

**REPORT TO:** Cabinet

**DATE:** 15 April 2010

**SUBJECT:** Council Motion - 10:10 Carbon Campaign

**WARDS AFFECTED:** All

**REPORT OF:** Alan Lunt – Neighbourhoods and Investment Programmes Director

**CONTACT OFFICER:** Ian Weller – Energy Manager  
0151 934 4221

**EXEMPT/CONFIDENTIAL:** No

**PURPOSE/SUMMARY:**

To provide a considered response to the Notice of Motion put forward at full Council on 14 January 2010 and subsequent resolutions at Overview and Scrutiny Committee (Regeneration and Environmental Services) of 9<sup>th</sup> March 2010 in respect of the resource implications of Sefton joining the '10:10 Campaign on Carbon Savings'.

**REASON WHY DECISION REQUIRED:**

Referred to Cabinet for consideration in accordance with Rule 15.14 of the Council and Committee Procedures

**RECOMMENDATION(S):**

The views of the Cabinet are sought as to the next steps to be taken in respect of the 10:10 Carbon Campaign

**KEY DECISION:** No

**FORWARD PLAN:** Not appropriate.

**IMPLEMENTATION DATE:** Upon expiry of the call in period for the minutes of this meeting

**ALTERNATIVE OPTIONS:**

No alternative course of action will comply with the Council's constitution

**IMPLICATIONS:**

**Budget/Policy Framework:** None as a direct result of this report

**FINANCIAL:**

	<b>2009/10</b> £	<b>2010/11</b> £	<b>2011/12</b> £	<b>2012/13</b> £
<b><u>CAPITAL EXPENDITURE</u></b>				
Gross Increase in Capital Expenditure				
Funded by:				
Sefton Capital Resources				
Specific Capital Resources				
<b><u>REVENUE IMPLICATIONS</u></b>				
Gross Increase in Revenue Expenditure				
Funded by:				
Sefton Funded Resources				
Funded from External Resources				
Does the External Funding have an expiry date?				
How will the service be funded post expiry?				

**Legal:**

**Risk Assessment:** No specific risk assessment has been carried out in respect of this issue, although failure to achieve Government Carbon Reduction targets has been risk assessed

**Asset Management:** Improvement of relative carbon performance of portfolio in compliance with new statutory undertakings

**CONSULTATION UNDERTAKEN/VIEWS**

FD 368 - The Head of Corporate Finance & IT Strategy has been consulted on this report and has made no comments.

**CORPORATE OBJECTIVE MONITORING:**

<b><u>Corporate Objective</u></b>		<b><u>Positive Impact</u></b>	<b><u>Neutral Impact</u></b>	<b><u>Negative Impact</u></b>
1	Creating a Learning Community	✓		
2	Creating Safe Communities		✓	
3	Jobs and Prosperity	✓		
4	Improving Health and Well-Being	✓		
5	Environmental Sustainability	✓		
6	Creating Inclusive Communities	✓		
7	Improving the Quality of Council Services and Strengthening local Democracy	✓		
8	Children and Young People	✓		

**LIST OF BACKGROUND PAPERS RELIED UPON IN THE PREPARATION OF THIS REPORT**

**Report** - Overview and Scrutiny Committee (Regeneration and Environmental Services) meeting – 9<sup>th</sup> March 2010 - '10:10 Carbon Campaign'

## **1.0 BACKGROUND**

- 1.1 At the meeting of Council on 14 January 2010 a Notice of Motion was put forward to examine the feasibility of Sefton Council signing up to the UK 10:10 carbon saving campaign.
- 1.2 The '10:10' campaign is a non-governmental run public campaign, asking everyone from householders up to very large organisations to make a public commitment to reducing their greenhouse gas emissions by 10% during 2010. This media campaign movement was borne out of the related debates from the Film 'Age of Stupid' which tackled pertinent issues of climate change.
- 1.3 In response, a report was taken to the Overview and Scrutiny Committee (Regeneration and Environmental Services) meeting on 09 March 2010 highlighting the opportunities and challenges should the Council decide to join this campaign.
- 1.4 The resolution of said Overview and Scrutiny Committee was to bring forward the possible resource implications of reaching the desired 10% carbon savings within the next 12 months.

