RE:NEW Roll-out Evaluation Report – 2011/12

Background

RE:NEW is a collaborative programme of home energy retrofit for London's homes delivered through a partnership between the Greater London Authority, London's boroughs, London Councils and the Energy Saving Trust.

RE:NEW is a pan-London home energy retrofit scheme aimed at reducing carbon dioxide (CO_2) emissions and water use from the domestic sector. The Mayor has set a target to reduce London's emissions by 60% by 2025[1] and the domestic sector accounts for 36% of those emissions. To meet this target, the Mayor's Climate Change Mitigation and Energy Strategy aims to work with partners to use public funds to develop commercial models that catalyse markets to offer appropriate whole-house retrofitting of energy efficiency, energy supply, and water measures to 1.2 million existing homes in London by 2015, and all homes in London by 2030.

RE:NEW brings together London's existing home energy retrofit programmes into a cohesive model to up-scale efforts on domestic CO_2 and water reduction in a cost-effective manner. It also provides a delivery framework for future carbon reduction activity to operate through, in turn acting as a mechanism to attract further retrofit financing into London.

RE:NEW was launched in April 2009 with technical trials held in three boroughs. The technical trials informed the demonstration phase which ran from November 2009 – July 2010. Projects ran in nine boroughs.

Following evaluation of the RE:NEW demonstration projects a simplified procurement process was recommended to make delivery more efficient. As a consequence the RE:NEW team ran an OJEU procurement exercise to select a framework of 12 delivery agents which boroughs and housing associations can call off (through mini-competitions) to deliver RE:NEW works until October 2014.

The next phase was to roll out the programme across London and this began delivery on the ground in July 2011 – April 2012. The aim for the roll-out stage of project was to develop a 'pan-London' approach – with at least one RE:NEW area in every borough. This is the phase evaluated in this report.

[1] As set out in the Mayor's Climate Change Mitigation and Energy Strategy (london.gov.uk/priorities/environment/vision-strategy/climate-change-mitigation)

The aims of the roll-out were:

- To further refine the delivery model taking into account the geographical, political and socio-economic differences of all boroughs.
- To achieve higher penetration rates through greater recognition of the brand and pan-London representation.
- To achieve greater cost-efficiencies through greater scale of delivery and purchasing power.

Headline results

Below is a summary of the outcomes from the roll-out phase:

- **50,683 homes retrofitted**[2]
- **£5,721,500 total cost to the Greater London Authority**
- **£1,087,500 levered in from energy suppliers, water suppliers, government (through Warm Front) and boroughs**
- **14,665 homes referred for further measures**[3]
- **1,548 homes had further measures installed**
- **Average annual savings per home where further measures were installed:**
    - **0.67 tonnes CO_2 per home** broken down as follows:
        - 0.171 tonnes CO_2 through easy measures[4]
        - 0.499 tonnes CO_2 through further measures
    - **£122.53 on fuel bills per home** broken down as follows:
        - £28.81 saved from easy measures
        - £93.71 saved from further measures
- **13.1 kilolitres average water saving per home**
- **Total annual savings:**
    - **9,458 tonnes CO_2** broken down as follows:
        - 8,686 tonnes CO_2 easy measures
        - 772 tonnes CO_2 further measures
    - **£1,605,000 on fuel bills** broken down as follows:
        - **£1,459,900** saved from easy measures
        - **£145,100** saved from further measures
    - **661,600 water savings (kilolitres)**
- **Average penetration and conversion rates for:**
    - Homes marketed to homes visited: 22.9%
    - Homes visited to referrals identified: 28.9%
    - Homes visited to installation of further measures : 3.05%

[2] A retrofitted home is defined as a home which has been visited under the RE:NEW programme and offered energy efficiency advice, energy and water saving devices, referred to as 'easy measures'. The easy measures are installed during the visit. Households will also be offered energy efficiency 'further measures' where appropriate. See footnote 3 for further measures offered and footnote 4 for the range of easy measures offered.

[3] The further measures were offered through Carbon Emission Reduction Target funding and consisted of cavity wall insulation, loft insulation and boiler and heating upgrades.

[4] The range of easy measures offered varied by delivery agent. Across the whole programme these included: low energy light-bulbs, radiator panels, stand-by switches, real time monitors, hot water tank jackets, draught proofing, blocking gaps around skirting boards, tap aerators, cistern displacement devices, shower timers, low-flow showerheads.

Objectives of the report

The objectives of the evaluation are to:

- Assess the original aims and objectives of programmes/projects as set out at the start.
- Assess the impact the programme has delivered.
- Summarise key achievements and outcomes of the programme against the original aims and objectives.
- Learn which interventions worked well and why, so as to inform future planning and the sharing of best practice.

This summary seeks to provide quantitative information on the outcomes for the RE:NEW roll-out phase and draw out key conclusions and recommendations for next steps based upon insight from the delivery agents, local authorities and the GLA. It does not seek to provide a full qualitative or quantitative analysis of the programme.

Overall evaluation of the roll-out project phase

There are four elements to RE:NEW visits: marketing and engagement; the home visit; referral for further measures, and installation of further measures. All of these must be designed and managed to convert home visits into installations of further measures as cost-effectively as possible.

