
HOME ENERGY CONSERVATION ACT FURTHER REPORT

READING BOROUGH COUNCIL
March 2015

FINAL DRAFT

HECA REPORT READING BOROUGH COUNCIL - MARCH 2015

1. INTRODUCTION

The Home Energy Conservation Act 1995 (HECA) requires Local Authorities to report to Government by 31st March 2015 on practical actions underway to improve household energy efficiency in their area. Progress reports are to be submitted at two yearly intervals up to March 2027.

This report provides a short review of the main actions undertaken from March 2013 to March 2015 and goes on to provide detail on current and planned activities to improve household energy efficiency to 2017.

Reading's Corporate Plan 2015-2018 (Helping to narrow the gaps in Reading) sets out a number of service priorities for developing and maintaining Reading as an attractive place to live, including the following objectives that are relevant to improving the energy performance of housing and reducing resident's fuel poverty levels:

- Safeguarding and protecting those that are most vulnerable¹
 - *Reducing excess winter deaths*
- Providing the best life through education, early help and healthy living
 - *Reducing child poverty (fuel poverty - decent homes)*
- Providing homes for those in most need¹
 - *Reducing fuel poverty*
- Keeping the town clean, safe, green and active¹
 - *Reducing impact on climate change through carbon reduction*
- Providing infrastructure to support the economy¹
 - *Carbon reduction (Renewable energy infrastructure and energy efficiency)*

In addition, Reading's Climate Change Strategy 'Reading Means Business on Climate Change' clearly sets out the intention to tackle fuel poverty through the identification of a number of strategic priorities relating to energy efficiency in housing.

Reading Borough has a population of 159,200, comprising around 63,000 houses, 27% of which were built pre 1919. There are also a high proportion of private rented properties with many experiencing poor thermal comfort.

2. GREEN DEAL AND ECO (Energy Company Obligation)

¹ http://beta.reading.gov.uk/media/2634/Corporate-Plan-2015-18/pdf/Corporate_Plan_2015-18_FINAL.pdf

2.1 Targeting

Early in 2013 Reading Borough Council was successful in being awarded funding under the Department of Energy and Climate Change's Green Deal Pioneer Places fund. The bid submission also included the purchase of a database which allows the identification of the type, age and wall type of Reading's domestic properties. This database allowed the authority to identify and map areas with predominantly solid wall homes.

We will continue mapping all available energy efficiency rating data of our residential accommodation on a Geographic Information System (GIS) and utilise fuel poverty, housing stock information and heat loss maps to enable prioritisation and targeting of energy efficiency improvements. We will also continue the use of MOSAIC to help target and encourage take up further. (Mosaic is a **cross-channel consumer classification** tool designed to help the user understand the demographics, lifestyles, preferences and behaviours of the UK adult population in detail.)

2.2 Energy Efficiency (ECO and Green Deal)

The Green Deal and ECO obligations started in January 2013 replacing all other previous policy mechanisms to make homes energy efficient.

For those able to pay, the Green Deal offers a means of financing improvements through a loan which is paid back via the household energy bill. Whilst 'pay as you save' is perceived as an interesting concept by many households there has been little take up of Green Deal in the area or nationally. Accordingly, Reading Borough Council developed an application to DECC in January 2014 to target measures in 330 Victorian solid wall properties. The bid was not successful because the number of people who were predicted to sign up for Green Deal finance was deemed to be too cautious. The bid round was very competitive and only a small percentage of applications were successful.

For those unable to pay, or in circumstances where the cost of work is too high to be financed as a loan, the energy companies subsidise the work through additional funding. The grant is called the 'Energy Company Obligation' (ECO). The amount of funding available varies depending on the measures installed, the carbon saved and the vulnerability of the household. ECO is made up of three parts:

- Home Heating Cost Reduction Obligation (HHCRO), also known as 'Affordable Warmth', for people on certain benefits (private rented and owner occupier only)
- Carbon Emissions Reduction Obligation (CERO) for houses which are harder to treat (social housing and private sector)
- Carbon Savings Communities Obligation (CSCO) Area based energy efficiency assigned by postcode.

Reading Borough Council is in the process of adopting a negotiated contract let by Southampton City Council which appointed MITIE as the main ECO works provider.