## **2.0 SEFTON'S CURRENT POSITION**

- 2.1 The 10:10 Campaign is designed as a way of making a public declaration of the Councils intentions and commitment to action on carbon mitigation and climate change.
- 2.2 In context of such public commitment:
  - The Council is already a signatory of the North West Development Agency (NWDA) Climate Change Declaration
  - The Council is already a signatory of the UK Nottingham Declaration on Climate Change
  - The Council was the first Mersey local authority to develop a Carbon Management Plan which covers all areas of Council Carbon arisings delivering a 5 year plan to reduce carbon and other related greenhouse gas emissions.
- 2.3 Collectively, this already gives a good public profile to the Council's commitment to mitigating climate change and to carbon reduction.
- 2.4 A report of 16 December 2009 to Cabinet Member(s) for Regeneration, Environmental Services and Technical Services also provides more extensive background and evidence of our proven commitment on Sefton carbon reduction practice.
- 2.5 Sefton Councils own reduction progress under the Carbon Management Plan, reached 13.26% by 2008, from a wide range of actions across waste and recycling, transport, sefton buildings and staff, street lighting and procurement. However, due to vacant posts being frozen within the Energy Division, as carbon lead officers, has led to a temporary hiatus in further recorded progress in the last 12 months. Re-filling of these critical posts is now being addressed through establishment control processes.

- 2.6 It is very important to note that measured progress to date has been based on available grant streams and internal investment, but also a lot of the 'low hanging fruit', so far as readily available carbon savings are concerned, have now already been picked.
- 2.7 Further rapid progress on savings will not now come without actually stopping doing things as a Council completely, or bringing in rolling programme of capital investment in improving energy hungry infrastructure. An outline of proposed actions to achieve progress is given in Section 4.0 below.

### **3.0 STRATEGIC REVIEW OF CARBON MITIGATION OPERATIONS AND STRATEGY**

- 3.1 The 10:10 Campaign guidance states that the purpose of the campaign for Local Authorities is to ensure that the emissions savings made during their 10:10 Action Year are part of long term goals and that any action taken will help realise any future cuts in emissions. It advises careful and considered investment decisions.
- 3.2 In relation to this, a full independent Strategic Review of carbon mitigation strategy and operations was commissioned from Capita Symonds in April 2009, in response to a call from Council Motion in September 08 and approved action at Cabinet in November 2008 for revenue costs to undertake this in 2009/10.
- 3.3 However, whilst we were due to report back to Council by December 2009, despite every effort as the Council client to support the process, Capita Symonds have failed to meet set deadlines and the fundamental requirements of the review brief within the draft version of the review document provided as of March 2010, already 7 months overdue. On this basis, due contractual full quality performance assessment process is being applied to this failed service provision from Capita Symonds.
- 3.4 The conclusive action being that instead, the review will now have to be undertaken and developed in-house, led by the Energy Division. This will inform the strategic and operational direction for Sefton Council to meet new challenging Statutory obligations such as National Indicator 185 and the Carbon Reduction commitment which in turn, will advise on available options and indeed actions to support 10:10 campaign.

### **4.0 IMPLICATIONS FOR SEFTON COUNCIL IN JOINING 10:10 CAMPAIGN**

- 4.1 The '10:10' Campaign requires a commitment to have an absolute reduction in energy use in key areas of electricity, gas and transport of 10% in a measured calendar year commencing by 01 September 2010.
- 4.2 Following the 10:10 Campaign guidance, we will draw our Carbon Emissions baseline from our '*National Indicator 185 - Percentage CO<sub>2</sub> Reduction from Local Authority Operations*' submission to government at 31 May 2010. This will be an indicative carbon emissions baseline, excluding Schools and outsource (service) emissions, for the calendar year 2009/2010.
- 4.3 NI 185 baseline covers direct carbon emissions arising from LA operations specifically:
- All council building assets energy use
  - All transport in delivering the functions of the Council (fuel and business travel)

- 4.4 However, usefully the 10:10 guidance allows the measured reduction year to then run for 12 months from that baseline declaration i.e. 01 April 2010 to 31 March 2011, with results re-assessed by 31 May 2011 to again co-incide with NI185 statutory reporting.
- 4.5 Currently prioritised work is underway by the Energy Division to meet the baseline calculation required for Carbon Reduction commitment which, due to significant financial risk, legal risk and robust auditing/penalty protocol applied, is key to the Council at this time. This will also help ratify the declaration made for NI 185 and indeed 10:10 campaign declaration.
- 4.6 Below is an illustration in this report only, from supply contract tendered consumptions and related carbon emissions:

