Brent	SCHOOLS FORUM 18 September 2013 **Policy and Performance (Environment and Neighbourhoods) & Property and Asset Management (Regeneration & Major Projects)**
For Information	**WARDS affected: ALL**
Low Carbon Schools Programme Closing Report	

1.0 SUMMARY

1.1 This report sets out for the Schools' Forum, the success of the Low Carbon Schools programme against the three specific energy reduction targets for the project group's tiers agreed by the schools' forum in February 2012.

1.2 The report also includes an outline of project delivery, barriers to action, lessons learnt and future school support.

2.0 BACKGROUND

2.1 The project's primary goal was to encourage schools to manage their energy usage effectively in order to reduce energy bills and the liability arising from the CRC energy efficiency scheme. In 2011/12 Schools account for 76% of the council's CRC reporting. On this premise both the Council and School Forum agreed in February 2012 that a project should be put in place to reduce ever increasing energy costs and mitigate against future rises in CRC costs. Based on research carried out through a Brent Council and Carbon Trust pilot project, the Forum agreed to top slice top from the Schools' Budget for one year. The money allowed for the creation of two full time posts, one as a Schools' Energy Advisor - Technical Specialist and a second as an Energy Advisor – Behaviour Change and Curriculum.

3.0 DETAIL

3.1 The Brent Low Carbon Schools Project commenced in April 2012. All schools were eligible to receive support and advice from the project team however at varying different levels due to resource constraints. The support packages are delineated into three distinct tiers, 'New Intake', 'Existing partners' and 'Entry level'.

3.2 The support packages had the following targets;

Low Carbon Schools groups	2012/13 Target - kWh % reduction per annum
New Intake (full programme -technical and behaviour change)	14%
Existing partners (Light touch approach)	3%
Entry level (Pre service support)	2%

3.3 **'New intake'** schools are thirteen schools identified to receive the full level of support available. These thirteen schools were selected on highest CO_2 emitters per metre squared as requested by the Schools' Forum.

3.3.1 These schools were able to draw extensively upon the expertise and experience of the two officers responsible for project delivery, the Schools' Behaviour Change Officer who started on the project in April 2012 and the Schools' Technical Officer who started in September 2012.

3.3.2 To increase awareness and participation in energy saving opportunities amongst the thirteen schools and across the school community, stakeholders were engaged through a wide variety of channels. This involved working with student and staff energy teams to develop cross-school strategies and plans that deliver carbon reductions though addressing occupants' relationship with energy and encouraging them to make small changes to their behaviour.

3.3.3 Teaching staff were encouraged to explore opportunities to integrate related topics including climate change into lesson plans and schemes of work through curriculum support offered by members of the project team. A workshop was held for staff to explore this in detail and learn from examples of best practice. In addition themed, interactive assemblies and auditing workshops directed at pupils are available to each participating school, delivered by the Schools' Behavioural Change Officer. All schools were offered Energy Spy case which contains energy auditing equipment for staff and pupils to use to monitor energy usage and/or as an educational aid.

3.3.4 A new Low Carbon Schools website was launched in September 2012 which hosts downloadable resources and a comments blog for teachers and school administrators. An additional function enables manual meter readings to be uploaded by schools to aid the monitoring of their consumption rates. This website was available to all of the borough's schools though the schools extranet, however the thirteen schools who receive bespoke advice had password protected areas.

3.3.5 The Technical Officer conducted regular visits to 'New intake' participating schools to identify potential system or structural upgrades that will generate energy savings. The officer also sought to advise upon the provision of building services that matches need and occupancy patterns in each building. When eligible, Salix interest-free loans (available to schools through the council to target energy efficiency projects and paid back through savings from energy bills) have been offered to enable improvements to be financed. Some schools however, have opted to use their own finances and the Technical Officer has visited individual school boards to outline the invest-to-save case. In early October the Technical Officer ran a training workshop for caretakers, addressing the programming and management of HVAC (heating, ventilation & air conditioning) plant and the reviewing of maintenance contracts. Eight of the thirteen schools attended along with other schools the Technical Officer had also been in contact with.