Marketing and engagement

As it is currently designed, getting people signed up to the scheme is the building block for delivering the rest of the programme. Only when an assessor is in a home can they conduct a survey, install measures and refer the resident onto more significant insulation measures.

The majority of RE:NEW marketing activity reflected a multi-staged, multi-faceted approach, employing a range of methods to communicate and engage customers. It was acknowledged that direct door-to-door engagement, supported by wider engagement to raise the level of awareness about the scheme, was the most effective approach to delivery.

Where marketing campaigns were not initially led by a door knocking approach this was quickly revised to ensure that the benefit of this method was maximised. For example in the early stages of RE:NEW, Climate Energy did not include door knocking in their original marketing plans. This was changed and the marketing activity in Climate Energy's other area of North London, which started later, included door knocking from the beginning.

Delivery of RE:NEW emphasised achieving the homes visit target and achieving a high penetration rate of homes receiving a visit to homes marketed to. Based upon the results of the demonstration projects, where boroughs achieved a penetration rate between 8% and 36%, the roll-out phase aimed for a 25% penetration rate. This allowed for a greater level of ambition, building on the success of the pilots and accommodated the assumption that a wider-scale project would achieve more awareness, recognition and take-up, along with economies of scale. In reality RE:NEW was marketed at small areas within each individual borough and therefore there was little opportunity for it to be perceived as a pan-London programme. The GLA could therefore pursue this opportunity as a mechanism to support the further phases of RE:NEW.

Although the penetration rate of 25% was not achieved across all boroughs, the average penetration rate achieved across London was 23%, just under the average from the pilot projects of 24%. The lowest penetration rate achieved was 13.9% (higher than the lowest demonstration pilot) in Havering. Havering was a demonstration borough and as a consequence received less money to deliver the programme which accounts for the low number of home visits in this borough. The highest achieved was in Richmond at 42.5% (higher than the most successful pilot).

Only Kensington & Chelsea failed to meet the home visits target, deciding not to select an expansion area to further promote the programme. The delivery agent in Kensington & Chelsea found it extremely difficult to meet its target due to the type and tenure of properties within the area. The borough chose not to select an expansion area to further promote the programme and the remaining home visits were spread across the rest of the sub-region so that West London met its overall target. See table 1 in Appendix 1 for the full list of results by borough for marketing approaches.

Delivery agents undertook a variety of marketing methods to support achievement of their targets. Door knocking was the most effective marketing method followed by direct mail outs, reinforcing lessons learnt from the demonstration phase of RE:NEW. The average percentage for success of different acquisition methods across all 32 London boroughs are outlined below:

- Door knocking: 73.9%
- Initial letter drop: 16.5%
- Community engagement: 1.7%
- Customer recommendation: 1.4%
- Booked through other means (principally outbound calling): 2.2%

From the information provided we can only account for the means by which 95.7% of home visits were generated. In some cases we do not have a full set of data on how the home visits were generated.

Although door knocking activity was principally responsible for securing the volume of visits, other marketing methods such as community engagement through marketing and events were responsible for generating contacts. As in the pilot project, these were noted to improve take-up. However whilst some boroughs such as Sutton, Tower Hamlets and Greenwich generated over 4% of visits through community based activity, many acknowledged that this route was underexploited during the process, with varying levels of effort and resource deployed for these activities. The evaluation of the pilot project found that community engagement activity made door knocking more effective. However, the fact that this route was not utilised throughout the programme means we cannot draw a definitive conclusion from the roll-out phase.

Customer recommendation, i.e. word of mouth, was also a successful channel for acquiring customers in Harrow, Hillingdon and Lewisham where over 5% of home visits were generated via this method.

A number of delivery agents engaged in ‘other activities’, which predominantly consisted of outbound calling activity to generate contacts. Bexley and Lewisham found this particularly effective, generating 18.4% and 11.2% of home visits via this mechanism. Where it is

possible to source an existing list of interested residents, this is a very effective means of generating home visits.

Home visits and referrals

The focus of RE:NEW is saving carbon emissions and so for RE:NEW to be a success it is vital that referrals for installing further measures are made. The point of the home visit is to incentivise and stimulate take up of the further insulation measures. Effective marketing to sign up householders, delivery of in home visits and conversions to installation of measures are therefore critical.

The structure of each RE:NEW home visit was bespoke dependent on the household and the type of property, but each delivery agent followed the basic outline below:

- Surveying the property
- Providing advice and installing easy measures
- Referral for further measures
- Installing the further measures

It was anticipated that cavity wall, loft insulation and heating measures would be funded through the Carbon Emission Reduction Target, Warm Front or other funding levered in.

Tables 2 and 3 in Appendix 1 show the following information for each borough:

- CO_2 saved across the programme, broken down by easy and further measures.
- Average fuel bill savings per home.
- The number of referrals made and referral to installation conversion rates.
- Conversion rates from home visits to installation.

The results demonstrate consistent delivery of easy measures across the programme with average savings of 0.17 tonnes CO_2 saved (annual savings) and ranges from 0.13 – 0.22 tonnes CO_2 saved (annual savings).