Originally, ECO funding identified hard to treat properties as a priority and set substantial national targets, which were mandatory for energy companies to meet. In the winter of 2013, the Government changed these targets, reducing them by two thirds. This had the effect of all but ending programme funding for external wall insulation, a key issue for Reading, given its housing stock.

The reduction of ECO funding has limited the ability of our selected partner to access funding from the utilities, particularly solid wall insulation. The contract is being utilised, however, to develop decentralised energy approaches which are now funded under the revised scheme.

The main changes to ECO are:

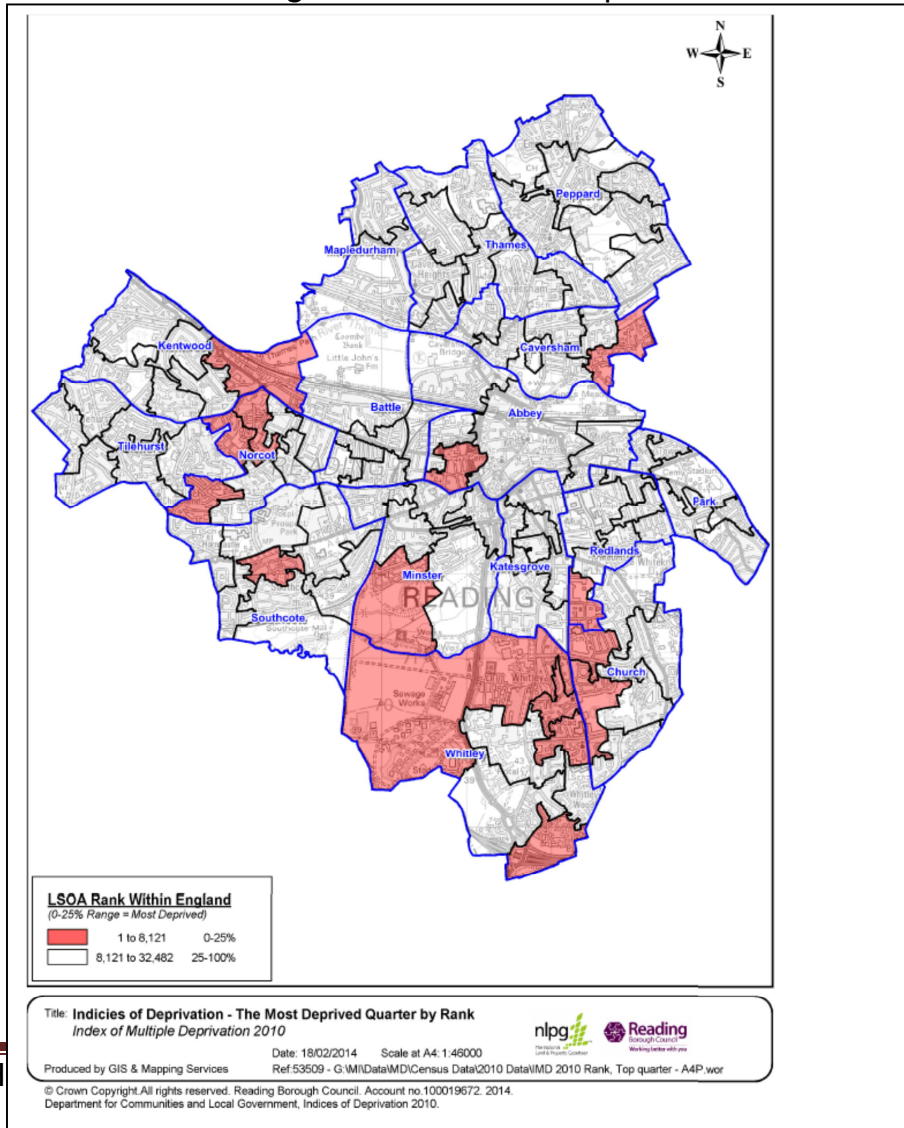
- **Carbon Emissions Reduction Obligation - CERO** (extended to 2017)- The budget was reduced by 33% (from around £ 760 million a year to around £ 507 million a year) but the eligible measures have been expanded to include loft and cavity wall insulation, as well as District Heating Systems in addition to Solid Wall Insulation (SWI)
- **Carbon Saving Community Obligation - CSCO-** and Home Heating Cost Reduction Obligation (extended to 2017) targets unchanged. CSCO was originally set up to assist with insulation measures for areas ranked amongst the 15 % most deprived. ECO now funds measures in areas amongst the 25 % most deprived using the Index of Multiple deprivation.

