 - Public Sector Buildings.
- 7.4 Appendix 2 below demonstrates how carbon reduction can be implemented over these sectors.
- 7.5 Appendix 3 demonstrates a typical set of projects over a short, medium and longer term basis to de-carbonise the city across the sectors stated above and below. This is a generic list that will be tailored by the partnership.
- Housing
- 7.6 Housing is responsible for a significant proportion of a settlement's carbon emissions. It is recognised that a need to address carbon emissions from both new and existing housing stock is essential to meet current targets. Working in partnership to secure expertise, new technologies and through innovative

financial models, it will be possible for the city region to accelerate this programme and tackle more homes more quickly.

- 7.7 In particular, settlements will make it easier for people to heat their homes more efficiently by insulating more homes with loft and cavity wall insulation, promoting and supporting the national boiler scrappage scheme and providing people with advice on installing solid wall insulation. However, significant challenges exist. Many properties across the city region are more difficult to insulate and there is a need to work in collaboration with the private sector to look at how we can develop a solid wall insulation programme.

Business

- 7.8 Business is a key area for local authorities to address given they are responsible for a significant proportion of the settlement's carbon emissions. With the introduction of national policies to incentivise carbon reduction it will be ever more necessary to support business in addressing these new challenges.

Transport

- 7.9 There must be a shift in culture and technology, together, to achieve carbon reduction ambitions in this sector. One area where this can be achieved is the acceleration of the uptake of low emission vehicles through a range of activities.

Education

- 7.10 For Exeter to move forward on this big challenge, it is important to take people with us. It is essential that everyone understands the challenge and how they can contribute to the solutions. E.ON's community programmes can support the city and its communities. E.ON have developed a suite of highly engaging, interactive, multi-media resources that teach young people (5-16 years) about the full range of energy issues through the Science and Geography curriculum.

Infrastructure

- 7.11 To facilitate regeneration and making heating more affordable for residents and businesses the Growth point will need to build on exemplar infrastructure and the development of district heating and cooling networks.

- 7.12 Other key identified areas where the partnership benefits can be realised are:-
1. Retro-fitting of new energy efficiency and low carbon technologies to the existing building stock (residential, civic, commercial and industrial);
 2. Stimulating behavioural change of the residents and businesses;
 3. Investment in low carbon transport systems, particularly on the back of the Government's Ultra Low Carbon Vehicle Strategy and its commitment to make strategic interventions in both infrastructure and vehicles;
 4. Investment in the Council's built estate to achieve high performing buildings;
 5. Development of the Council's land holdings to generate low carbon and renewable energy for the benefit of local communities;
 6. Work on the delivery of energy efficiency retrofitting programmes supported by Community Energy Savings Programme funding;
 7. The engagement of young people, through EcoSchools, teaching and research, apprenticeships and training programmes.

8.0 FINANCING

- 8.1 A strong benefit of the partnership is the flexible access to various funding mechanisms to deliver specific project outcomes. It is intended that the partnership will be highly skilled in the capability of applying for central government monies through building effective business cases.
- 8.2 This is complemented by a clear understanding of private sector funding opportunities and how to execute such funds. The private sector partners will also have access to internal funds to invest in the region, for example E.ON invests in citywide low carbon district heating schemes, ensuring customers in the community are guaranteed a competitive price promise whilst freeing up city funds and management time to work on more immediate community requirements.
- 8.3 The Energy Partnership Agreement is a non-legally binding commitment to working collaboratively. There is an expectation that the City Council will provide leadership and commit resources to the partnership.