Whilst the take-up of easy measures and advice was high and a real success for the scheme overall, referrals for further measures, such as loft and cavity wall insulation were low. The average conversion rate from referral to further measures was 10.6%, but over one-third of the boroughs recorded a conversion rate below 6%. There were five boroughs which did not report any further measures installed. Several of these boroughs had protracted contractual issues with their delivery agent, which meant that further measures were not installed. The other two boroughs have housing stock that did not lend itself to CERT-funded installations, mainly solid-walled properties and a high number of flats.

Six boroughs recorded conversion rates over 50% from home visit to referral, mainly in East London. However all of these boroughs were in the bottom half of the league table for installation of further measures. This is symptomatic across the programme where referral conversion was much lower than initial conversion rates.

Every delivery agent experienced issues converting referrals to installations. For example Groundwork experienced a dropout rate of 25% across West London, through cancellations or ’no-shows’.

There can be many reasons why referrals do not always lead to installations, many of which are avoidable or could be remedied, so it is important to audit referrals to be able to identify and overcome the issues. Below is a summary of key barriers that have been identified by the delivery agents and boroughs:

- **Discrepancies between identified measures and referrals reported from sub-contractors** – There have been some concerns expressed by delivery agents about the accuracy of the data provided through the in-home visit (for example in East London there was a discrepancy in higher virgin loft installs than the number referred; this was due to some loft top up referrals actually being virgin loft measures after survey. There were also some issues identifying some non-standard cavity wall properties). Some delivery agents felt that further training of their advisors would prevent discrepancies between identified measures and possible installations. For two delivery agents, Climate Energy and Carillion, the GLA asked them to review the data from their final reports as part of this evaluation. A number of changes were made to the data to improve the accuracy of it when the raw data was reviewed.
- **Number of in-home visits required** – Assessor referrals require follow up by a technical survey from an installation surveyor. This has caused drop out as not all residents have granted access for the follow up visit. For example in the private rented sector a second visit would require securing landlord permission which was not always granted. The GLA has tried to address the issue of multiple assessment visits in the current phase of RE:NEW. This been addressed for technical assessment of loft insulation but it does not extend to assessment of cavity wall insulation.
- **Significant lag time between referral to installation –** caused householders to drop out. It is unclear what caused the delays between referrals and installations. However, it may have been seen as a lower priority in comparison to delivery of the target for home visits. It is crucial that referrals and further action happen soon after the initial visit. This ensures that the householder is still engaged with the process at the time of the installation of further measures.

These issues affected the conversion rate from home visit to further installation measures, causing consistently low numbers across the programme. Almost all boroughs recorded a conversion rate of less than 3% and a number of boroughs did not progress beyond installation of easy measures. Harrow, Hillingdon and Lewisham were exceptions to this trend with around 9% of all visits resulting in the installation of a further measure. This has been attributed to the make-up of the housing stock which has high potential for further measures and the fact that the borough leads in these areas were highly engaged with the programme.

Issues with the conversion of home visits to installations were identified during and shortly after the roll-out phase. In the current phase this has been addressed by linking payments to both homes and carbon targets.

Fuel bill and water savings followed the same trend. The areas with the highest fuel bill savings were ultimately those who installed the greatest number of further measures. The same analysis can be made for CO_2 emissions. Based upon modelled data from the Energy Saving Trust, on the whole virgin loft insulation generates the largest CO_2 saving, followed by cavity wall insulation and then loft top up. However in flats a loft top-up generates greater savings than cavity wall insulation because there is less wall space.

Despite few installations of further measures, significant savings have been made by installation of easy measures. However it should be noted that these savings are, to a degree, dependent on behavioural elements and as a result are inherently more temporary than installation of further measures. This is taken into account when calculating the lifetime savings for each measure.

Water measures

Unlike delivery of energy efficiency easy measures there is some variation in the delivery of water measures across the boroughs. Redbridge, Merton, Lewisham, Newham and Harrow were the most effective at installing water efficiency 'easy' measures, saving over 25 million litres annually. In other boroughs the distribution of water efficiency measures was far lower. In some instances this was due to availability from the water utility, distribution to depots, and often whether the assessor understood the measure and had been trained in installing them.

Other referrals

Over 5,000 homes were referred to an income maximisation service. This equated to 10% of all home visits. However, the data on the results of these referrals was not reported in most instances. The GLA received data on the conversion of these referrals and the amount awarded from six of the East London boroughs. Based on this limited analysis, householders were awarded an additional £216,493 in benefits income.

Customer satisfaction

The GLA suggested several methods in order to capture customer satisfaction via survey: in person, by phone, by email or post, each with different pros and cons. A list of proposed questions was presented to delivery agents. However it was acknowledged that the preferred method of contact may impact upon how many questions were included and in turn affect the response rate to the survey.

Satisfaction results were received for 28 of the 32 boroughs, the table below shows the average results across these boroughs. From this we can conclude positive satisfaction levels, with those homes being satisfied making up (on average) 94% of those residents who replied to the questions.