3.3.6 For further information on individual schools progress, refer to **appendix A** for a summary.

3.4 '**Existing partner**' schools were the ten schools, which had previously taken part in the CLCSS and were provided with a comprehensive support service to help consolidate their previous efforts. These schools also had access to a bespoke, password protected '**Existing partner**' schools areas on the Low Carbon Schools webpage and could contact the Schools' Behaviour Change Officer and Schools' Technical Officer with queries. The 'Existing partner' schools also had access to Salix finance and a visit from the Technical Officer if they request, however the thirteen 'New Intake' schools are being prioritised for Salix finance as 'Existing partner' schools had priority access to the fund during the pilot.

3.4.1 Staff from these existing partner schools were used to support the New Intake schools through providing information at workshops and contributing to the initial Low Carbon Schools film which can be found on the schools' website.

3.5 All other borough schools were classed as '**Entry level**' and were able to access open areas of the Low Carbon Schools website. However use of the project team's more extensive range of services such as detailed notes which accompany one to one support was restricted. One school that was not in the 'New intake' or 'Exiting schools' categories approached the Schools' Behaviour Change Officer having seen details on the Low Carbon Schools website. If an 'entry level' school approaches the Technical Officer for Salix finance, the school was not refused. Towards the end of the project left over Salix finance was offered to all schools that had yet to take advantage of the finance.

4.0 Results

4.1 At the end of the 2012/13 **'New intake'** schools results from meter reading information provided by individual schools were analyses. These results demonstrated hat the programme was on target to meet it 14% energy reduction and CO_2 and cost equivalents. However before this data could be published additional check were needed to ensure the results correlated with annual data collected as part of the CRC data collection process.

4.1.2 There was a significant discrepancy between meter reading data provided by the school and overall annual data collected for CRC reporting through supplier statements. Further analysis between the two sets of data highlighted a problem with data collected by the schools through meter readings. It was concluded that the accuracy of the meter read data was unreliable and therefore the data provided through CRC reporting should be taken in determining the project's success against its energy targets. The CRC data set demonstrated a 5% reduction in energy for the 'LCS new intake' schools, a 0.3% reduction in CO_2 and a 1% reduction in energy bills (is due to 3% increase in all three fuel prices over the course of the project i.e. 2011/12 to 2012/13).

4.2 At the end of 2012/13 '**Existing partner**' schools results from CRC supplier statement data were analysed and showed that the programme met it's of a 3% energy reduction and CO_2 and cost equivalent targets. In fact, '**Existing partner**' schools bet the target and reduced their energy (kWhs) by a massive 17%, which equates to an 11% reduction in CO_2 and a theoretical energy bill cost reduction of almost £62k (11.5%) on the previous year. This significant reduction during 2012/13 indicates that '**Existing partner**' schools only felt the impact of the pilot behaviour change and technical programme in year following full implementation. This observation would be logical as schools who installed energy saving technologies would have only done so mid way through or at the end of the pilot so energy reductions and financial saving from them would not have been felt until the following year. The same could be said about embedding a 'whole schools approach' to energy saving behaviour.

4.3 With new evidence from the '**Existing partner**' schools to when optimum savings are achieved, it is felt that the data presented for 2012/13 **'New intake'** is an unfair representation of the progress within the schools. For this reason additional analysis has been done on savings achieved from both **'New intake' and** '**Existing partner**' during 2012/13 based on previous years data and is presented below.

4.3.1 'New intake' and 'Existing partner' during 2012/13

	2012/13 kWh (DD adjusted)	**2012/13 CO_2 (DD adjusted)**	**2012/13 Theoretical Cost in % (DD adjusted)**	**2012/13 Theoretical Cost in £ (DD adjusted)**
New Intake and Existing Partner Schools (23 schools in total*)	-10%	-5%	-6%	-£67,988

*2011/12 baseline

4.4 At the end of 2012/13 '**Entry level'** Low Carbon Schools programme results from CRC supplier statement data were analysed and showed that the programme was on target and met its 2% energy reduction and its CO_2 and cost equivalent

targets. In fact the entry level schools reduced their energy consumption by 10% on the previous year which equates to a 6% reduction in CO_2 and a £112k (5.5%) reduction in energy bills.