9.0 DELIVERY TEAM

- 9.1 E.ON has suggested, based on their experience, that to develop momentum behind the partnership, it will require some initial investment from which efficiencies, savings and income generation can be realised. Longer term it is proposed that a core partnership team will be subsidised by the success of the region wide energy projects over time, however a residual funding is foreseen for this team, which will not benefit from subsidy in its first year.
- 9.2 A fully developed business case for investment could be developed in the future to support this investment, but it is proposed that initially a team of 4 full-time staff made up equally from E.ON and the local authorities be brought together. Currently, Exeter and East Devon have staff working on this agenda that can be called upon to progress the work programme. The focus for the team is suggested to be the current Delivery Team under the Projects Director. This set up works to a governance structure that has overseen the funding agreements for the chpp and enjoys a broad measure of support from the three local authorities.
- 9.3 A reinvestment model from successful projects can be considered to reduce this overhead for future years. The Carbon Reduction Commitment management opportunity is a good example of this. Through a partnering agreement, mechanisms can be agreed to effectively self fund the capital implementation of carbon reduction technology which is ultimately paid for the savings generated – full risk transfer to the operator under an energy performance guarantee.

10.0 RECOMMENDED that Executive notes the view of the Scrutiny Committee – Economy and approves the proposed action in relation to the following that :-

- 10.1
- (i) Exeter City Council enter into an energy partnership agreement with E.ON and East Devon District Council;
 - (ii) Members consider whether the Exeter and East Devon New Growth Point Board function as the governance structure for assessing

- performance and managing the partnership;
- (iii) The partnership seeks to engage Devon County Council in taking forward the work programme;
 - (iv) The Projects Director for the New Growth Point acts as the principal lead for the partnership; and
 - (v) A review of the decision be considered annually.

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ECONOMY & DEVELOPMENT DIRECTORATE

Local Government (Access to Information) Act 1972 (as amended)

Background papers used in compiling this report:-

1. Reducing Carbon Emissions in Exeter: the Role of Planning and Transportation Strategy, Scrutiny Committee – Economy, 21 January 2010; Executive, 9 February 2010.
2. Climate Change Strategy, Executive, January 2008.

APPENDIX 1**THE ENERGY PARTNERSHIP AGREEMENT (EPA)**

The EPA clearly defines a governance structure which broadly accords with a typical Intelligent Client model; however, the EPA does offer greater flexibility not being a formal contractual agreement.

At a senior level, sponsors agree to meet (typically quarterly) to review the Energy Strategy and set specific targets on a project-by-project basis to deliver the identified objectives to an agreed budget. It is at this Sponsors Review Group (SRG) level where the project management team, procurement method and funding of each project will be agreed, maximising where appropriate available funds and grants and, where necessary, additional finance.

A more detailed Project Review Group (PRG) will meet on a monthly basis to monitor and resolve any project specific details, escalating any issues to SRG for resolution is necessary.

It is recognised, depending on the scale and nature of the projects, that Local Government procurement rules and legislation will apply. In order for E.ON not to be precluded from any relevant procurement tenders, it is envisaged that E.ON sponsor representative(s) will extract themselves from such meetings that are deemed sensitive to the nature of the tender process.

E.ON / Exeter and East Devon Energy Partnership Charter

Introduction

This Collaborative Charter sets out the nature of the relationship between E.ON and Exeter City Council and East Devon District Council, which all parties have committed to adopting. Although this agreement is not contractual, both signatories jointly undertake to operate within the spirit of collaborative partnership described here in: -

The Rationale

The rationale for this agreement is summarised as follows:

- All parties wish to operate in new ways and through a new relationship.
- All parties firmly believe that their interests are best served by the adoption of cooperative ways of working together.
- While accepting the need for project specific contracts, all parties accept that this Charter will provide a reference document against which their approach and actions can be compared.

Principal Objectives

The principal objectives of the relationship Between E.ON and Exeter City Council and East Devon District Council are as follows:

1. To reduce within the growth point energy consumption / carbon footprint / energy costs
2. To increase energy efficiency through smart initiatives / technologies
3. To seek continuous improvement through an agreed regular communications and partnership working programme
4. To deliver additional benefits to the community through education, training, job creation and community engagement
5. To deliver services to the highest standards of quality.

Signed on behalf of Exeter City Council

Position

Date

Signed on behalf of East Devon District Council

Position

Date

The actions that will be taken to deliver the Principal Objectives:

- Co-operation will be continually aspired to in all our activities and communication.
- We agree to work with respect and equality and wherever possible as simplistically as possible
- All parties (and subsequent additional partnering parties) will adopt the partnership at a senior level
- All parties will annually allocate the necessary resources where necessary.