Homes satisfied (very/ fairly) with RE:NEW visit	94%
Homes not satisfied (not very/ not at all) with RE:NEW visit	3%
Homes satisfied that RE:NEW visit helped save energy and money	61%
Homes satisfied with package of easy measures installed	94%
Homes remember being referred to further measures	16%
Homes remember being referred to other council services	5%
Homes that would recommend the RE:NEW service to a friend	91%

From this survey we can conclude that fewer people remember being referred to further measures (16%) than those that were actually referred (29%). Also, while the RE:NEW service received a high satisfaction rating and most homes would recommend it to a friend, it appears that many households did not see the link between the visit and a reduction in energy use and bills.

Lessons learnt and recommendations for future delivery

Aims and objectives of programme delivery

Selection of areas was often based on fuel poverty prevalence or council priorities rather than by energy efficiency criteria alone. This was a result of conflict between the key objectives of RE:NEW (energy efficiency) and those of the council (fuel poverty). This may have meant that the areas selected included a high proportion of solid wall properties, one of the main factors in fuel poverty. These properties could not be treated through the roll-out phase of RE:NEW due to limits on the funding available for further measures.

Recommendation:

- GLA and local priorities need to be brought into alignment to ensure that programme objectives are agreed or at least aligned or the GLA need to be more prescriptive about the selection of target areas to ensure that this leads to a focus on further measures.

Staff and training

Levels of staff turnover differed between delivery agents. Some found it difficult to recruit and retain quality domestic energy assessors, particularly assessors that were experienced in door knocking to sell energy efficiency schemes.

However it is widely recognised through case studies and reporting from the delivery agents that the delivery of RE:NEW has enabled local employment and training opportunities. For example, one delivery agent was able to employ an individual that had been in long term unemployment, continuing his employment and training after completion of this phase of delivery. In other areas, such as East London, staff have been retained that would have otherwise been made redundant if it had not been for the RE:NEW scheme.

Recommendation:

- Delivery agents need to consider levels of staff turnover, both in their recruitment planning and staff training, whether internal or through a contracted delivery partner, to ensure consistent staff levels throughout project delivery.
- Consider a more effective, focused programme of training for Home Energy Advisors to ensure accuracy of in home assessments and opportunities for installations. However this may have costs implications for delivery of the programme.

Promotion of the scheme

Some of the delivery agents found promotion of the scheme difficult due to the constraints of working within a target area. For example East London considered carrying out promotions to schools within local areas but like community events it would have been difficult to design a campaign limited to the target area. Others such as Lewisham used schools to promote RE:NEW but had to manage expectations beyond those living in the target areas.

Recommendation:

- A pan-London marketing campaign spearheaded by the GLA as a way to warm up residents.
- Pre-scheme-launch events to promote the project and brands alongside local community groups and organisations could improve awareness of the programme.

- Consider offers available for those outside of the target areas.
- Avoiding delays in producing marketing materials.

Generating and delivering home visits, partnerships and stakeholders

RE:NEW marketing activity reflected a multi-staged, multi-faceted approach, employing a range of methods to communicate and engage customers. Of these methods direct door-to-door engagement, supported by wider engagement to raise the level of awareness about the scheme, was the most effective approach to delivery. However the delivery agents recognise that alternate channels, such as community events and outbound calling could be used more extensively in delivery of future programmes.

In order to meet their targets for delivery of in-home visits, delivery agents have employed a variety of techniques. This included partnerships with local partners and stakeholders to maximise the impact of local campaigns and extend reach. These groups included:

- Registered providers
- Age UK
- Council for Voluntary Services and community groups
- Supermarkets
- Community groups

Whilst some of these groups were used effectively the delivery agents felt that they could have done more to engage with residents and communities and maximise these channels.

Other techniques included activities such as employing multi-lingual staff, offering translation services to those participating in the scheme and delivering out-of-hours services which have helped to engage a broader range of people across London.

The quality of home visits has been a success of the scheme with 94% of those surveyed providing positive feedback with regard to customer service and the energy advice provided.

Recommendation:

- Targeted “last chance letters” are a good opportunity to generate additional home visits as a delivery agent comes to the end of the door knocking phase for a ward.
- Employ assessors who are able to speak several different languages and produce literature in a range of languages.
- Ensure an out-of-hours service is in operation to maximise the effectiveness of door knocking. Operating an out-of-hours service for both door knocking and for the phone service will improve home visit rates.
- Identify established community groups and community centres able to promote and support RE:NEW. The identification of these groups could be used as part of the criteria for area selection or as an activity conducted prior to finalising area selection.
- Partnerships with stakeholders, particularly registered providers, and resident and community groups should be formed pre-roll-out to maximise effectiveness.

Referral process

Take-up of easy measures and advice was high but referrals for further measures were low. The average conversion rate for referral to further measures was 18.3% but over one-third of the boroughs recorded a conversion rate below 10%. Referral conversion to installation was much lower than initial conversion rates.

Recommendation:

- There were a number of discrepancies between identified measures and referrals reported. This has been attributed to assessors mis-identifying referrals during the home visit and due to a lack of accuracy in reporting of referrals by sub-contractors. Therefore the accuracy of information provided by both the delivery agents and subcontractors needs to be improved to ensure that referrals are required.
- A clearly defined referral process and a robust procedure for tracking progress and reporting outputs are required. Particularly where there are a high number of referral routes.

Installation of measures

The conversion rate from home visit to further installation measures was consistently low across the programme.

