

## Common Strategic Framework 2014-2020: Halton Priorities

### Thematic Area Pro-forma

This pro-forma has been developed in order to provide an outline of each thematic area for Halton projects in relation to the CSM Framework 2014-2020. Please provide as much detail as possible for your area at this stage.

<b>Merseyside Priority Themes 2014-2020</b>
<b>Project Title: Low Carbon</b>
Which of the themes below does this pro-forma relate to? Please type Yes against the relevant priority.
<b>Research/Innovation</b> <b>SME/Competitiveness</b> <b>Low Carbon Economy Yes</b> <b>ICT</b> <b>Employment</b> <b>Education/Skills/Training</b> <b>Social Inclusion</b> <b>Sustainable Transport</b> <b>Superport/Gateways</b> <b>Infrastructure</b> <b>Visitor economy</b>
<b>Golden Thread – Strategic Policy Linkages</b>
<b>National: Climate Change Act</b> <b>UK Low Carbon Transition Plan</b> <b>UK Renewable Energy Strategy</b>  <b>Merseyside-wide (including LEP/LCR priorities): LCR Sustainable Action Plan</b> <b>Low Carbon Economy Action Plan</b>  <b>Halton: Carbon Management Plan</b> <b>Core Strategy</b> <b>Local Transport Plan</b> <b>Affordable Warmth Strategy</b>
<b>Partnership &amp; Governance</b>
<b>Key Partners</b>  <b>Public: HBC</b>  <b>Private: Business, RSLs, Private occupiers Private Landlords Energy Companies Sci Tech Daresbury, Redrow, Marshalls, LEP, LCEC Specialist District Energy Company</b>  <b>Third Sector: EPPLUS</b>

**Departmental / Council Role:**

**Governance Arrangements:**

*What level of approval has the project received? E.g. Exec Board.*

Executive Board has approved the key regional and local policy documents outlines above

**Lead Contact Details**

**Lead Officer: Jim Yates**

**Position: Assistant to Chief Executive**

**Directorate: Chief Executive's Office**

**Tel Number: 0151 511 6989**

**Email: jim.yates@halton.gov.uk**

**Overview of Thematic Area**

Please provide an overview of Halton's current position in relation to the identified theme

Through the UK Climate Change Act and the UK Low Carbon Transition plan the Government has set various targets for reducing carbon emissions nationally by 2020 and 2050. The Government's Carbon Plan identifies a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs and technologies. The levers include increasing the target for energy from renewable sources establishing a smart grid and rolling out smart meters encouraging decentralised and community-owned renewable energy schemes encouraging home energy efficiency improvements through ECO and Green Deal.

The LCR Sustainable Energy Action Plan sets out a vision and establishes a number of strategic aims and identifies a programme of action required locally to reduce carbon emissions, primarily by increasing energy efficiency and the region's renewable energy technology capacity. It sets out ambitions and opportunities to create a low carbon economy in which future economic growth is decoupled from fossil fuels.

The Council has adopted the LCR SEAP and provided a commitment to develop a local SEAP and sign the EU Covenant of Mayors. The local SEAP will set out the Council's vision and ambitions to reduce emissions by 20% by 2020 and open up access to EU funding streams.

The Council through its own Carbon Management Plan has set target reductions and identified opportunities for carbon reduction initiatives. Since the 5 Year plan was adopted in 2008 the Council has reduced emissions in buildings by 7.4% The Plan is in need of updating from 2013. Since the introduction of the Plan the Council has completed the following projects

PV installation on Council buildings taking advantage of the Feed In Tariff

Developed an in-house Energy management programme within our council buildings

Provided a low carbon school service

Installed a number of technical measures within our buildings ranging from power

perfectors sensory lighting retrofits

Supported energy efficiency measures in the Castlefields Regeneration Programme

Upgraded its Street lighting to include LEDs

Replaced individual printers with MFDs

The Core Strategy sets out how the Council will plan for new development, setting out locations and measures to reduce greenhouse gas emissions, along with actively supporting energy efficiency improvements to existing buildings. These requirements are consistent with the Government's zero carbon buildings policy.