The Nature of the Relationship

The following values are held by all parties to the Charter:

- No party has a monopoly on best practice, initiative or solution
- All information is shared openly where possible
- Problems are solved jointly
- Innovative proposals are positively criticised
- Working relationships are friendly
- Wherever possible risks are shared

The Success Review Group (SRG) Quarterly* Suggested agenda Appendix 1A

All parties agree to undertake strategic goal setting and monitoring of progress to achieve the successful progression towards the **Principle Objectives**.

- Purpose to confirm the strategy
- To enable decision making and authorise projects
- To cross communicate up to date global thinking from both organisations
- Strategic legal and procurement governance

Project Review Group (PRG) Monthly* Suggested agenda Appendix 1B

The PRG will ensure that projects, authorised by SRG, are appropriately resource and managed.

- Clear project management / ownership
- Regular reporting of benefits and risk awareness
- Shared project management resources
- Clear budgetary / quality / programme controls

Signed on behalf of E.ON

Position

Date

APPENDIX 1A**Agenda**

Meeting	Community Energy Partnership - Sponsors Review Group (SRG)
Date	
Time	6Hrs Every quarter – Revolving between sponsors
Venue	
Attendees	Sponsor Managers plus Invited Project team Representatives
Apologies	

<u>Item</u>	<u>Description</u>	<u>Action</u>	<u>Timing</u>
1.0	Introductions & Housekeeping		
2.0	Strategic Goals & Mission		
3.0	Benefits Review		
4.0	Project Updates		
	<ul style="list-style-type: none"> • Project 1 • Project 2 • Project 3 		
5.0	Funding Update		
6.0	Community Update		
	Sponsor only matters		
6.0	<ul style="list-style-type: none"> • Expenditure Review • Resources update 		
7.0	AOB		