Directorate	Gas (Tonnes of CO <sub>2</sub> )	Electricity (Tonnes of CO <sub>2</sub> )	Oil (Tonnes of CO <sub>2</sub> )	Total Carbon Tonnes
CSF (non schools)	349	406	63	<b>818</b>
Leisure	2453	2648	20	<b>5121</b>
Tech Serv	791	2873	0	<b>3664</b>
Enviro Protect	0	102	36	<b>138</b>
H & SC	106	136	0	<b>242</b>
Misc	25	86	0	<b>110</b>
Street Lighting	0	7790	0	<b>7790</b>
New Directions	695	482	0	<b>1177</b>
<b>Total Annual Carbon Emissions</b>	<b>4420</b>	<b>14523</b>	<b>119</b>	<b>19062</b>

- 4.7 Therefore, the Council would be expected to seek a targeted 10% reduction in kWh consumption of 5,140,333 kWh and 1,906 tonnes of CO<sub>2</sub> within 12 months based on an available assessment of energy data, which would be augmented by transport savings options.
- 4.8 Key actions expected by the 10:10 Campaign group would include both promotion of the 10:10 Campaign to the public and business stakeholders as well as implementing measured actions of carbon reduction projects across the scoped remit aligned with NI 185.
- 4.9 The Council's action plan for 10:10 should include:

Part 1 -Supportive/encouragement actions of:

- Encouraging staff to sign up to 10:10 as individuals
- Increase existing staff engagement to cut the organisations emissions
- Encouraging more staff to cycle to work,
- Encouraging more staff to have meat free days
- Encouraging more staff to eat seasonally and locally
- Support and incentivise lift sharing and car pooling

Part 2- Hard intervention measures including:

- Range of 'invest to save' measures to building fabric, heating, lighting and equipment consumptions
- Local and buildings integrated renewables generation
- Construction/installation of more cycle lanes
- Low emission vehicles for rent to staff and public

4.10 The costing model applied to Seftons Carbon Management Plan (CMP) interventions, to save 12% of carbon over 5 years was estimated at £385K on 2006 price matrices,

4.11 As referred to in Paragraph 2.6, the CMP included low cost>high carbon saving options, as well as new waste reduction options which are no longer available. Therefore, in lieu of a final detailed matrix of costed carbon savings options for 2010/11 being drawn up as a recommendation from this report, it is a reasonable suggestion that investment of a minimum of £500K would be needed to achieve 10% carbon savings within a 12-month period.

4.12 Typical types of energy/carbon saving measures and pay-back times are summarised in Table 1 below:

<b>Boiler Plant and Heating/Hot Water</b>		
<b>Measure</b>	<b>Typical Energy/Carbon Saving (%)</b>	<b>Typical Payback (Years)</b>
Condensing boilers	20	2-3
Zone control valves	10	1-3
Insulation of valves and flanges on distribution pipework	60-80	1-2
Thermostatic radiator valves	10	1-2
Reflective foil behind radiators on external walls	10	1/2
<b>Building</b>		
<b>Measure</b>	<b>Typical Energy/Carbon Saving (%)</b>	<b>Typical Payback (Years)</b>
Draughtproofing	15	1-2
Loft insulation	20	1-3
Flat roof insulation	10-15	20
Cavity wall insulation	20	3-5
Internal wall insulation	10-15	5-8
External insulation	10-20	20-25
<b>Water</b>		
Urinal controls	40-80	0.2-1
Volume control in WC cisterns	15-20	0.2-0.5
Percussion taps	40-80	2-3
Tap flow restrictors	20-40	1-2
<b>Management Systems</b>		
Installation of building energy management system	5-10	2-5

Table 1: Energy and Water Saving Measures with Indicative Savings and Payback

- 4.13 As an illustration we have scoped a range of invest to save measures both for renewables and energy/water measures in our buildings, based on capital investment that would reduce relative Council total consumption and carbon emissions by within the time *following* installation.
- 4.14 **Solar Programme:** Proposal to install 10 No. 3kWp Photo Voltaic systems on existing Council buildings, that are likely to be in service at least 15 years, in accordance with current asset planning and have a suitable south facing aspect available. Each installation will need about 35m<sup>2</sup> of roof space. There will be an approximate cost of £120K, plus dedicated officer time to manage programme. The return on investment will take approximately 10-12 years, accelerated by new 'feed-in tariff's'. Our electrical savings on site (assuming 80% use) will be 18,000kWh and this would save 9.74 tonnes of CO<sub>2</sub> per annum.
- 4.15 **Wind Programme:** Proposal to install 10 No. 6kW systems in Council sites. There will be an approximate cost of £240K. The return on investment will take approximately 8 years accelerated by new 'feed-in tariff's'. Our electrical savings on site (assuming 80% use) will be 84,096kWh and this would save 46 tonnes of CO<sub>2</sub> per annum. Requires one-officer full time and take 2 years.
- 4.16 **Identified Energy Savings Measures in Sefton Council Buildings Programme:**