4.5 Results against targets

Low Carbon Schools groups	2012/13 Target - kWh % reduction per annum	2012/13 Actual kWh % reduction per annum	2012/13 Actual kWh % reduction per annum (New suggested combined results for New Intake and Existing partner schools)
New Intake (full programme -technical and behaviour change)	-14%	-0.3%	-10%
Existing partners (Light touch approach)	- 3%	-17%	
Entry level (Pre service support)	-2%	-10%	

4.6 Overall during 2012/13 all borough schools have collectively reduced their energy by 10%, their CO_2 emissions by 5.5% and saved approximately £180k (5.5% reduction) on their energy bills compared with the previous year.

4.7 Due to changes in the reporting of the CRC a direct comparison between 2011/12 and 2012/13 tax cannot made.

5.0 The future of the Low Carbon Schools programme

5.1 Due to a change of rule by Central Government, Local Authorities will no longer be able to top slice and hold funds form the schools' budget making it difficult to collectively fund the Low Carbon School project in future years.

5.2 If funding could be found to continue the project, the Council currently does not have the capacity to manage and monitor such a project on this scale at this present time. There may be capacity to provide bespoke ad hoc behaviour change and technical support; however this would require the school paying for a traded service. Schools would also have to demonstrate full commitment to implementing any projects.

5.3 Due to the time it takes to implement the project in a school, in particular the technical aspect, any future programme success should be measured over a two year period as a minimum.

6.0 Barriers to Action

6.1 In some cases there was a lack of commitment on the part of the schools to fully implement a 'Whole School Approach' to energy reduction among all members of the schools community. While initial support may have been offered by some members of a school's community, often the school's senior management, it usually falls upon others to ensure it is implemented. Problems arose when individual members of staff who were implementing the projects did not have the necessary support from senior management to drive change. Despite Council

officers efforts to address this issue, senior management often had more pressing priorities which lead to school staff implementing the project becoming despondent.

6.2 Schools were asked to submit regular, monthly readings; however a proportion of schools did not adequately meet this obligation, resulting in infrequent or unreliable data being submitted. Reasons for this include;

- Accessibility of meters – meters often located in hard to reach or restricted areas
- Motivation or support affecting accuracy and/or frequency – the schools project coordinator often delegated this task to caretakers and facilities managers who were not fully bought into the programme.
- Lack of Accountability - When meter readings have not been taken as requested there appears to be little holding to account of the person whose responsibility this oversight has been.
- Poor internal communication – in some schools it was unclear who has 'ownership' of the task to accumulate manual meter reads.
- Complicated meters and lack of training – there are a verity of new types meters and most caretakers and facilities managers are largely unaware of which types of meters were installed. It is understandable for them to be reluctant to approach these complicated meters and a fear of "mucking them up by pressing the wrong button" was frequently expressed to project officers despite support form council officers.

6.3 Due to internal matters there was a delay in employing the Schools' Technical Officer, which means the post was vacant for the first five months of the project. The schools forum agreed in December 2012 to allow for this underspend to continue beyond the project Closer until August 2013.

7.0 RECOMMENDATIONS

7.1 Close the project in its current form and ask schools to approach the Council if they would like any further tailor made support, either behavioural change technical or both, on a traded service basis.

7.2 If a programme similar to the Low Carbon Schools Programme is to be rolled out to Brent schools again, the above areas will need to be addressed and full school support given to the project.

7.3 In a one years' time revisit all schools energy and CO_2 reduction progress, in particular the progress of the 'New Intake' schools.

7.4 If the Schools Forum raises concerns with schools energy and CO_2 reduction progress after one year, the forum will consider corrective action such as ways of funding schools support.

7.5 Continue to host the Brent Council Low Carbon Schools webpage for all schools to have access to the entry level service.

7.6 Offer a Caretaker training service/workshop on an individual school payment basis.

8.0 SUMMARY

8.1 The project overall achievement can be demonstrated despite varying levels of success in meeting specific group targets. The fact that during 2012/13 the 'New intake' and 'Existing partner' achieved a 10% reduction in energy, a 5% reduction in CO_2 a theoretical 6% reduction in cost should be seen as the significant achievement.

8.2 The Low Carbon Schools project, at all levels has received positive feedback from the majority of schools that participated. Schools have an interest in saving energy and reducing CO_2 emissions in order to save money. The project has also allowed schools to set an example to their staff and pupils by drawing upon saving energy and climate change mitigation best practice identified.