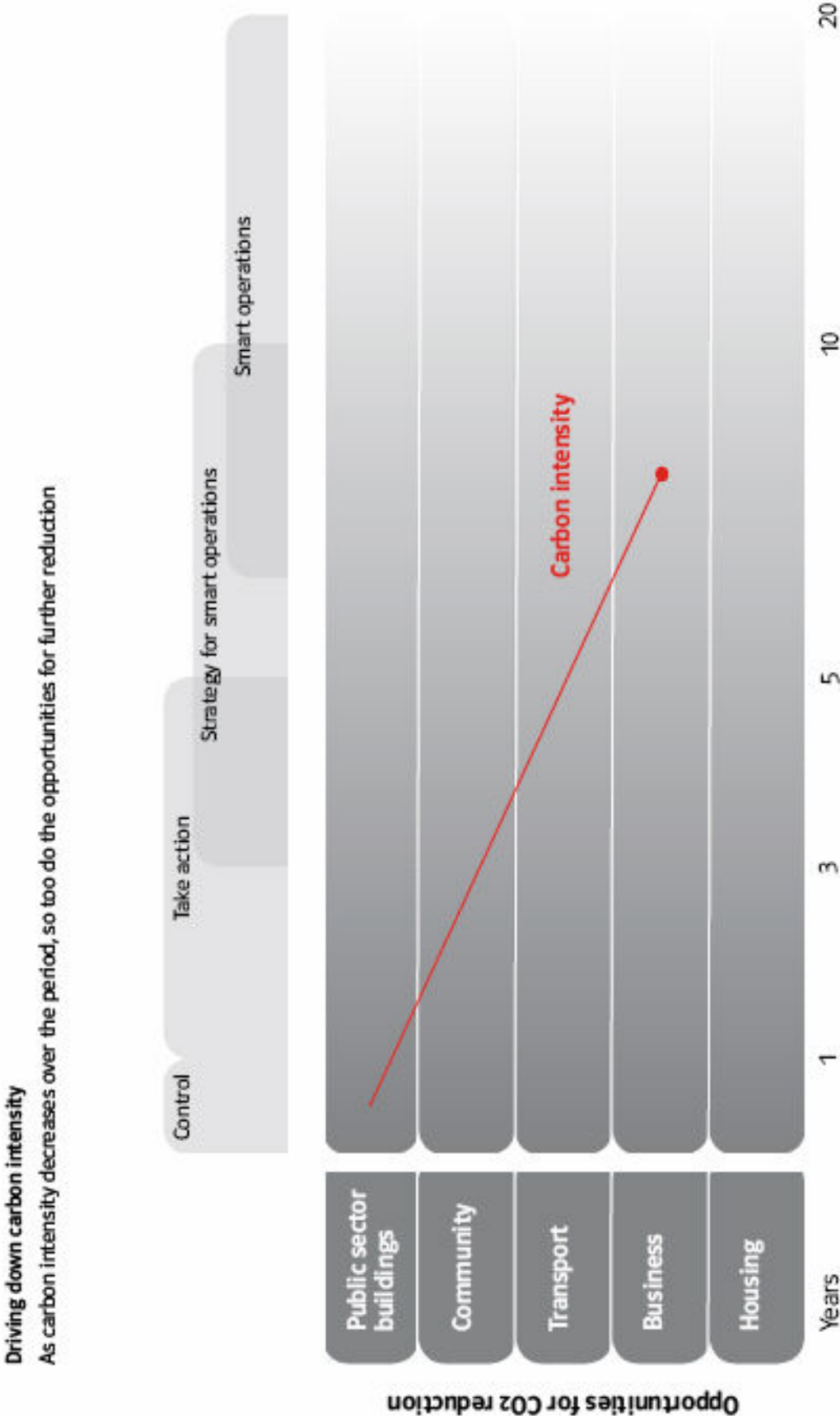
APPENDIX 1B**Agenda**

Meeting	Community Energy Partnership - Project Review Group (PRG)
Date	
Time	6Hrs Every 4 weeks (Interim Teleconference 2 weekly 1 hr)
Venue	Revolving between sponsors
Attendees	Sponsor Managers plus Invited Project team Representatives
Apologies	

<u>Item</u>	<u>Description</u>	<u>Action</u>	<u>Timing</u>
1.0	Introductions & Housekeeping		
2.0	Project Update & Improvement by Project Leader		
3.0	Benefits Review		
4.0	Community Update		
5.0	AOB		