Work has been progressing over recent years to develop an evidence base for sustainability including the scope to introduce renewable energy schemes at the Liverpool City Region level, through a number of studies led by consultants Arup. These studies provided the evidence base for the Halton Core Strategy, and the specific policy regarding Sustainable Development and Climate Change. The study recommended that given the potential for growth in carbon emissions associated with economic growth, local authorities should commit to driving forward low carbon development. The Stage Two report also identified a series of Energy Priority Zones across the sub-region, and within Halton, Runcorn Docks and the Daresbury Strategic Site were both identified as priority zones for District Heating Biomass CHP.

#### Key projects within the Thematic Area

Please list key projects to be delivered within the thematic area, along with proposed timeframe and budget requirements (if known)

- 1) The LCR Sustainable SEAP identifies a range of decentralised energy opportunities in the LCR, with one in East Runcorn Area of Change. The Core Strategy provides for significant expansion of the Sci Tech Daresbury Park and Daresbury Business Park alongside new residential development. Critical to this is the provision of an effective and efficient supply of energy. Work at Daresbury Laboratory and in connection with planning for the development of Sci Tech Daresbury has already identified deficiencies in power supplies to meet known future requirements and detailed plans have already been drawn up to increase supply at the Laboratory. This will be sufficient to meet the increase in demand in the short term but has highlighted the need to plan for a sustainable, secure and low cost energy supply to meet the needs of the wider Campus and Area of Change over the coming years. The SEAP identifies significant potential for CHP and heat networks across the City Region, and Daresbury is identified as having significant potential for a combined heat and power capacity as the scale of new demand, likely phasing and mix of uses suggests a good load fit for a viable local decentralised heat and power scheme. The proposal is to develop an energy master plan for the Daresbury Area of Change to assess the potential to develop proposals in the Liverpool City Region Sustainable Energy Action Plan (SEAP) around CHP and District Heat Networks and to explore financial and business models to bring the project to the investment stage.
- 2) The LCR SEAP identifies the need to develop an Energy Master plan for the City Region. This will provide a common source of information and opportunities that can be accessed by local authorities and stakeholders to help attract inward investment, inform planning and commercial decision making. Master Planning and associated mapping to display utility network provision and capacity in Halton against strategic

economic development areas. This work will provide a consistent, shared, data set for both network providers, renewable energy developers and the local authority. This approach should mean strategic energy and regeneration projects can be expedited with reduced risk and cost and at a faster pace. The outputs from the master plan will provide essential spatial information to inform the investment priorities including deliverability mechanisms for the LCR SEAP project pipeline. It will also add to the evidence base to ensure that any new land allocations for regeneration, employment and housing are fully aware of energy infrastructure strength and will provide a new evidence-based mechanism for dialogue with the DNO to ensure that network investment can be delivered in the context of increasingly distributed energy generation. It will also direct developers and investors to the most appropriate opportunities by enabling them to make initial judgements quickly about the scale and commercial viability of potential decentralised energy project opportunities.