8.3 The extensive support offered by the Council has been invaluable to these schools who, constrained by resource and time pressures, would ordinarily be unable to prioritise this issue fully. However in the future for the benefits of the project to be fully achieved, a total 'whole schools' approach in all participating schools is needed.

9.0 CONTACT OFFICERS

Sara Williams
Director- Children and Families

Emily Ashton
Environmental Projects and Policy Officer (Policy and Performance – Environment and Neighbourhood services)

Anis Robinson
Energy Manager (Property and Asset Management - Regeneration & Major Projects

Ceridwen John
Environmental Projects and Policy Manager (Policy and Performance Environment and Neighbourhood Services)

Appendix A

Summary of progress within individual schools

This section provides a brief overview of every school that formally participated in the Low Carbon Schools programme. The most important actions taken by each school to reduce their energy consumption and engage their school community are outlined.

1. School: **Sudbury Primary School**

   Number of students: **820 pupils**

   A very large primary Academy school taking students aged 3-11 years old. The original school is a two story solid-brick building that has undergone a number of extensions since the school was founded. It is installed with a gas-fired central heating system. The school has added a major two story extension in 2011 containing sustainable features including grass roofing, photovoltaic panels, a sun catcher which converts solar thermal energy into electricity and a wind catcher to provide natural ventilation.

   Engagement Activities

   The school has

   - Nominated an eco-coordinator and sent them to the LCS' Energy Matters workshop
   - Established a monitoring program called the 'e team' in which two students from each class, around 50 students in total, check recycling, energy usage and temperatures of classrooms at lunch time and report back. Teachers from underperforming classrooms were initially named and shamed at staff meetings. As a result noticeable improvements have been observed such as a significant reduction in the number of lights left on during lunch and break times.
   - Received and used an Energy Spy toolkit
   - The 'e team' in the future will make wider use of digital thermometers to reduce the levels of overheating occurring in classrooms.
   - Delivered a school topic called 'Being Green'. Subjects such as climate change and energy conservation have been explored in a number of ways across the school.
   - A further sustainability measure inspired by the school's participation in the LCS programme has been the establishment of a kitchen garden and nature area to encourage biodiversity.

   Technical Assistance & Improvements

   The school has

   - Sent a site manager to a training day provided by the LCS programme.

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Received a report highlighting recommended capital investment opportunities for the original, less efficient buildings.

2. School: **Brentfield**

Number of Students: **535 pupils**

This is a larger than average inner city primary school, serving a culturally diverse community, taking students aged 3-11 years old.

The original single story building is 50-60 years old, undertaking periodic expansions up until the present day and is heated by a gas-fired system. Recently a 2 storey extension has been built onto the existing school incorporating new classrooms, toilets, storage rooms, school hall, kitchen and associated plant, and some roof-mounted photovoltaic panels.

Engagement Activities

The school has:

- Nominated an eco-coordinator, who has taken a very active role in the LCS initiative.
- Appointed eight students as eco-warriors to ensure energy efficiency measures are implemented. Students had to undergo a formal interview process to apply for the role. Eco Warriors monitor the school at break times and after school to make sure energy waste is avoided. Eco Warriors featured in a video for the Low Carbon School programme which has been used extensively to promote understanding of the service.
- Achieved recognition of their efforts through receipt of a Silver Eco Schools Award in January 2013. This was partially through the encouragement and advice from LCS Officers.
- Received and used an Energy Spy toolkit
- Held a special assembly delivered by the Council's Behavioural Change Energy Officer.

Technical Assistance & Improvements

The school has

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Agreed to pilot an innovative TSB passive cooling system which will be installed in the summer of 2013. This will be fitted into three classrooms and is funded with Central Government money that will also pay for additional measures such as natural ventilation grills, lighting upgrades and valve wraps.
- The school is in the process of replacing its current air-conditioning system in its IT suite and is being assisted in identifying an appropriate energy efficient upgrade.

- Explored the possibility of installing solar film to existing windows and light sensor controls.
- Has reviewed its current maintenance contracts to ensure that it is getting the best value for money combined with a guaranteed quality of service. It is hoped that this will ensure the longevity and efficiency of existing HVAC systems.
- Sent its site manager to attend a training day provided by the LCS programme.

