HOME ENERGY CONSERVATION ACT  1995

FURTHER REPORT

MARCH 2017
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1. Introduction

The Home Energy Conservation Act 1995 requires all English local authorities to report on activity in their area to improve energy efficiency in residential accommodation and to report to the Secretary of State on progress in implementing the measures. Local authorities are required to publish these reports every two years up until March 2027.

The Secretary of State for Business, Energy & Industrial Strategy (BEIS) requires reports to include information on:

- Local energy efficiency ambitions and priorities
- Measures that take advantage of financial assistance and other benefits offered from central Government initiatives, to help result in significant energy efficiency improvements or residential accommodation
- Measures which the authority has developed to implement energy efficiency improvements cost-effectively in residential areas by using area based/street by street roll out involving local communities and partnerships
- A timeframe for delivery and national and local partners

Peterborough City Council recognises the key role it plays in improving energy efficiency of residential accommodation in its area. This further report will update on the progress made since the last published report in March 2015 and will outline the ambitions and priorities for the future. This is a collaborative report that has been produced in consultation with colleagues across the Council including the Housing Programmes Team, the Environment, Transport and Future City Team, and Strategic Resources.

2. National Context

The Council is committed to improving the energy efficiency of its residential accommodation and to contribute to the Government’s legal requirement introduced by the Climate Change Act 2008. The Carbon Plan published by the Department of Energy & Climate Change (DECC) in 2011 outlined the emissions reduction targets including:

- To reduce greenhouse gas CO2 emissions by 29% by 2017, 35% by 2022 and by 50% by 2027

Tackling Fuel Poverty

The Government published “Cutting the Cost of Keeping Warm - A Fuel Poverty Strategy for England” in March 2015 which introduced a new fuel poverty target:

- The fuel poverty target is to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency rating of Band C, by 2030

Interim milestones were also set:

- as many fuel poor homes as is reasonably practicable to Band E by 2020 and
- as many fuel poor homes as is reasonably practicable to Band D by 2025
Key fuel poverty indicators have been introduced:

- Energy efficiency: As well as headline figures on SAP ratings, BEIS will monitor installation of specific measures, including:
  - presence of a central heating system in fuel poor households;
  - number of fuel poor households with non-condensing boilers; and
  - number of fuel poor households with loft and cavity wall insulation.
- Renewables: BEIS will monitor the installation of renewable technologies in fuel poor households to better understand the impact of these technologies on energy requirements.
- Distribution: It is important to understand the rate of improvement in energy efficiency in fuel poor households in relation to the national average. BEIS will therefore publish the distribution of households across the different energy efficiency bands for both fuel poor households and all households.
- Non-gas homes: Living in a non-gas home is a significant factor in being fuel poor, and these households face some of the highest energy costs. Paying particular attention to the fuel poverty gap for non-gas households, both rural and urban, will help us to understand how their situation is changing.
- Children in fuel poverty: There is a link between educational attainment and living in cold homes, so BEIS will monitor the number of children in fuel poverty and will publish the number of fuel poor households with a child aged under 16 years.

ECO (Energy Company Obligation)

This is an obligation on energy suppliers aimed at helping households cut their energy bills and reduce carbon emissions by installing energy efficiency measures. The Government has confirmed plans for a supplier obligation to run for five years from April 2017 at an estimated level of £640 million per year, rising with inflation. ECO2 ended in March 2017 and has now moved into a transitional period (ECO2t) for 18 months, taking us to September 2018.

Energy suppliers will be able to achieve up to 10% of their affordable Warmth obligation (nearly £70 million over the 19 months period) by installing energy efficiency measures in households declared eligible by Local Authorities. This “flexible eligibility” falls into two main categories of private tenure households:

- Fuel poor households, particularly those who are not in receipt of ECO eligible benefits and the estimated 20% of fuel poor households who are not in receipt of any benefits; and
- Low income households that are vulnerable to the effects of living in a cold home

Feed In Tariffs

The FIT scheme is a government programme designed to promote the uptake of small-scale renewable and low-carbon electricity generation technologies. Introduced on 1 April 2010, the scheme requires participating licensed electricity suppliers (FIT Licensees) to make payments on both generation and export from eligible installations. Following a 65% reduction in government incentives paid to householders, data published by the energy regulator shows there was 21 megawatts (MW) of small solar installed in February and March this year, after a new, lower incentive rate came into effect. By contrast, energy department figures show that for the same period in 2015, 81MW was installed.
Renewable Heat Incentive

The Domestic Renewable Heat Incentive (Domestic RHI) is a government financial incentive to promote the use of renewable heat. Switching to heating systems that use eligible energy sources can assist the UK reduce its carbon emissions and meet its renewable energy targets. People who join the scheme receive quarterly payments for seven years for the amount of clean, green renewable heat it’s estimated their system produces. The Government has withdrawn support for solar stating that it has the highest tariff of all the RHI and this measure is the least cost effective. Evaluation also found that over half of owner occupiers would have installed solar even without the incentive.