Provisional figures show that 1576 measures were installed under ECO up to the end of September 2014. Detailed information is included in Table 1. It is envisioned that a similar level of activity will continue until 2017. In line with this, we will scope out area based projects which focus on tackling fuel poverty, reducing energy consumption and fuel bills for residents.

Table 1: Reading Green Deal and ECO Statistics (Up to Dec 2013)

Number of Green Deal Assessments Lodged	1,199
Green Deal Assessments delivered under Pioneer Places	487
Number of cashback vouchers paid	31
Provisional number of ECO HHCRO measures	361
Provisional number of ECO CERO measures	950
Provisional number of ECO CSCO measures	265

CSCO areas for Reading are shown in the map below.



We recognise the opportunities offered through the ECO scheme and we will continue to increase awareness of energy efficiency activities for residents and sign post information through a broad range of communication channels.

The Council's sustainability team also supports several communication activities to encourage take up of energy measures in partnership with Reading Climate Change Partnership, thermal imaging of property throughout the Borough to highlight inefficient use of fuel, events, etc.

In the next year, officers will continue to assess and develop projects which find new ways to access funds to help residents become more energy efficient.

3. FUEL POVERTY

The Council's Corporate Plan 2015 - 2018 and the adopted climate change and poverty strategies include a renewed focus on this objective.

Following the Hills Fuel Poverty Review, the Government introduced a new definition of fuel poverty. Under this new indicator, a household is considered fuel poor if:

- They have required fuel costs that are above the median level; and
- Were they to spend that amount they would be left with a residual income below the official poverty line.

Using the new definition of Fuel Poverty, Reading Borough Council has 6695 households experiencing fuel poverty as per 2012 year figures². There are practical challenges in identifying houses in fuel poverty and more work needs to be done in setting up criteria and using proxy-indicators to identify households that could benefit from receiving improvements.

The original fuel poverty target, as described in the 2012 HECA Guidance, has been replaced with a new statutory target to “*ensure that as many fuel poor homes in England as is reasonably practicable achieve a minimum energy efficiency rating of a Band C by 2030*”. In addition to the 2030 statutory target, the Government consultation, “*Cutting the cost of keeping warm*” also proposed the following interim milestones:

² <https://www.gov.uk/.../statistics/2012-sub-regional-fuel-poverty-data-low>

- As many fuel poor homes in England as is reasonably practicable to Band E by 2020
- As many fuel poor homes in England as is reasonably practicable to Band D by 2025

In Reading a large proportion of these properties were built before 1919 and have solid walls, consequently it will be more difficult to improve energy efficiency of those homes with lower cost measures and this is why they are considered 'hard to treat'.

The Borough also has high concentrations of more modern housing (post - 1980). There are also a high number of households in private rented accommodation in Reading.

Private sector housing conditions in Reading have improved substantially in the seven year period from 2006 as evidenced by a reduction in the number of non-decent homes from 20,500 dwellings in 2006 to 12,200 dwellings in 2013: a reduction of 8,300 non-decent homes or 40%.

The area of greatest improvement, within the Decent Homes Standard, is thermal comfort linked to energy efficiency of domestic dwellings. However despite improvements in energy efficiency, fuel poverty has increased in the Borough as shown in the Private Sector House Condition Survey (2013). This is primarily related to increases in energy tariffs and the economic circumstances of households affected.

Considering locality profile and in line with the new targets set up nationally, we will establish mechanisms to identify and target vulnerable households most in need of assistance.

3.1 Fuel Poverty Project - Winter Watch

The Council's Winter Watch Project ran from December 2013 to March 2014 and from November 2014 to March 2015. The latter, with the support of Public Health budget as part of the aim to deliver on poverty pledges adopted by the Council in November 2013. The aim of this project is providing expert advice and practical hands-on support to help vulnerable people to keep warm during the winter months whilst also reducing carbon emissions. Target groups include pensioners, families with young children, people with serious illnesses and disabilities and those who receive benefits.