3&4. School: **Mount Stewart Infant and Junior Schools**

Number of Students: **643 pupils**

The site at Carlisle Gardens, Kenton contains two separately managed schools - an Infants and a Juniors. The schools share many of their building services; in particular gas and electricity supplies for which both schools share a meter for each.

The two schools were treated as different entities by project officers who worked with different points of contact within each school when supporting behavioural change initiatives and offering technical support. However the shared meters prevented separate monitoring of each schools' energy consumption. Observed changes to consumption patterns were therefore attributed to both schools collectively.

Engagement Activities

Both schools have:

- Nominated staff eco-coordinators, who have taken a active role in the LCS initiative.
- Received and used an Energy Spy toolkit

Mount Stewart Infants has:

- Set up a team of Eco Warriors who check twice a week that lights and heating in every room are switched off after school finishes. They also check for leaking taps and that that the doors to the outside are closed in order to retain heat. 'Thumbs down' cards are left in underperforming classes and are 'named-and-shamed' in assembly.
- Received a visit from the Schools Behavioural Change Officer who went into classrooms to talk to students about the importance of energy conservation.
- Rewards the best performing class with a certificate each month.
- Looked beyond energy conservation to other sustainability issues; initiating paper recycling and composting of fruit waste for which each class is responsible for.
- Efforts have also been made to integrate energy efficiency and conservation into the Year 2 Electricity topic.

Mount Stewart Juniors has:

- Set up a team of student champions to check shutdowns are completed and wasteful behaviour is reduced.
- Sent its eco-coordinator to the LCS' Energy Matters workshop

- Conducted a review of the school curriculum; identifying opportunities for integration of related themes into classroom content.
- Run design competitions for awareness posters and for the LCS Service's new logo.
- held a special assembly run by the Schools Behavioural Change Officer

Technical Assistance & Improvements

The schools have:

- Sent site managers to attend a training day provided by the LCS programme
- Not engaged closely with the School Technical Energy Officer and a comprehensive site review has not been conducted, preventing the compilation of a report with specific recommendations.

5. School: **Byron Court**

Number of Students: **592 pupils**

This is a larger than average primary school, serving a culturally diverse community, taking students aged 3-11 years old. The main school building was built in 1932 in the Arts and Crafts style. The building has since improved the thermal properties of the building by adding features such as a draft lobby in reception and double glazing throughout, however the building has not undergone significant modification since construction.

Engagement Activities

The school has:

- Nominated a staff eco-coordinator, who has taken an active role in the LCS initiative.
- Received and used an Energy Spy toolkit
- Sent its eco-coordinator to the LCS' Energy Matters workshop
- Set up of an Eco council which holds regular meetings for thirty eco warriors picked from across the two key stages. Eco warriors are responsible for saving energy across the school and reducing waste by recycling. Eco warriors are required to remind staff to switch off lights and interactive whiteboards across the school.
- Run a design competition for an eco code poster to raise greater awareness among pupils and staff.
- Taken part in Switch off Fortnight in November 2012.
- Sought to integrate energy and climate change issues more fully into the school curriculum through PSHE topics.
- Held a week, celebrating Byron Court Eco School. This involved assemblies and other activities with a sustainability theme.

- Held an assembly delivered to the school by the School Behavioural Change Officer.
- Plans to repeat many of the actions it has taken this year in order to maintain interest and active participation in energy savings in the future. Assemblies on energy issues will be held for all year groups and the poster competition will be repeated. The school is also keen to hold its own Eco Week event again and to participate in Switch off Fortnight 2013.

Technical Assistance & Improvements

The school has:

- Applied for £25,000 of Salix funding to fund report recommendations including upgrades to LED lighting, installation of valve insulation, and other energy saving measures. These measures were identified by the council's technical officer.
- Agreed to have new boilers installed through funding from the Council's Property & Asset Management capital projects budget.
- Sent a site manager to attend a training day provided by the LCS programme

6. School: **Furness Primary School**

Number of Students: **557 pupils**

This is a larger than average inner city primary school, serving a culturally diverse community, taking students aged 3-11 years old.