SMART Meters

Smart meters are the next generation of gas and electricity meters and offer a range of intelligent functions. SMART Meter roll-out is in progress and should be completed nationally by 2020.

3. Local Context

3.1 Environmental Capital

Peterborough City Council is a unitary authority serving a growing population of approximately 194,000 residents (ONS mid 2015 estimate). In terms of carbon each city resident produces an average of 5.6 tonnes of CO2.

Peterborough has a long-standing commitment to environmental leadership. In 1992 Peterborough became one of four UK Environment Cities. In 2004 we signed the Nottingham Declaration, which acknowledges our contribution to climate change.

The Peterborough Sustainable Communities Strategy 2008 - 2021 is the overarching strategy that guides the work of Peterborough City Council and its partners. The strategic priorities are:

- Drive growth, regeneration and economic development
- Improve educational attainment and skills
- Safeguard vulnerable children and adults
- Implement the Environment Capital agenda
- Support Peterborough’s culture and leisure trust – Vivacity
- Keep all our communities safe, cohesive and healthy
- Achieve the best health and wellbeing for the city

We recognise that addressing climate change is critical to the success of achieving those strategic priorities. We also lead by example. As one of the most visible organisations and largest employers in Peterborough we are in a key position to lead on tackling climate change. We will, where possible, work alongside our strategic partners to undertake both mitigation efforts to reduce our carbon dioxide emissions and adaptation efforts to future proof the city from extreme weather events. This will demonstrate our commitment to moving towards a low carbon future.

The Environment Action Plan: City-Wide and Environment Action Plan: Peterborough City Council documents were adopted by Full Council in April 2017. They aim to provide a clear vision for how
Environment Capital will be delivered. The ‘Environment Action Plan: City Wide’ is a document that has been developed with stakeholders from organisations across Peterborough. The ‘Environment Action Plan: Peterborough City Council’ focuses on the policy position, achievements and targets specific to the City Council. The plans are broken down into ten areas and comprise achievements to date, interim targets to 2020 and visions to 2050. The ten themes are:

- Zero Carbon Energy
- Sustainable Water
- Land Use & Wildlife
- Sustainable Materials
- Local & Sustainable Food
- Zero Waste
- Sustainable Transport
- Culture & Heritage
- Equity & Local Economy
- Health & Wellbeing

The Plans outline a target to reduce per capita CO2 emissions to 4.5 tonnes by 2020. Residents contribute to the City’s carbon emissions, with domestic emissions contributing 27% of city wide emissions in 2014 indicating the importance of improving the energy efficiency of homes.

Per capita emissions in Peterborough have reduced from 8.25 tonnes in 2005 to 5.61 in 2014. Table 3.1.1 below illustrates per capita CO2 emissions from industrial and commercial, domestic and transport sources.

<table>
<thead>
<tr>
<th>Year</th>
<th>Per Capita Industry &amp; Commercial (t)</th>
<th>Per Capita Domestic (t)</th>
<th>Per Capita Road Transport (T)</th>
<th>Per Capita Total (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3.10</td>
<td>2.34</td>
<td>2.66</td>
<td>8.10</td>
</tr>
<tr>
<td>2006</td>
<td>3.03</td>
<td>2.31</td>
<td>2.60</td>
<td>7.94</td>
</tr>
<tr>
<td>2007</td>
<td>2.99</td>
<td>2.22</td>
<td>2.60</td>
<td>7.81</td>
</tr>
<tr>
<td>2008</td>
<td>2.96</td>
<td>2.17</td>
<td>2.45</td>
<td>7.59</td>
</tr>
<tr>
<td>2009</td>
<td>2.51</td>
<td>1.94</td>
<td>2.35</td>
<td>6.81</td>
</tr>
<tr>
<td>2010</td>
<td>2.57</td>
<td>2.07</td>
<td>2.30</td>
<td>6.94</td>
</tr>
<tr>
<td>2011</td>
<td>2.32</td>
<td>1.79</td>
<td>2.23</td>
<td>6.35</td>
</tr>
<tr>
<td>2012</td>
<td>2.51</td>
<td>1.91</td>
<td>2.14</td>
<td>6.56</td>
</tr>
<tr>
<td>2013</td>
<td>2.33</td>
<td>1.86</td>
<td>2.15</td>
<td>6.34</td>
</tr>
<tr>
<td>2014</td>
<td>1.91</td>
<td>1.54</td>
<td>2.16</td>
<td>5.61</td>
</tr>
</tbody>
</table>

Table 3.1.1 Per capita CO2 emissions from industrial and commercial, domestic and transport sources
3.2 Gas & Electricity Sales and Consumption

Table 3.2.1 and 3.2.2 below illustrate the domestic Gas and Electricity Sales and Consumption, comparing Peterborough with the East of England Region and England as a whole.