In order to deliver the project, Reading Borough Council worked in partnership with a number of local community groups and voluntary organisations. Partners included: Reading Citizens Advice Bureau, Berkshire Community Foundation, Aster Living, Age UK Berkshire, Reading Voluntary Action and Transition Town Reading. Reading CAB was also a delivery partner and received a grant to run an 'energy

bills support service' from January to June 2014 which helped 600 residents. Transition Town Reading also developed a draught proofing project that supported 45 households.

Table 2: Outputs Winter Watch project (seasonal)

	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u> ⁽¹⁾	<u>Total</u>
No. of Referrals	157	169	176	502
No. of Emergency Payments	100	78	96	274
No. of Emergency Heating Equipment	4	12	22	38
No. of Properties Draught proofed	18	14	5	37
No. of ECO Applications	4	10	8	32
No. of Warm Home Discount Applications	0	15	13	28

⁽¹⁾ Provisional data to 6/02/15

Whilst the Council works hard to get energy efficiency measures into people's homes it is recognised that fuel poverty cannot always be resolved by these alone and income maximisation also needs to be considered. In 2014 a targeted campaign was developed to support local residents to find out whether they are entitled to additional income benefits. Council staff have also been trained in fuel debt advice and in recognising the links to general debt advice. Additionally, Reading Borough Council works closely with Citizens Advice Bureau to provide benefits advice.

In summary, as fuel poverty is an issue which impacts on so many different aspects, we will continue to work with a wide range of agencies and departments in the Council to create opportunities for joint working across the following sectors: housing, benefits, environmental health, sustainability, financial advice etc.

It is proposed that officers continue to work through the extensive networks established under the 'Winter Watch' project to service those who are most vulnerable to the impacts of fuel poverty. This would be achieved through the development of an all year around project that addresses issues around fuel poverty, affordable warmth and well-being. Officers will explore alternative sources of funding.

3.2 Links to Public Health Duties

Local Authorities in England and Wales have held the responsibility for Public Health and its improvement since April 2013. This was formerly delivered under the NHS Primary Care Trust's roles.

The new Public Health Outcomes Framework sets out desired high level outcomes and how these will be measured. Improved housing and reduced fuel poverty contribute to those outcomes and have an impact on increased healthy life expectancy, general wellbeing, mental health and seasonal excess mortality.

Reading Borough Council public health team has been actively involved in the organisation of the 'Winter Watch' project since its inception, as explained in the previous section. The scheme is organised as a one-stop referral system. In line with this, we will continue to work with health workers through this scheme and organise training for front line staff to ensure that all health professionals are aware of local services to improve warmth in the home.

3.3 Private Sector Energy Efficiency work

Over the past year the Council's Housing Standards Team has addressed many excess cold hazards through its enforcement activities and its support to private landlords, helping to improve health and reduce CO₂ emissions. These activities resulted in increased awareness about grants available through ECO for boiler replacements. We actively promote those grants available to landlords and tenants through the existing Deposit Guarantee scheme. Boiler upgrades and replacements have helped tenants to reduce energy costs and run warmer homes.

Other grants and loans are provided annually by Reading Borough Council to improve thermal comfort and/or energy efficiency of homes for vulnerable home owners, primarily those receiving certain benefits. Eight properties had energy efficiency measures installed as part of grant aided works in 2013/14 and three properties thus far in 2014/15.

The Energy Act 2011 requires that from April 2018 all private rented dwellings should have a minimum standard Energy Performance Certificate rating of 'E'. Reading Borough Council will continue to work with landlords, their agents and occupying tenants to raise awareness of the need to meet the standard, highlight the benefits of energy efficiency and secure improvement to their properties when funding is available.

4. THE COUNCIL'S OWN HOUSING STOCK

Reading Borough Council directly maintains 5,500 properties. The Council has achieved the Decent Homes Standard for its housing stock but also seeks to ensure that energy efficiency is continuously incorporated into building improvements.

We have invested in heating and insulation improvements to our own stock and regularly trial new and innovative measures. This work has significantly increased the quality in our own housing stock as shown in the next sections.

4.1 Targets and SAP rating

Reading Borough Council has procured software so that improvements in energy efficiency can be stored in a database format and regular reports can be used to monitor changes to the Standard Assessment Procedure - SAP³ rating in the Council's housing stock. Updates are made when heating systems are installed or improved, insulation works carried out or other improvements made such as installation of double glazing. Targets for improvement have been set up as per Table 3.