In some cases delivery agents focused delivery of visits to social housing properties because this met the council's fuel poverty objectives and they were more likely to respond during daylight hours. As a result this has restricted the level of opportunity to deliver further measures because they weren't always coordinated with the landlords.

However there were some successes. For example in Lewisham there were 58 installations in the private sector of loft insulation and 22 installations of cavity wall insulation, with 10 hot water tank jackets installed when identified during the installation of further measures. There were also a total of 93 installations, predominantly cavity wall insulation, delivered in the Perry Vale ward on Lewisham Homes properties which predominantly consisted of flats.

Recommendation:

- Social housing properties can offer scope for installing further measures, but it requires the delivery agents to ensure that this activity is coordinated with existing maintenance programmes.
- Further targeting of the able to pay market/ private owner occupiers is necessary to improve take up of further measures.
- Link payments to achievement of both homes and carbon targets.

Other recommendations

- Improve communication between delivery agents and suppliers of easy measures across London to identify supply issues early to ensure that stock is available when requested and avoid delays.
- Parking restrictions often presented a challenge given the volume of visits to be conducted in high density residential areas. In future, it would be useful to provide access to parking permits from boroughs, to reduce delivery costs.

- Reporting accuracy can be improved by providing delivery agents with some training on preparing these reports and on how to avoid common errors.
- Reporting of delivery required a far higher level of resource and level of IT investment and expertise from contractors than expected. Greater flexibility and streamlined reporting requirements would allow managing agents to focus more attention on delivery than in the monitoring and reporting of these activities. A more flexible approach has been developed for the current phase of RE:NEW to address some of these issues.

Conclusion

The roll-out phase of RE:NEW has been a qualified success. The programme has demonstrated that there is value in a pan-London approach but in the rush to deliver a large number of home visits, not all of the opportunities for carbon saving measures were capitalised on.

In terms of the original aims of the roll-out, it has shown that the socio-economic differences of the boroughs have a clear impact on the programme. Therefore, to be successful as a carbon saving programme, it needs to strike a balance between achieving carbon saving and alleviating fuel poverty. Focusing too closely on fuel poverty will not result in significant carbon savings. However, by ignoring this issue, the programme will lose credibility with partners and miss the opportunities for carbon saving in fuel poor areas which do exist.

The roll-out phase of RE:NEW achieved a similar penetration rate for home visits to the demonstration pilots. Most of this can be attributed to the door knocking strategy that all the delivery agents took and there is clearly room to improve upon this by using other marketing methods more effectively, such as community engagement. However, to achieve higher penetration rates, this will require greater investment. This investment will be required in two parts: first in longer timescales to allow for approaches such as community engagement to gain traction and second in marketing and advertising, which could bring the pan-London nature of the programme to the attention of residents.

The greatest success in terms of the original aims of the programme is the improvement in cost-efficiency by delivering at a larger scale. The cost per household went down from £159 on average in the demonstration pilots to £113 in the roll-out phase of RE:NEW. This cost could go up again if more investment is made in marketing. However, in the current phase of RE:NEW, these costs have been reduced further by limiting the range of easy measures installed in households.

Since the development of RE:NEW, however, the playing field has changed significantly. While there are still funding routes available from the energy suppliers for energy efficiency measures, the focus of these programmes has changed. With the introduction of Energy Company Obligation (ECO) funding, there is a greater focus on more difficult measures, such as solid-wall insulation, with less focus on insulating cavities and lofts. At the same time, central government is rolling out the Green Deal for the able-to-pay sector. In some ways, this makes the job of RE:NEW easier in that there is an offer available, regardless of tenure or financial position, but that offer may not be as attractive as it was under CERT.

So any delivery of RE:NEW will need to adapt to these new circumstances. Issues with reporting and the accuracy of referrals will need to be monitored and rectified quickly. Under ECO and Green Deal, there is additional regulation to ensure the accuracy of home

surveys, which should help to eliminate this problem. However, this new level of regulation will result in additional surveys for the property, which has already been identified as a barrier to uptake of further measures. The process of home visit to referral to installation will become even more important to the programme and each step will need to continue to engage residents in a similar way to the home visit.

Next phase of RE:NEW

The RE:NEW programme has received funding for another phase and is now underway in 2012/13. The aim of this phase of delivery is to maximise take up for the Carbon Emission Reduction Target as it approaches the end of the period and to support the transition to Green Deal and the new Energy Company Obligation.

This phase was procured by the GLA in Summer 2012 using the existing RE:NEW framework. The following delivery partners have been selected:

- North London: Willmott Dixon
- East London: Climate Energy
- South East London: Osborne Energy
- South West London: Climate Energy
- West London: Willmott Dixon

Further information

Further analysis on how easy measures and referrals should be approached, as well as other elements of project management and delivery, can be found in the RE:NEW Good Practice Manual which can be found on the GLA website: http://london.gov.uk/implementing-renew-locally

This evaluation is based on analysis of RE:NEW projects delivered across all 32 London boroughs from July 2011 – March 2012 following a demonstration phase from November 2009 – July 2010. For further information, please contact Rachael Hickman (Rachael.Hickman@london.gov.uk).