<b>Building</b>	<b>Description of Work</b>
<b>Southport Crematorium</b>	Install Building Energy Management System, Replace boiler with high efficiency condensing boiler, Install dual-flush WC's when current WC's require replacement or upgrade, Fit urinal control to back room staff urinal.
<b>Southport Town Hall</b>	Insulate all boiler house pipe work, Install Building Energy Management System, Insulate hot water cylinders, Replace boilers with high efficiency condensing boilers, Install dual-flush WC's when current WC's require replacement or upgrade.
<b>Aintree Library</b>	Fit thermostatic controls to radiators, Install dual-flush WC's when current WC's require replacement or upgrade, Upgrade remaining T12 lighting to T5 versions, Install suspended ceiling to reduce warm air stratification
<b>Bootle Town Hall</b>	Insulate Roof Voids, Install TRV's on radiators, Install occupancy sensors in corridors ,other circulation areas, ground floor, cloakrooms and toilet blocks, Upgrade T12 lighting to T5's, Install Building Management System, Install dual-flush WC's, Draught proof internal window frames and external doors, Install insulated suspended ceiling under fibre glass roof (Education Welfare Service)
<b>Bootle Leisure Centre</b>	Use a liquid pool cover, Install timer switching gear for external uplighting, Install Variable Speed Drives on all pump, Install Building Management System, Install daylight sensors (internally at front of site and toilets and storerooms), Install revolving doors at the site entrance, Upgrade WC's to duel flush versions



<b>255 Knowsley Rd</b>	Install Loft Insulation (mineral wool quilt), Install Occupancy Detectors (PIR's) on Corridor/ Circulation Lighting, Draught Proof Windows, Replace Entrance Door (UPVC), Upgrade T12 lighting to T5
<b>Lonsdale Road Hostel</b>	Replace / Upgrade existing heating controls on storage heaters, Insulate roof, Replace incandescent light bulbs with high efficiency T5 versions
<b>Sefton Security HQ</b>	Replace boiler in main boiler house with a high efficiency condensing boiler (including weather compensatory controls), Install Building Energy Management System, Replace old cast iron radiators with more energy efficient slim line radiators, Install PIR occupancy detectors in corridors & circulation areas, stores, toilets and kitchenettes, Install dual-flush WC's in toilet blocks (male & female), Fit tap controls in toilet blocks (male & female) and kitchenettes
<b>Ainsdale Library</b>	Install new electric water heaters, Insulate roof voids, Replace oil boiler in main boiler house with a high efficiency condensing boiler, Replace T12 fluorescent tubes with T5 versions
<b>Crosby Civic Hall &amp; Library</b>	Insulate all areas of the roof presently lacking insulation, Replace the 15 year old boiler with a high efficiency condensing boiler, Replace electric water heaters with modern efficient versions, Install Variable Speed Drives on all boiler pumps, Install wireless building energy management system, Replace T12 lighting fittings with T8 slimline versions, Install dual flush WC's in all toilet blocks, Replace older lighting fittings (with diffusers) with Compact Fluorescent Lamps in the bar area

- 4.17 Noting further that, due to the measured year of consumption reduction for the 10:10 Campaign having already effectively commenced on 01 April 2010, all measures/actions would have to be installed and underway immediately to have an effect.
- 4.18 Whilst the 10:10 Campaign declared savings will not themselves be audited, it is felt prudent to publicly declare only those savings that, if investment is now forthcoming, the Council has a realistic chance of achieving relative to this.
- 4.19 Whilst this would be a significant call on investment to be made relation to achieving statutory or 10:10 targets, this will be effectively paid back by savings gained from reduction in energy, fuel and new carbon trading costs within an acceptable period of up to 5 years or less, dependant on measures chosen.
- 4.17 The views of the Cabinet are sought in respect of the next steps to be taken in this matter.