³ SAP Standard Assessment Procedure is a measure of the energy efficiency of a property on a scale from 1-100

Table 3: SAP Ratings and Targets (using Rd SAP 2009 Elmhurst software)

Band	SAP Rating Points	RBC Housing stock in each category (Oct 2014)	Target APR 2016
A	92-100	0	40
B	81-91	243	280
C	69-80	4090	4292
D	55-68	1159	900
E	39-54	10	0 (excl refusals)
F	21-38	10	0 (excl refusals)
G	1-20	0	0

4.2 Energy Efficiency

Loft and Cavity wall Insulation

We have installed loft insulation of 250 mm thickness or over in 1844 council-owned homes. A review was conducted in 2014 and levels of insulation were surveyed in 3795 lofts. 340 lofts have yet to be surveyed. Targets for topping up insulation are now set in a new action plan.

All properties that are suitable for cavity wall insulation have had this work completed. Each year, less than a dozen homes become known to us which were missed on earlier contracts. We are working towards bringing the remaining properties up to the required standard by 2015.

Solid wall insulation in hard to treat properties

The cross-wall (solid wall) properties typically occur in late 1960's and 1970's estates such as Hexham Road, Dee Park, Scott and Elliot Close (among others). These estates also have some of our lower energy ratings. We are targeting some cross wall type properties to improve loft & wall insulation.

Pilot studies were carried out in 2013 to explore options to insulate cross wall properties. In 2014/15 we have commenced works to insulate 27 homes at Hexham road and 60 homes at Dee Park. Both programmes will extend into 2015/16 to additional properties.

4.3 Heating Systems

Currently, Reading Borough Council invests £900k in upgrading heating systems annually. This rolling replacement programme will continue to 2017. 80% of

properties have a modern boiler which is less than fifteen years old and 62 % have A or B rated boilers.

We will also target 50 households that are off the gas grid and using inefficient electric storage heaters to encourage and support them to use an alternative source of fuel (e.g. connection to gas mains and a new central heating system). Additionally, we will carry out a pilot study that will monitor performance of modern storage heaters in 40 flats.

4.4 Renewable Energy

A programme was agreed in December 2013 to install solar panels on approximately 500 council houses.

Council houses have been selected on their technical suitability. Council tenants who do not benefit from solar panels on their houses will benefit from an Energy Efficiency Advice Service scheme which will provide a range of support including:

- Full energy 'health check' of the house
- Full check of entitlement to energy-saving grants and funding and help to apply for them
- Help with reprogramming heating and hot water controls so that the system runs more efficiently

The solar panels will be installed at no cost to eligible homes; tenants will benefit from free electricity generated by the solar panels in their homes worth an estimated £100 to £300 annual saving in energy costs per household.

4.5 Decentralised Energy

As part of an ongoing commitment to reduce energy consumption and tackle fuel poverty, RBC Sustainability team and Housing Officers are currently assessing opportunities to replace Coley High Rise flats heating system with a more affordable and low carbon option.

Coley High Rise comprises three residential tower blocks situated to the west of Reading centre. The site is located within an area ranked in the lowest 10% as measured by the Indices of Multiple Deprivation (IMD) in England and as such is likely to experience a considerable degree of fuel poverty.

Reading Borough Council was recently successful in a bid to the Government Department of Energy and Climate Change's Heat Networks Delivery Unit (HNDU) to fund a feasibility study and project development of the three Coley High Rise towers. In addition we will develop a heat map of the surrounding areas which

may help to identify areas for future work. This piece of work will be developed in 2015.

5. PLANNING

5.1 Current Policy

The Local Development Framework contains policies which promote energy efficiency in new developments and in conversion of buildings to residential use.

To meet these requirements: -

- All new housing is required to meet the Code for Sustainable Homes Level 3 as a minimum standard, and all new commercial developments are required to meet the most up-to-date BREEAM 'Very Good' as a minimum standard;
- On larger developments of more than 10 dwellings or 1,000 m² of floor space, ensure that 50% of the provision meets Code for Sustainable Homes Level 4 Homes and/or BREEAM 'Excellent' standards;
- All new developments maximise the use of energy efficiency and energy conservation measures in their design, layout and orientation to reduce overall energy demand.