Appendix 1: Data tables

Table 1: Marketing approaches

Borough	Actual # homes (marketed to)	Penetration rate (%) (homes marketed to homes visited)	% booked through door knock	% booked through initial mail-out	% booked through community engagement	% booked through customer recommendation	% booked through other means
Barking and Dagenham	4,368	39.9%	82.1%	15.5%	2.4%	0.0%	0.0%
Barnet	6,435	23.8%	92.0%	6.6%	0.0%	1.0%	0.5%
Bexley	4,536	35.3%	50.7%	26.5%	3.6%	0.7%	18.4%
Brent	9,237	18.1%	50.8%	5.3%	0.2%	1.9%	1.6%
Bromley	6,500	26.0%	80.4%	18.2%	0.4%	1.1%	0.0%
Camden	6,685	23.2%	88.1%	8.2%	0.1%	0.3%	3.3%
Croydon	6,903	22.3%	62.3%	33.5%	2.1%	2.1%	0.0%
Ealing	8,078	20.3%	85.3%	5.2%	1.1%	0.3%	3.8%
Enfield	7,500	20.4%	78.9%	18.6%	0.0%	0.4%	2.1%
Greenwich	5,124	31.3%	90.6%	4.0%	4.0%	1.4%	0.0%
Hackney	3,372	41.8%	64.8%	32.3%	2.9%	0.0%	0.0%
Hammersmith and Fulham	5,000	34.7%	87.1%	10.5%	0.0%	0.3%	2.1%
Haringey	6,739	22.4%	87.5%	10.8%	0.0%	0.1%	1.7%
Harrow	7,980	21.3%	60.9%	14.8%	2.7%	6.5%	5.3%
Havering	3,538	13.9%	88.4%	11.2%	0.4%	0.0%	0.0%
Hillingdon	10,070	16.1%	26.1%	14.5%	2.0%	5.5%	4.6%

Borough	Actual # homes (marketed to)	Penetration rate (%) (homes marketed to homes visited)	% booked through door knock	% booked through initial mail-out	% booked through community engagement	% booked through customer recommendation	% booked through other means
Hounslow	7,864	20.5%	70.3%	26.3%	0.0%	0.2%	3.2%
Islington	5,043	31.1%	90.2%	7.8%	0.1%	0.0%	1.9%
Kensington and Chelsea	7,500	17.4%	86.2%	9.6%	0.6%	0.2%	3.4%
Kingston upon Thames	6,836	23.7%	82.6%	14.7%	1.0%	1.7%	0.0%
Lambeth	6,836	23.4%	84.7%	13.2%	0.6%	1.6%	0.0%
Lewisham	6,416	29.1%	65.2%	11.5%	5.6%	5.2%	14.2%
Merton	8,310	20.6%	75.0%	19.5%	2.0%	2.0%	1.5%
Newham	7,153	30.1%	85.7%	12.5%	1.8%	0.0%	0.0%
Redbridge	9,417	18.9%	60.2%	37.5%	2.3%	0.0%	0.0%
Richmond upon Thames	3,765	42.5%	80.8%	13.8%	1.8%	1.6%	1.9%
Southwark	11,232	14.3%	80.9%	13.5%	3.5%	2.1%	0.0%
Sutton	6,958	23.0%	74.8%	16.4%	5.4%	2.1%	1.3%
Tower Hamlets	5,488	23.0%	67.7%	27.8%	4.5%	0.0%	0.0%
Waltham Forest	5,741	30.6%	82.1%	15.4%	2.4%	0.0%	0.0%
Wandsworth	11,211	14.3%	69.7%	26.1%	2.0%	2.2%	0.0%
Westminster	9,100	16.0%	77.1%	20.2%	0.1%	0.3%	2.3%

Table 2: Key carbon outputs

Borough	# home visits	Tonnes CO_2 saved from easy measures (lifetime)	Tonnes CO_2 saved from further measures (lifetime)	Total tonnes CO_2 saved (lifetime)	Tonnes CO_2/home (lifetime)	Tonnes CO_2/home easy measures (annual)	Tonnes CO_2/home further measures (annual)	Tonnes CO_2/home total (annual)	Tonnes CO_2/home further measures (annual, where further measures installed)	Tonnes CO_2/home total (annual, where further measures installed)
Barking & Dagenham	1,744	3,481	779	4,260	2.44	0.159	0.012	0.171	0.342	0.501
Barnet	1,533	4,061	-	4,061	2.65	0.207	0.000	0.207	0.000	0.207
Bexley	1,602	2,967	871	3,838	2.40	0.148	0.014	0.162	0.376	0.524
Brent	1,670	3,908	1,352	5,260	3.15	0.166	0.020	0.186	0.704	0.870
Bromley	1,690	3,485	876	4,361	2.58	0.162	0.013	0.175	0.498	0.660
Camden	1,553	3,299	21	3,320	2.14	0.159	0.000	0.159	0.258	0.416
Croydon	1,536	3,275	1,896	5,171	3.37	0.173	0.031	0.204	0.412	0.585
Ealing	1,643	3,954	1,245	5,198	3.16	0.171	0.019	0.190	0.724	0.894
Enfield	1,532	3,073	-	3,073	2.01	0.158	0.000	0.158	0.000	0.158
Greenwich	1,602	2,909	152	3,061	1.91	0.140	0.002	0.142	0.476	0.615
Hackney	1,409	2,930	1,016	3,946	2.80	0.162	0.019	0.181	0.415	0.577
Hammersmith & Fulham	1,733	4,339	83	4,422	2.55	0.192	0.001	0.193	0.516	0.708
Haringey	1,510	3,204	-	3,204	2.12	0.168	0.000	0.168	0.000	0.168
Harrow	1,702	4,811	4,366	9,177	5.39	0.213	0.064	0.277	0.686	0.899
Havering	492	831	291	1,122	2.28	0.128	0.015	0.144	0.437	0.565
Hillingdon	1,623	4,186	4,366	8,552	5.27	0.185	0.067	0.253	0.686	0.872