APPENDIX 2

THE CARBON INTENSITY GRAPH



APPENDIX 3

Housing

	<u>Short Term</u>	<u>Medium Term</u>	<u>Long Term</u>
	Goal: Target: Timeline: Circa 1 year	Goal: Target: Timeline: Circa 3-5 years	Goal: Target: Timeline: 20 years+
Opportunities	<ol style="list-style-type: none"> 1. Feasibility study on LSOA to identify most cost effective “green” solution 2. City wide housing stock review to identify most cost effective “green” solutions both new and retro fit 3. Identify site specific area for de-centralised energy and scope opportunities – relation to district heat etc 4. CESP 5. Metering strategy and scope (RSL / social housing stock) 	<ol style="list-style-type: none"> 1. Develop detailed proposals for de-centralised energy / ESCo sites. 2. Roll out Smart meters 3. Influencing the planning strategies for low carbon infrastructure on new developments 4. Roll out microgen to the public (Ignite) 	<ol style="list-style-type: none"> 1. Continuous improvement strategy including maximising use of existing district heat network and expansion of use via newly constructed 2. Monitoring and effectively implementing a low carbon operational plan, where saving energy is business as usual. 3. Creating the city as a World leading low carbon city, including all city and supply chain partners
Benefits to the people & Businesses of the city	<ol style="list-style-type: none"> 1. Identify Best, most efficient and cost effective carbon reduction solutions for the city with major investment by E.ON 2. Best, most efficient and cost effective solution beyond CESP to include E.ON investment in CERT/Microgen etc 3. Maximise use of ESCo, secured energy prices, risk transfer to E.ON City benefits from extending E.ON schemes at lower project cost and E.ON energy price promise 4. Reduce fuel poverty, increase asset value and attraction, local job creation and training E.ON to invest circa £xm over 3 years 5. Reduce fuel poverty, increase awareness of consumption and carbon footprint, allows community to join the initiative which can grow into greater community engagement 	<ol style="list-style-type: none"> 1. Grid carbon intensity significantly reduced, secure energy tariffs, risk transfer to E.ON, low carbon culture, E.ON competitive price promise using E.ON investment monies/infrastructure funds 2. Develop SMART grid infrastructure, energy management, interactive reduction in consumption and carbon, E.ON smart grid knowledge transferred to local DNO to leverage more inward investment 3. Commitment to developing a low carbon community throughout the cities growth strategy 4. Customised offers to suit all demographic segments of the community, initial targets includes student population and investment offers 	<ol style="list-style-type: none"> 1. To ensure the city benefits from world leading technologies / services including the local manufacturing and commerce of such technologies / services (significant low carbon economy) 2. To continuously achieve European targets 3. Building a low carbon City / economy saving energy through smart operation and technologies becomes business as usual
Delivery of Opportunity	<ol style="list-style-type: none"> 1. Consultancy study jointly with housing strategy 2. Consultancy study jointly with housing strategy 3. Consultancy to scope opportunity, design, build fund and operate through ESCo 4. End to end service delivery – or in partnership with local contractors 5. Through metering technology 	<ol style="list-style-type: none"> 1. ESCo design, build, fund and operate 2. Smart metering roll out 3. Collaborative development and management of relevant planning processes 4. Smart technologies via end to end service of in partnership with local contractors 	<ol style="list-style-type: none"> 1. Via the Energy Partnering Agreement governance structure including international commerce and technology partners 2. Via the Energy Partnering Agreement governance structure 3. Via the inclusion of international commerce partners, European government and scientific institutions.
Investment / Commitments Required	<ol style="list-style-type: none"> 1. Human resource to work in partnership, cost range between £5 - £25k depending on depth 2. Human resource to work in partnership, cost range between £30 - £50k depending on depth 3. Scoping and design varies on site, range £5k - £40k. 4. Significant E.ON investment (circa £3m) additional top up monies may be required / redirected from the city 5. Metering consultancy study £3-5k 	<ol style="list-style-type: none"> 1. E.ON investment / infrastructure investment 2. E.ON / DNO Smart grid funding / government funding 3. Joint resource with skilled staff (annual management fee) 4. E.ON financial services / public purchase / rental (benefits of FIT) 	<ol style="list-style-type: none"> 1. Annual management fee (supported by business plan showing multiple savings) 2. Annual management fee (supported by business plan showing multiple savings) 3. Annual management fee (supported by business plan showing multiple savings)