5.2 Heritage and Energy efficiency

In 2013/14 Reading Borough Council worked jointly with English Heritage and Parity Projects Ltd. to identify suitable measures to improve the energy efficiency of older solid wall properties. Four pre-1919 solid wall houses of differing sizes and configurations were selected and in-depth surveys were carried out by Parity Projects Ltd, producing reports for each house which detailed the energy efficiency of the houses, the recommended measures for improvement and the likely costs.

A second phase of this work is planned for next year when we will look in detail at how to disseminate best practice in improving the energy efficiency of pre 1919 stock.

5.3 Road to Zero Carbon -Standards after 2016

The Building Regulations with zero carbon requirements are due to be introduced in 2016 (in advance of the 2020 deadline of the near zero carbon in EPBD - Energy Performance in Buildings Directive).

In August 2013, the government issued a consultation called “Next Steps to Zero Carbon Homes - Allowable Solutions”, which explains the proposed delivery options for zero carbon, including 100% on site or connected measures.

Allowable Solutions is the proposed mechanism to enable mass market delivery of zero carbon building without negatively impacting development potential. Developers will have the freedom to choose whether to achieve zero carbon on site or to develop off-site actions through a local or national fund.

Allowable Solutions form the third level of the zero carbon hierarchy (after emission reduction through energy efficiency measures and on-site renewable energy generation), and are intended to facilitate the delivery of off-site carbon reduction projects using funds collected from developers.

The evolving policies relating to the built environment present new opportunities for local authorities to play a role in the identification and delivery of carbon-saving projects. This could include the renovation of existing building stock in the near vicinity, or investment in off-site renewable energy or heating schemes. In this way, developers should be ‘allowed’ to deliver the equivalent carbon benefit via payments for offsite carbon reduction projects.

The Government has yet to make a detailed policy announcement on the delivery structure and scope of allowable solutions. There are a number of decisions that must be made in order to identify how an off-set fund could be developed further. There is potential locally to develop a portfolio of CO₂ reduction projects and to generate funding which can support these over time.

READING HECA REPORT – ACTION PLAN 2015 - 2017

Ref	Objective	Actions	Outcome /(measurement)	Timescale
1.	STRATEGIC COMMITMENT			
1.1	Deliver Climate Change Strategy Actions.	<ul style="list-style-type: none"> Report on performance against actions in Climate Change Strategy Action Plan. 	<ul style="list-style-type: none"> To monitor performance of the Council and other partners addressing climate change approach 	Annually
1.2	Incorporate energy efficiency in relevant strategies	<ul style="list-style-type: none"> Coordinate with Anti-Poverty Strategy and new Housing Strategy and Local Plan 	<ul style="list-style-type: none"> Integrate affordable warmth into Council strategies. (reduced numbers of fuel poor) Coordinate approach to delivery 	Poverty - 2015/16 Housing - 2015/16 Local Plan - 2016
2.	BASELINE DATA AND ANALYSIS			
2.1	Improve quality and scope of data held by Reading to support energy efficiency programmes	<ul style="list-style-type: none"> Gather social data and fuel poverty data Load data onto corporate GIS 	<ul style="list-style-type: none"> Data sets for : Social (Mosaic, income) Fuel poverty Property condition and type. 	Annually updated data sets

Ref	Objective	Actions	Outcome /(measurement)	Timescale
2.2	Evaluate Green Deal Assessment take-up	<ul style="list-style-type: none"> • Load data from Green Deal Surveys/Analyse them 	<ul style="list-style-type: none"> • Policy evaluation (number taken up) 	Ongoing
3.	PRIVATE HOUSING			
3.1	Access funding to provide measures for low income households and areas	<ul style="list-style-type: none"> • Refer customers to ECO funding opportunities. • Enter into contract with delivery partner to refer householders for ECO funding and/or Green Deal. 	<ul style="list-style-type: none"> • To deliver energy improvements to vulnerable houses. (Number of houses referred for ECO funding) • Complete stage 2 of contract with Southampton ECO contract provider. 	Annual reporting 2015/16
3.2	Identify hard to treat properties and promote/develop options to improve energy efficiency	<ul style="list-style-type: none"> • Identify ECO eligible areas and households through available data and provide referrals to delivery partner where appropriate to deliver measures under ECO 	<ul style="list-style-type: none"> • Produce adequately targeted plan to enable a Borough wide approach for ECO delivery in Reading. • To scope focused and area based projects to tackle fuel poverty, reduce 	2015/2016