Borough	# home visits	Tonnes CO_2 saved from easy measures (lifetime)	Tonnes CO_2 saved from further measures (lifetime)	Total tonnes CO_2 saved (lifetime)	Tonnes CO_2/home (lifetime)	Tonnes CO_2/home easy measures (annual)	Tonnes CO_2/home further measures (annual)	Tonnes CO_2/home total (annual)	Tonnes CO_2/home further measures (annual, where further measures installed)	Tonnes CO_2/home total (annual, where further measures installed)
Hounslow	1,614	3,750	295	4,045	2.51	0.176	0.005	0.181	0.492	0.669
Islington	1,570	3,477	-	3,477	2.21	0.163	0.000	0.163	0.000	0.163
Kensington & Chelsea	1,307	2,785	545	3,330	2.55	0.167	0.010	0.177	0.426	0.593
Kingston upon Thames	1,620	3,413	1,826	5,240	3.23	0.166	0.028	0.194	0.411	0.578
Lambeth	1,602	2,717	319	3,036	1.90	0.135	0.005	0.140	0.532	0.667
Lewisham	1,876	3,752	3,299	7,050	3.76	0.200	0.044	0.244	0.477	0.677
Merton	1,711	4,352	481	4,833	2.82	0.207	0.007	0.214	0.388	0.595
Newham	2,154	4,540	723	5,262	2.44	0.165	0.009	0.174	0.403	0.568
Redbridge	1,777	4,804	1,313	6,117	3.44	0.220	0.018	0.238	0.444	0.663
Richmond upon Thames	1,600	3,494	1,798	5,293	3.31	0.176	0.028	0.204	0.416	0.592
Southwark	1,602	2,901	476	3,377	2.11	0.144	0.007	0.151	0.410	0.554
Sutton	1,600	3,321	712	4,033	2.52	0.164	0.011	0.175	0.445	0.609
Tower Hamlets	1,264	2,264	106	2,370	1.88	0.137	0.002	0.139	0.443	0.580
Waltham Forest	1,756	3,838	959	4,797	2.73	0.173	0.014	0.186	0.487	0.659
Wandsworth	1,603	3,114	549	3,663	2.28	0.155	0.009	0.164	0.392	0.548
Westminster	1,453	3,699	-	3,699	2.55	0.196	0.000	0.196	0.000	0.196
Average	**1,584**	**3,467**	**960**	**4,427**	**2.79**	**0.1714**	**0.0152**	**0.1866**	**0.499**	**0.670**
Total	**50,683**	**110,933**	**30,716**	**141,649**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Table 3: Key referral, installation and cost outputs

Borough	# of referrals made	Referrals made (% visits)	# of further measures installed	Install. (% of referrals)	Install. (% of visits)	Total cost (GLA spend)	£/ home (GLA spend)	£/ tonne (GLA spend, lifetime CO_2)	Total cost (including leverage)*	£/ home (including leverage)*	£/ tonne (including leverage, lifetime CO_2)*
Barking & Dagenham	849	48.68%	61	7.18%	3.50%	£209,300	£120.01	£49.13	£264,882	£151.88	£62.18
Barnet	867	56.56%	-	0.00%	0.00%	£181,801	£118.59	£44.77	£201,102	£131.18	£49.52
Bexley	609	38.01%	58	9.52%	3.62%	£172,018	£107.38	£44.82	£207,241	£129.36	£53.99
Brent	241	14.43%	48	19.92%	2.87%	£176,387	£105.62	£33.53	£209,731	£125.59	£39.87
Bromley	423	25.03%	44	10.40%	2.60%	£187,849	£111.15	£43.08	£220,799	£130.65	£50.63
Camden	116	7.47%	2	1.72%	0.13%	£176,430	£113.61	£53.15	£191,785	£123.49	£57.77
Croydon	432	28.13%	115	26.62%	7.49%	£176,632	£114.99	£34.16	£230,572	£150.11	£44.59
Ealing	280	17.04%	43	15.36%	2.62%	£176,503	£107.43	£33.95	£205,678	£125.18	£39.57
Enfield	707	46.15%	-	0.00%	0.00%	£176,937	£115.49	£57.58	£194,865	£127.20	£63.42
Greenwich	579	36.14%	8	1.38%	0.50%	£172,476	£107.66	£56.34	£190,937	£119.19	£62.37
Hackney	709	50.32%	63	8.89%	4.47%	£167,405	£118.81	£42.42	£213,563	£151.57	£54.12
Hammersmith & Fulham	126	7.27%	4	3.17%	0.23%	£188,204	£108.60	£42.56	£212,597	£122.68	£48.08
Haringey	368	24.37%	-	0.00%	0.00%	£180,571	£119.58	£56.36	£200,538	£132.81	£62.59
Harrow	445	26.15%	159	35.73%	9.34%	£175,010	£102.83	£19.07	£253,110	£148.71	£27.58
Havering	370	75.20%	17	4.59%	3.46%	£58,619	£119.14	£52.25	£65,695	£133.53	£58.56
Hillingdon	410	25.26%	159	38.78%	9.80%	£175,010	£107.83	£20.46	£233,253	£143.72	£27.27