Engagement Activities

This school has:

- Nominated a staff eco-coordinator, who has taken an active role in the LCS initiative.
- Received and used an Energy Spy toolkit
- Sent its eco-coordinator to the LCS' Energy Matters workshop
- Set up of an Eco council.
- Held an assembly delivered to the school by the School Behavioural Change Officer.
- Appointed two eco-warriors in every class to ensure energy efficiency measures are implemented. The top year group also has five Eco Spies who adjudicate in a monthly competition awarded to the class displaying the most eco-friendly behaviour. Each winning class is awarded a certificate to display and a box of chocolates. Staff have been encouraged to support students' efforts and to actively participate in the monthly competition themselves –encouraging a friendly rivalry between teachers.

- Involved students in an energy saving themed colouring-in competition and in designing awareness-raising posters.
- Planned to participate in a school-wide celebration of Earth Day with every year group participating in cross curricular activities focusing on energy saving and climate change.
- Plans to hold a sustainability-themed trip for the eco warriors and spies to reward them for their involvement and to encourage their interests further.

Technical Assistance & Improvements

The school has:

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Received a report highlighting capital investment opportunities to improve building performance. Lighting upgrades, more efficient boiler controls & valve insulation, building insulation were identified as measures that would be eligible for Salix funding. To date the school has not yet committed to implementing any of these projects.
- The school site manager attended a training day provided by the LCS programme.

7. School: **Wykeham Primary School**

Number of Students: **524 pupils**

A larger than average inner city primary school, serving a culturally diverse community, taking students aged 3-11 years old. The school largely remains contained within the original solid brick, two story building it has occupied since 1930. A heated, indoor pool is located onsite and is used regularly by students and community groups.

Engagement Activities

The school has:

- Had been initially slow to engage in the programme due lack of enthusiastic staff
- Held two workshops for Year 3 students run by the programme's behavioural change officer. These workshops focussed upon energy efficiency and the use of the Energy Spy toolkits to identify opportunities within the classroom.
- Has tried to raise awareness of energy conservation through the use of poster, stickers and discussions in staff briefings and assemblies.

Technical Assistance & Improvements

The school has:

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Received a report highlighting capital investment opportunities to improve building performance. Lighting upgrades, more efficient boiler controls & valve insulation, building insulation were identified as measures that would be eligible for Salix funding. To date the school has not yet committed to implementing any of these projects.
- Received help in review maintenance contracts. A new contractor providing a higher guaranteed quality of service is being sought - extending the longevity and efficiency of existing HVAC systems.

8. School: **North West London Jewish Day School**

Number of students: **279 pupils**

A voluntary-aided state primary school taking Jewish students aged 3-11 years old. The school occupies a late-1950s solid brick building; with heating throughout provided via a gas-fired boiler system. Large volumes of electric air-conditioning have recently been installed across the site – substantially adding to fuel consumption. A heated, indoor pool is located onsite and is used regularly by students and community groups.

Engagement Activities

The school has:

- Been slow to engage in the programme as a whole. Some office-based champions have raised awareness amongst staff in teacher briefings as to the importance of saving energy and suggested actions for implementation.
- Put up posters and stickers across the school
- Done little to engage students; there has been no uptake of the services offered by the behavioural change officer.

Technical Assistance & Improvements

The school has:

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Received a report highlighting capital investment opportunities to improve building performance. Measures were identified that would be eligible for Salix funding due to the short payback periods. These include installation of a swimming pool cover, insulation, lighting upgrades and installation of more efficient burner controls to existing heating systems.

- Expressed some interest in replacing older, inefficient air-conditioning systems and installing photovoltaic panels.
- Yet to commit to implementing any of these projects.

9. School name: **Islamia**

Number of students: **389 pupils**

A voluntary-aided state primary school taking Muslim students aged 3-11 years old. The school occupies a late-Victorian solid brick building; with heating throughout provided via a gas-fired boiler system. The school site is shared with the privately-run Islamia Girls Secondary School. The two schools share most of their build services and are jointly metered for gas and electricity. Both schools currently wish to expand their admissions, but are constrained by the size of the site and planning restrictions. The primary school is in the process of identifying new premises offsite.