Ref	Objective	Actions	Outcome /(measurement)	Timescale
			<p>energy consumption and reduce fuel bills for residents.</p> <ul style="list-style-type: none"> • Installation of measures to hard to treat properties. (targets to be defined in above plan and pending funding) 	
3.3	Reduce fuel poverty and improve winter resilience	<ul style="list-style-type: none"> • Run re-designed Winterwatch programme as an all year round fuel poverty project • Investigate potential capital funding for complementary measures (draught proofing, etc) 	<ul style="list-style-type: none"> • Reduce excess winter death rate. • Improved health and warmer homes. (health data and SAP ratings) • Reduced CO₂ emissions (calculated from number of measures and overall for Borough from Govt data) 	Winters 2015 and 2016
3.4	To encourage private sector landlords and private owners to improve	<ul style="list-style-type: none"> • Promotion of ECO to landlords through Deposit Guarantee Scheme • Grants and Loans to 	<ul style="list-style-type: none"> • Improve energy efficiency of homes. (EPC ratings) • To reduce fuel 	Ongoing

Ref	Objective	Actions	Outcome /(measurement)	Timescale
	energy efficiency	<p>include energy efficiency up-grades</p> <ul style="list-style-type: none"> Promote low cost tariffs for key meter users 	<p>poverty among tenants. (number of receiving intervention)</p> <ul style="list-style-type: none"> Empty homes standard improved. 	
3.5	Raise awareness of existing energy efficiency funding options	<ul style="list-style-type: none"> Signpost householders to information sources and funding opportunities 	<ul style="list-style-type: none"> To ensure residents receive good information To ensure private landlords have a greater understanding of the GD initiative including ECO. 	Ongoing
3.6	Facilitate a good working partnership between agencies	<p>Look at each sector in detail:</p> <ul style="list-style-type: none"> Health sector Community Sector Fuel and Debt Advice Organise health front line workers training. 	<ul style="list-style-type: none"> Develop partnership working between partners in areas to ensure that the most vulnerable are provided with support. Establish and maintain fuel poverty referral 	Ongoing

Ref	Objective	Actions	Outcome /(measurement)	Timescale
			network between agencies.	
4.	SOCIAL HOUSING			
TARGET 1: REDUCE THE NEED FOR ENERGY				
4.1	Improve energy efficiency of social housing through accessing funding and installing measures	<ul style="list-style-type: none"> Carry out analyses of housing stock and planned investment Deliver ECO projects 	<ul style="list-style-type: none"> To access ECO funding to install measures across RBC and other social provider owned 'hard-to-treat' stock. (amount of ECO funding drawn) To further improve the energy efficiency of Reading Borough Council and other Social provider owned homes. (measured by SAP ratings) 	2014/16
4.2	To alleviate damp	<ul style="list-style-type: none"> Create a damp register and continue to support 	<ul style="list-style-type: none"> Ability to track customers, offer 	2015/16

Ref	Objective	Actions	Outcome /(measurement)	Timescale
	conditions in properties	customers where damp conditions occur	regular support, advice and solutions. (number of properties remedied)	
4.3	To improve the average SAP Energy rating of the housing stock	<ul style="list-style-type: none"> Target cost effective improvements and funding to achieve target at least cost 	<ul style="list-style-type: none"> An average SAP of 72 for council housing stock 	SAP 72.7 by 2015 SAP 73 by 2016
4.4	To set a minimum acceptable energy rating for council housing stock	<ul style="list-style-type: none"> To carry out the most cost effective measures to improve the energy rating to a minimum of SAP 55 	<ul style="list-style-type: none"> Reduced energy bills for tenants and a raised thermal standard 	Min SAP 55 for all (except refusals) by Apr 2016
4.5	To raise the minimum local standard loft insulation from 200 mm to 250 for RBC owned properties.	<ul style="list-style-type: none"> Survey the 633 lofts on which data is missing Offer loft insulation to the 703 properties known to have less than 150mm and any non - surveyed 	<ul style="list-style-type: none"> Cost effective improvements for all council tenants with a pitched roof 	Dec 2015 Dec 2015
4.6	Every wall cavity of more than 30mm width to be insulated for RBC owned properties.	<ul style="list-style-type: none"> Whilst all known cavity wall insulation has been done we will continue to target any missed instances. 	<ul style="list-style-type: none"> Cavity walls insulated 	To address as they arise
4.7	Trial programme to	<ul style="list-style-type: none"> Use funding to explore options to insulate cross 	<ul style="list-style-type: none"> Warmer properties 	180 homes