Borough	# of referrals made	Referrals made (% visits)	# of further measures installed	Install. (% of referrals)	Install. (% of visits)	Total cost (GLA spend)	£/ home (GLA spend)	£/ tonne (GLA spend)	Total cost (including leverage)*	£/ home (including leverage)*	£/ tonne (including leverage)*
Hounslow	56	3.47%	15	26.79%	0.93%	£174,656	£108.21	£43.18	£201,541	£124.87	£49.83
Islington	24	1.53%	-	0.00%	0.00%	£174,018	£110.84	£50.05	£189,412	£120.64	£54.48
Kensington & Chelsea	135	10.33%	32	23.70%	2.45%	£141,194	£108.03	£42.40	£167,498	£128.15	£50.30
Kingston upon Thames	550	33.95%	111	20.18%	6.85%	£177,171	£109.36	£33.81	£231,185	£142.71	£44.12
Lambeth	270	16.85%	15	5.56%	0.94%	£171,599	£107.12	£56.51	£193,384	£120.71	£63.69
Lewisham	428	22.81%	173	40%	9%	£268,696	£143.23	£38.11	£331,290	£176.59	£46.99
Merton	407	23.79%	31	7.62%	1.81%	£182,722	£106.79	£37.80	£221,207	£129.29	£45.77
Newham	1,822	84.59%	48	2.63%	2.23%	£258,462	£119.99	£49.11	£310,393	£144.10	£58.98
Redbridge	203	11.42%	74	36.45%	4.16%	£212,937	£119.83	£34.81	£252,965	£142.36	£41.35
Richmond upon Thames	449	28.06%	108	24.05%	6.75%	£176,570	£110.36	£33.36	£229,531	£143.46	£43.37
Southwark	288	17.98%	29	10.07%	1.81%	£175,169	£109.34	£51.87	£202,266	£126.26	£59.89
Sutton	359	22.44%	40	11.14%	2.50%	£176,145	£110.09	£43.67	£208,331	£130.21	£51.65
Tower Hamlets	842	66.61%	6	0.71%	0.47%	£151,719	£120.03	£64.01	£159,674	£126.32	£67.37
Waltham Forest	891	50.74%	50	5.61%	2.85%	£210,308	£119.77	£43.84	£243,561	£138.70	£50.78
Wandsworth	354	22.08%	35	9.89%	2.18%	£171,161	£106.78	£46.73	£200,935	£125.35	£54.86
Westminster	56	3.85%	-	0.00%	0.00%	£147,828	£101.74	£39.96	£169,492	£116.65	£45.82
Average	**458**	**28.93%**	**48**	**10.56%**	**3.05%**	**N/A**	**£112.89**	**£40.39**	**N/A**	**£134.35**	**£48.07**
Total	**14,665**	**N/A**	**1,548**	**N/A**	**N/A**	**£5,721,506**	**N/A**	**N/A**	**£6,809,011**	**N/A**	**N/A**

*Leverage funding refers to all other sources of funding for easy and further measures outside of the GLA's budget. Leverage funding came from the energy suppliers, water suppliers, central government (in the form of Warm Front) and the boroughs.

Table 4: Income maximisation

Borough	Referred to income maximisation service	% referred to income maximisation service	£ awarded[5]
Barking and Dagenham	255	15%	£51,910
Barnet	281	18%	
Bexley	18	1%	
Brent	308	18%	
Bromley	18	1%	
Camden	275	18%	
Croydon	31	2%	
Ealing	188	11%	
Enfield	293	19%	
Greenwich	12	1%	
Hackney	205	15%	£23,524
Hammersmith and Fulham	114	10%	
Haringey	237	16%	
Harrow	328	19%	
Havering	215	44%	£34,401
Hillingdon	56	3%	
Hounslow	175	12%	
Islington	377	24%	
Kensington and Chelsea	52	10%	
Kingston upon Thames	36	2%	
Lambeth	21	1%	
Lewisham	11	1%	
Merton	39	2%	
Newham	400	19%	£31,172
Redbridge	0	0%	
Richmond upon Thames	36	2%	
Southwark	18	1%	
Sutton	23	1%	
Tower Hamlets	508	40%	£49,418
Waltham Forest	157	9%	£26,068
Wandsworth	37	2%	
Westminster	329	23%	
Total	5,053	10%	£216,493

[5] Data was only available for a limited number of boroughs.