Business

	<u>Short Term</u>	<u>Medium Term</u>	<u>Long Term</u>
	Goal: Min Target: Timeline: Circa 1 year	Goal: Target: Timeline: Circa 3-5 years	Goal: Target: Timeline: 20 years+
Opportunities	<ol style="list-style-type: none"> 1. CRC management increasing energy efficiency benefits over applicable business building stock 2. Metering strategy and scope 3. SME micogeneration opportunities 4. Business inclusion in partnership – peer to peer energy piping opportunities 	<ol style="list-style-type: none"> 1. Develop detailed proposals for de-centralised energy / ESCo sites. 2. Roll out Smart meters 3. Influencing the planning strategies for low carbon infrastructure on new developments 	<ol style="list-style-type: none"> 1. Continuous improvement strategy including maximising use of existing district heat network and expansion of use via newly constructed 2. Monitoring and effectively implementing a low carbon operational plan, where saving energy is business as usual. 3. Creating the city as a World leading low carbon city, including all city and supply chain partners
Benefits to the people & Businesses of the city	<ol style="list-style-type: none"> 1. Conformance to legislation, commitment to low carbon community, FIT, RHI, attracting new business, opportunity to grow partnership, pooling administration and carbon trading. High placement in league table provides financial incentives 2. Dynamic energy management and reduction 3. Benefits from FIT, reduced fuel bills 4. Jobs, carbon reduction, inward investment etc 	<ol style="list-style-type: none"> 1. Maximise use of ESCo, secured energy prices, risk transfer to E.ON City benefits from extending E.ON schemes at lower project cost and E.ON energy price promise 2. Develop SMART grid infrastructure, energy management, interactive reduction in consumption and carbon 3. Commitment to developing a low carbon community throughout the cities growth strategy 	<ol style="list-style-type: none"> 1. To ensure The city benefits from world leading technologies / services including the local manufacturing and commerce of such technologies / services (significant low carbon economy) 2. To continuously achieve European targets 3. Building a low carbon City / economy saving energy through smart operation and technologies becomes business as usual
Delivery of Opportunity	<ol style="list-style-type: none"> 1. Identify the city businesses and implementation plans to achieve common CRC business compliance / city commitment. 2. Via energy management contracts 3. End to end service delivery or via local contractors (job creation / retention) 4. Via the partnering agreement / forums 	<ol style="list-style-type: none"> 1. ESCo design, build, fund and operate 2. Smart metering roll out 3. Collaborative development and management of relevant planning processes 	<ol style="list-style-type: none"> 1. Via the Energy Partnering Agreement governance structure including international commerce and technology partners 2. Via the Energy Partnering Agreement governance structure 3. Via the inclusion of international commerce partners, European government and scientific institutions.
Investment / Commitments Required	<ol style="list-style-type: none"> 1. Individual client funding – high league table incentives. Energy management savings self funding option. 2. Individual client funding 3. Client funding / government grants and carbon trust loans 4. Strategic funds, FIT 	<ol style="list-style-type: none"> 1. E.ON investment / infrastructure investment 2. E.ON / DNO Smart grid funding / government funding 3. Joint resource with skilled staff (annual management fee) 	<ol style="list-style-type: none"> 1. Annual management fee (supported by business plan showing multiple savings) 2. Annual management fee (supported by business plan showing multiple savings) 3. Annual management fee (supported by business plan showing multiple savings)

Transport

	<u>Short Term</u> Goal: Target: Timeline: Circa 1 year	<u>Medium Term</u> Goal: Target: Timeline: Circa 3-5 years	<u>Long Term</u> Goal: Target: Timeline: 20 years+
Opportunities	<ol style="list-style-type: none"> 1. Electric vehicle viability study with identified potential charging points (including other city partner fleet? – Kier 80 vans) 2. Feasibility to deliver and use alternative fuel sources for fleet – public and private partner organisations (bio-gas) 3. LED exterior lighting (outside scope of PFI) 	<ol style="list-style-type: none"> 1. Electrical tram maintenance services, high level electrical including lighting 2. New Anaerobic Digestion plant potential 3. Consolidation centres within the city for centralised delivery and re-distribution. Sites can also house training / education facilities (include other city partners and public/private sector businesses) 	<ol style="list-style-type: none"> 1. Continuous improvement strategy including maximising use of existing district heat network and expansion of use via newly constructed 2. Monitoring and effectively implementing a low carbon operational plan, where saving energy is business as usual. 3. Creating The city as a World leading low carbon city, including all city and supply chain partners
Benefits to the people & Businesses of the city	<ol style="list-style-type: none"> 1. Leading the way nationally with new technology. Increasing air quality within the City 2. Sustainable fuel source for service vehicles, reduce pollution 3. Ultra low energy white light solution offering increased feeling of safety – CCTV recognition etc 50% energy reduction, 60% carbon reduction 	<ol style="list-style-type: none"> 1. Low carbon inclusion of infrastructure 2. Source for alternative vehicle fuel, fuel for ESCo's produced within the city. Job creation and retention 3. Reduced congestion within the City leading to better air quality. Job creation, retention and training options 	<ol style="list-style-type: none"> 1. To ensure The city benefits from world leading technologies / services including the local manufacturing and commerce of such technologies / services (significant low carbon economy) 2. To continuously achieve European targets 3. Building a low carbon City / economy saving energy through smart operation and technologies becomes business as usual
Delivery of Opportunity	<ol style="list-style-type: none"> 1. Study to identify and scope the potential 2. Locally produced / local distribution 3. Installation, maintenance and lease back funding options available 	<ol style="list-style-type: none"> 1. End to end service delivery 2. End to end service delivery 3. Sites on fringe of city to consolidate materials with guaranteed deliveries within x hours of call to city centre establishments. 	<ol style="list-style-type: none"> 1. Via the Energy Partnering Agreement governance structure including international commerce and technology partners 2. Via the Energy Partnering Agreement governance structure 3. Via the inclusion of international commerce partners, European government and scientific institutions.
Investment / Commitments Required	<ol style="list-style-type: none"> 1. Government/ E.ON sponsorship / supply chain sponsorship 2. Supply chain subsidised 3. Typical unit rate £400 each – funding options available. 	<ol style="list-style-type: none"> 1. Client funded – project specific 2. Client funded – project specific 3. Gate fee based with possible supply chain subsidies 	<ol style="list-style-type: none"> 1. Annual management fee (supported by business plan showing multiple savings) 2. Annual management fee (supported by business plan showing multiple savings) 3. Annual management fee (supported by business plan showing multiple savings)