Ref	Objective	Actions	Outcome /(measurement)	Timescale
	insulate solid walls	wall properties.		insulated by 2016
4.8	Review landlord lighting, and continue rolling replacement/re-lamping programme.	<ul style="list-style-type: none"> To introduce energy efficient LED lighting triggered by movement sensors. 	<ul style="list-style-type: none"> Better and more reliable lighting for customers in our blocks of flats. Reduced energy consumption and repairs. (Council energy reporting) 	Current programme to 2015
TARGET 2: USE ENERGY MORE EFFICIENTLY IN BUILDINGS				
4.9	Where we have gas central heating (currently 85% of homes), set a minimum boiler standard of Energy rated A or B.	<ul style="list-style-type: none"> Continue rolling replacement programme. 	<ul style="list-style-type: none"> All boilers to be A or B rated 	A/B rated by 2018 Low SAP homes boiler replacement by April 2015
4.10	Storage heater review.	<ul style="list-style-type: none"> Offer fuel switch Explore range of solutions 	<ul style="list-style-type: none"> Outcome depends on take up. In past stage of fitting meters has reduced take up 	2 years initially with further programme of works
TARGET 3: RENEWABLE ENERGY				
4.11	Promote renewable	<ul style="list-style-type: none"> Work on the business case to assess renewable 	<ul style="list-style-type: none"> To increase renewables up-take 	2016

Ref	Objective	Actions	Outcome /(measurement)	Timescale
	energy installations	options and costs		
4.12	Coley high rise District heating	<ul style="list-style-type: none"> Maximise the use of DECC HNDU funding for decentralised energy studies Develop feasibility study to analyse potential options to replace heating system 	<ul style="list-style-type: none"> Full technical and financial feasibility study Options appraisal. 	2015/16
4.13	Monitor data on air source heat pumps recently fitted	<ul style="list-style-type: none"> Check fuel used by tenants in these flats compared with their previous fuel bills 	<ul style="list-style-type: none"> Clarity on payback costs and savings to the tenant compared to the sum invested 	Review costs and policy on an annual basis
4.14	Fit solar panels to 500 homes	<ul style="list-style-type: none"> Procurement and installation of solar panels. 	<ul style="list-style-type: none"> Panels offered and fitted to selected houses 	2015/16
5.	ZERO CARBON HOMES			
5.1	Ensure that new buildings in Reading meet high standards of energy efficiency in their design and construction and install the most appropriate on site renewable energy generating technologies.	<ul style="list-style-type: none"> Sustainable Design Policy and guidance Facilitate implementation of decentralised energy policies 	<ul style="list-style-type: none"> Increased levels of new developments achieving high sustainability standards. (Code for Sustainable Homes, Part L compliance) Increased generation of energy from on-site renewables 	Ongoing until New Housing Standards Review and in line with National Policy

Ref	Objective	Actions	Outcome /(measurement)	Timescale
			(total registered systems) <ul style="list-style-type: none"> Better adapted homes to Climate Change 	
5.2	Identify Council's approach to a Zero Carbon Homes and allowable solutions policies	<ul style="list-style-type: none"> Agree on framework for investing in CO₂ reduction projects. 	<ul style="list-style-type: none"> Ensure investment in the Reading Area (number of local schemes supported) Cost effective energy efficiency projects (carbon savings achieved) 	Summer 2016
6. LOW CARBON ECONOMY				
	Ensure that Local SMEs continue to be part of the solution for Energy efficient and renewable installations on housing in Reading	<ul style="list-style-type: none"> Maintain links with local SMEs from 'Re:start Local' project by regular email communication Promote Reading UK CIC's project Elevate Business to SMEs Work with LEP to ensure any Meet the Buyer events are relevant to and 	<ul style="list-style-type: none"> More opportunities for local companies to gain business Job opportunities Training opportunities (number taken up) 	2017

Ref	Objective	Actions	Outcome /(measurement)	Timescale
		<p>promoted to 'green businesses'</p> <ul style="list-style-type: none"> Promote apprenticeship scheme with local firms in the building/ energy efficiency/ renewables sector 	<ul style="list-style-type: none"> Apprenticeships (number taken up) 	