Engagement Activities

The school has:

- Held a special assembly attended by every student and member of staff in which the behavioural change officer officially launched the school's involvement in the programme.
- Office-based champions who raise awareness amongst staff in teacher briefings as to the importance of saving energy and suggested actions for implementation.
- Put up posters and stickers across the school to reinforce the energy saving message.
- Appointed student energy monitors to ensure that lighting and ICT is switched off in rooms that are left unoccupied during lunches and breaks.

Technical Assistance & Improvements

The school has:

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Received a report highlighting capital investment opportunities to improve building performance. Due to uncertainty concerning the future use of the school site, implementation of any of these measures by the primary school is unlikely at present.
- Sent its school site manager to a training day provided by the LCS programme.

10. School name: **Kingsbury Green Primary**

Number of students: **634 pupils**

A larger than average primary school serving a culturally diverse community, taking students aged 3-11 years old. The school consists of a range of buildings dating back since the early twentieth century until the present day; with heating throughout provided via a gas-fired boiler system.

Engagement Activities

The school has:

- Been slow to engage with the behavioural change officer; there has been no uptake of the services offered to them. It is unclear whether staff have implemented any measures to promote awareness of energy efficiency and conservation.

Technical Assistance & Improvements

The school has:

- Received a site visit, conducted by the council's technical officer who made adjustments to HVAC programming.
- Applied for £35,000 of Salix funding to fund report recommendations including upgrades to LED lighting, installation of valve insulation, and other energy saving measures.
- Begun exploring the possibility of installing solar PV panels on its roof which it would finance itself.
- Sent a site manager to attend a training day provided by the LCS programme

11. School name: **Newman Catholic College**

Number of students: **517 pupils**

A smaller than average boys-only secondary school built in the late 1950s which has undergone several additional phases of development up until present day. The school is one of the last remaining schools to use oil as its primary heating fuel.

Engagement Activities

The school has:

- Been quick to engage in the programme; building upon a pre-existing system of student eco champions and staff environment committee.
- Invited the behavioural change officer to attend a number of the committee's twice monthly meetings and meet with student representatives.
- Introduced a system of eco champions who check to ensure that lighting and ICT is switched off in rooms that are left unoccupied during lunches and breaks.

Technical Assistance & Improvements

The school has:

- Initially engaged well with the schools technical officer. A site visit was constructed by the council's technical officer who made adjustments to HVAC programming and compiled a report highlighting recommended capital investment opportunities.
- Received a report outlining options that included converting the existing oil-burning heating system to gas, retrofitting more efficient boiler controls, valve insulation, and installation of more efficient lighting.
- Yet to commit to implementing any of these projects.

12. School name: **Queens Park Community School**

Number of students: **1202 pupils**

An average-sized mixed secondary school built in the 1980s which has also undergone several additional phases of development since then. In recent years the school has made heating and lighting upgrades funded through the Salix fund. The school started the LCS programme as a Community School under the auspices of the local education authority, however converted to Academy Status in September 2012.

Engagement Activities

The school has:

- Been unable to engage fully in the programme; most likely due to the additional complications and pressures experienced as the school makes the transition towards Academy Status.

- Initiated a 9pm automated power down of computers.
- Replaced existing inefficient projectors with LED projectors
- A manual switch off check in each room is conducted daily by facilities manager.

Technical Assistance & Improvements

The school has:

- Had a site visit from the council's technical officer and a report of recommendations were submitted however the school has been unable to engage fully in the programme; most likely due to the additional complications and pressures experienced as the school makes the transition towards Academy Status.

13. School name: **Copland**

Number of students: **1704 pupils**

A Specialist Science College is a large urban secondary and tertiary school. The original building (approx. 1950s) is in a poor state of repair and is likely to be very inefficient at retaining heat due to deficiencies in glazing and the building fabric. The school has used Salix funding in the past to implement some improvements including upgrading its gas-fired heating plant and lighting. The school has a large volume of ageing external portakabin classrooms using inefficient electric heating.

Engagement Activities

The school has:

- Failed to engage in the programme; despite the efforts of an enthusiastic member of staff and the School Behavioural Change Officer

Technical Assistance & Improvements

The school has:

- Had a brief meeting with the council's technical officer but has failed to engage beyond that.