Community / Education

	Short Term	Medium Term	Long Term
	Goal: Target: Timeline: Circa 1 year	Goal: Target: Timeline: Circa 3-5 years	Goal: Target: Timeline: 20 years+
Opportunities	<ol style="list-style-type: none"> 1. Education awareness programme to drive lower consumption and responsibility to act (affluent area target) 2. Stage a "Green Jobs Conference" 3. Maximise the usage of the E.ON curriculum approved education packs across all The city schools / colleges 4. Engage with local Universities to test and monitor performance of new / emerging sustainable energy technologies 5. Target large residential student platform to "change energy" 6. Microgeneration on schools / colleges 	<ol style="list-style-type: none"> 1. Established regular community engagement with the well-organised community representation 2. Community inclusion within project delivery including educational sector, voluntary sector, third sector, job placement schemes 3. Establish local community-based manufacturing/skills transfer (eg Remploy) 	<ol style="list-style-type: none"> 1. Continuous improvement strategy including maximising use of existing district heat network and expansion of use via newly constructed 2. Monitoring and effectively implementing a low carbon operational plan, where saving energy is business as usual. 3. Creating The city as a World leading low carbon city, including all city and supply chain partners
Benefits to the people & Businesses of the city	<ol style="list-style-type: none"> 1. Increase awareness, reduce bills and carbon emissions, increase community inclusion / support 2. Job creation / The city destination for jobs 3. Raise awareness and encourages people to take action and ownership in reducing carbon 4. Recognised as centre of excellence for "green" energy technology, encouraging students and business to The city 5. Benefits of FIT, reduced bills and influential population 6. FIT, reduced bills, education 	<ol style="list-style-type: none"> 1. Low carbon awareness and knowledge of accessing information becomes business as usual for the city communities. 2. Low carbon economic growth, opportunities for the young, skills growth 3. Local manufacturing and assembly job growth, new skills accumulation, global supply chain 	<ol style="list-style-type: none"> 1. To ensure The city benefits from world leading technologies / services including the local manufacturing and commerce of such technologies / services (significant low carbon economy) 2. To continuously achieve European targets <p>Building a low carbon City / economy saving energy through smart operation and technologies becomes business as usual</p>
Delivery of Opportunity	<ol style="list-style-type: none"> 1. Accord and develop with The city is my Planet 2. Partnering agreement / collaborative marketing support – including supply chain 3. Delivery of CD's and education packs / on-line curriculum 4. Research funded studies / E.ON trials 5. E.ON innovation collaborating with Universities and supply chain 6. E.ON microgeneration 	<ol style="list-style-type: none"> 1. A regular agenda item across the partnership at all levels 2. Job placement for partnership projects supported by on-the-job training through local educational community and E.ON Academy/apprenticeships 3. Local supply chain inclusive within partnering agreement supported by local FE sector/supplemented by E.ON Academy 	<ol style="list-style-type: none"> 1. Via the Energy Partnering Agreement governance structure including international commerce and technology partners 2. Via the Energy Partnering Agreement governance structure 3. Via the inclusion of international commerce partners, European government and scientific institutions.
Investment / Commitments Required	<ol style="list-style-type: none"> 1. Sponsorship 2. Sponsorship – potential supply chain subsidies 3. LEA collaboration 4. University / FE engagement 5. Part grant funded, FIT benefit 	<ol style="list-style-type: none"> 1. Covered through overhead/Sponsorship/grants 2. Project specific, subsidised by project subsidised by third sector, enterprise grants 3. Project specific, subsidised by project subsidised by third sector, enterprise grants 	<ol style="list-style-type: none"> 1. Annual management fee (supported by business plan showing multiple savings) 2. Annual management fee (supported by business plan showing multiple savings) 3. Annual management fee (supported by business plan showing multiple savings)