- 3) The LCR SEAP identifies the potential Smart Grids can have in promoting the wider carbon agenda for a low carbon future. Smart Grids are anticipated to transform energy management by delivering electricity to residents and business using two way digital technology. The technology facilitates the control of appliances at consumers' properties recognising when energy is not needed and switching appliances off. By using energy management solutions, energy demand is reduced and efficiency increased. Making the most of the network without the need for major improvement works in the distribution infrastructure. Smart Grids are likely to provide a cost effective and flexible technology option for reducing demand. The project would seek to develop a priority of smart grid priority zones in Halton.
- 4) The LCR Renewables Study identifies the potential for micro generation and renewable technologies in Halton. The Core Strategy highlights that the deployment of renewable and low carbon energy has a central role in delivering sustainable growth, contributing to climate change mitigation and ensuring energy security. It encourages reductions in CO2 emissions through the incorporation through efficient building design and energy supply through decentralised renewable and low carbon sources. The LCR SEAP highlights the potential for micro generation deployment and the need through energy master planning to highlight Priority Zones at street and neighbourhood level for the deployment of micro generation opportunities. Building on the LCR renewables study support work to identify solar and other renewable opportunities such as Ground and Air source Heat pumps, biomass across Halton. The LCR identified a target of for Halton of generating 3.25MW of electricity from renewables by 2015 (1625 schemes) and 6.5 MW by 2020 (3250 schemes) by 2020. Through an energy master plan identify at street and neighbourhood level opportunities to develop renewable technologies and take advantage of the various financial incentives have been introduced to encourage the deployment of micro generation – Feed In Tariffs/ Renewable Heat incentive.
- 5) The LCR SEAP recognises that domestic, commercial and industrial retrofit is a key challenge and provides a basis for the delivery of a package of energy efficiency measures for retrofitting all building types. The Borough has already benefited from a number of retrofit programmes delivered under CESP and CERT in to properties in Castlefields, Halton Brook, Grangeway and Widnes. Development of a domestic and industrial retrofit programme. Building on the previous CESP and CERT schemes and using the ECO and Green deal initiatives to develop retrofit programmes for domestic properties both RSL and private and industrial properties. To reduce energy

consumption in domestic properties through improved insulation measures, installation of renewable energy systems and the provision of energy support and advice for residents and landlords.

- 6) Recent government policy has mostly been aimed at decarbonising the national grid in order to meet climate change and energy security targets. Achieving grid decarbonisation, will require a focus on decentralised energy generation. By moving the generation of electricity by combustion closer to populated areas, the heat that's normally wasted can be distributed to buildings through district heating networks. This means we would no longer need to burn gas in individual buildings for heating and, as the electricity is generated closer to where it's used, less energy is lost during transmission and distribution. The main objective of the project is to enable Halton to identify opportunities for decentralised energy and develop the capacity to realise those opportunities and bring them to the investment stage.
- 7) The LCR SEAP and the Low Carbon Action Plan identify the significant economic opportunity for business from the take up of renewable technologies, retrofit programmes, etc. The development of the low carbon economy requires a skilled talent pool to support growth and the diversification of existing of existing companies. The aim of the project is to supporting Halton companies to innovate and diversify into new markets, technologies and supply chains and develop and train staff in new skills to take advantage of emerging new markets. Develop local programmes on low carbon skills / training – eg. support businesses with Microgeneration Certification Scheme (MCS) accreditation. Support business diversification – help businesses from other sectors identify opportunities for diversification into Low carbon markets. Strengthen local supply chains, eg. for low carbon housing retrofit. Help low carbon businesses to access skills support, apprenticeships Energy assessor training for businesses so they can complete energy audits and give advice on actions to householders and businesses through Green Deal and ECO (could be a sub region basis and link to Viridis). Build capacity within businesses so they meet the requirements of public procurement for example Fusion 21s frameworks and can compete with businesses out of the area.
- 8) Astmoor / Canalside Renewable Energy Scheme. Opportunity to link up new housing on Council owned Canalside development site of approx 180 units (but with potential to increase) and Astmoor Business Park with a renewable energy and heat scheme on Astmoor. This location has scope to exploiting relationship with UU waste water treatment site, , i.e. anaerobic digestion / methane recovery.

#### **Links with other Themes**

Please comment on how your Thematic Area links with other themes, in particular the cross-cutting themes of Low Carbon Economy and ICT.

A number of the projects would require the development of new research and innovation to deliver new energy technologies. Through the development of a low carbon economy there is the opportunity to develop local businesses and create new skills and employment and apprenticeship opportunities

**Completed By: Jim Yates**

**Date: 20/05/13**

**Please return completed pro-formas to [steph.davies@halton.gov.uk](mailto:steph.davies@halton.gov.uk) by Wednesday May 1<sup>st</sup>.**