Public Sector Buildings

	<u>Short Term</u> Goal: Target: Timeline: Circa 1 year	<u>Medium Term</u> Goal: Target: Timeline: Circa 3-5 years	<u>Long Term</u> Goal: Target: Timeline: 20 years+
Opportunities	<ol style="list-style-type: none"> 1. CRC evaluation study of all public sector buildings from an energy efficiency perspective (inclusive of other city partner organisations & Universities / Hospitals) 2. LED exterior lighting options for car parks etc (outside PFI scope) 3. "Smart Building" total dynamic management of all public buildings 4. <i>Embedded</i> management 	<ol style="list-style-type: none"> 1. Using established best value framework for all new city projects including technology range and scope, benefits cases, return on investment. 2. Standardised contract forms 3. Such standard contracts mentioned above to be made further efficient by including wider city partners eg Kier 	<ol style="list-style-type: none"> 1. Continuous improvement strategy including maximising use of existing district heat network and expansion of use via newly constructed 2. Monitoring and effectively implementing a low carbon operational plan, where saving energy is business as usual. 3. Creating The city as a World leading low carbon city, including all city and supply chain partners
Benefits to the people & Businesses of the city	<ol style="list-style-type: none"> 1. Compliance with regulations and targeted reductions in carbon. High league table position offers financial rewards, the city to be an aspired leader to follow for other LA's 2. Reduced carbon, better quality white light solutions 3. Thought leadership icon for community, better, reduced energy bills, pro-active energy advice, better public buildings 4. E.ON staff to be embedded in management to bring continuous benefit / knowledge sharing 	<ol style="list-style-type: none"> 1. Reduce delays in accessing energy savings and proving value for money 2. Reduced cost of individually negotiated projects, based upon agreed benefits and output specification 3. Further reduced cost of individually negotiated projects, based upon agreed benefits and output specification 	<ol style="list-style-type: none"> 1. To ensure The city benefits from world leading technologies / services including the local manufacturing and commerce of such technologies / services (significant low carbon economy) 2. To continuously achieve European targets 3. Building a low carbon City / economy saving energy through smart operation and technologies becomes business as usual
Delivery of Opportunity	<ol style="list-style-type: none"> 1. Consultancy study. BEEP style model, re-invest savings back into green technology products – inward investment. Energy management savings self funding option. 2. End to end service delivery 3. E.ON / Accenture / providing value for money per installation 4. Agreed secondment arrangements 	<ol style="list-style-type: none"> 1. BEEP style framework, supported by detailed costed solutions to allow accurate budgeting. 2. Standardised forms of contracting 3. Standardised forms of contracting 	<ol style="list-style-type: none"> 1. Via the Energy Partnering Agreement governance structure including international commerce and technology partners 2. Via the Energy Partnering Agreement governance structure 3. Via the inclusion of international commerce partners, European government and scientific institutions.
Investment / Commitments Required	<ol style="list-style-type: none"> 1. Estimated price for consultancy £. Risk transfer models available for annual service fee to manage CRC entirely 2. Various funding options including lease back are available 3. Gain share, part gain share or bureau 4. Salary share 	<ol style="list-style-type: none"> 1. Enabling work to be shared costs 2. Enabling work to be shared costs 3. Enabling work to be shared costs 	<ol style="list-style-type: none"> 4. Annual management fee (supported by business plan showing multiple savings) 5. Annual management fee (supported by business plan showing multiple savings) 6. Annual management fee (supported by business plan showing multiple savings)