<table>
<thead>
<tr>
<th>GAS</th>
<th>Domestic Sales (GWh)</th>
<th>Average domestic consumption (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,140</td>
<td>35,684</td>
</tr>
<tr>
<td>2014</td>
<td>891</td>
<td>27,471</td>
</tr>
</tbody>
</table>

*Mean Average

Table 3.2.1 Domestic Gas Sales and Consumption figures (2005 and 2014)

<table>
<thead>
<tr>
<th>ELECTRIC</th>
<th>Domestic Sales (GWh)</th>
<th>Average domestic consumption (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>310</td>
<td>12,081</td>
</tr>
<tr>
<td>2014</td>
<td>296</td>
<td>11,016</td>
</tr>
</tbody>
</table>

*Mean Average

Table 3.2.2 Domestic Electricity Sales and Consumption figures (2005 and 2014)

The general trend in the total annual consumption of both gas and electricity in Peterborough is downward. This reduction is set against a background of population growth, indicating greater efficiency of use. Gas & electricity sales per domestic consumer have remained consistently below national levels and show a general downward trend over the period 2005 to 2014 with the exception of electricity sales per customer, which showed a small increase in 2010 (Local Plan - Authorities Monitoring Report 2015).
3.3 Household Energy Efficiency

Table 3.3.1 below illustrates the number of Energy Company Obligation (ECO) funded measures in Peterborough compared with England and the East of England.

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Carbon Saving Target (CERO)</th>
<th>Carbon Savings Community (CSCO)</th>
<th>Affordable Warmth (HHCRO)</th>
<th>ECO measures installed</th>
<th>Percentage of ECO measures installed</th>
<th>ECO measures per 1,000 households</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>707,686</td>
<td>403,866</td>
<td>583,329</td>
<td>1,694,881</td>
<td>83.0%</td>
<td>73.7</td>
</tr>
<tr>
<td>East</td>
<td>78,337</td>
<td>18,516</td>
<td>28,708</td>
<td>125,561</td>
<td>6.1%</td>
<td>49.5</td>
</tr>
<tr>
<td>Peterborough</td>
<td>2,513</td>
<td>1,778</td>
<td>3,095</td>
<td>7,386</td>
<td>0.4%</td>
<td>94.7</td>
</tr>
</tbody>
</table>

Table 3.3.1 Eco Measures by ECO Obligation up to end of December 2016 (BEIS March 2017)

Figure 3.3.1 below shows Energy Performance Certificates (EPCs) that have been lodged in Peterborough in 2016 across the A-G Energy Efficiency bands. The Energy Act 2011 introduced regulation of the energy efficiency of properties in the private rented sector. Since April 2016 a tenant has been able to request consent to energy efficiency measures from their landlord and the Act sets a minimum energy efficiency standard. This will be an E EPC rating in line with the non-domestic sector. This will apply equally to all categories of domestic private rented property.

From 1 April 2018, the Private Rented Sector Energy Efficiency Regulations (Domestic) will apply upon the granting of:

- a new tenancy to a new tenant, and,
- a new tenancy to an existing tenant.

From 1 April 2020, the regulations will apply to all privately rented property in scope of the regulations.
3.4 Fuel Poverty in Peterborough

Sub regional Fuel Poverty statistics are based on national data drawn from the English Housing Survey (EHS). Under the Hills Low Income High Costs (LIHC) definition, a fuel poor household is one in which:

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

The latest Fuel Poverty statistics (2014) are detailed in Tables 3.4.1 and 3.4.2 below

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Households</th>
<th>No. of Households in Fuel Poverty</th>
<th>Proportion of Households Fuel poor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>2,488,910</td>
<td>210,215</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Table 3.4.1 DECC Regional Fuel Poverty Statistics 2014
<table>
<thead>
<tr>
<th>LA Name</th>
<th>Region</th>
<th>Estimated number of households</th>
<th>Estimated number of Fuel Poor Households</th>
<th>Proportion of households fuel poor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peterborough</td>
<td>East of England</td>
<td>76,128</td>
<td>6,441</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Table 3.4.2 DECC LA Fuel Poverty Statistics 2014

3.5 Housing Stock Modelling and Health Impact Assessment

In 2015, Peterborough City Council commissioned the Building Research Establishment (BRE) to undertake a series of modelling exercises on their housing stock to produce an integrated Private Sector Domestic stock model for the purpose of targeted investment into Energy Efficiency, Fuel Poverty and Health Hazard interventions. The model makes use of Energy Performance Certificate data, Local Land and Property Gazetteer data and Experian data, along with other imputed and observed characteristics to build a fully integrated model of the housing stock in Peterborough.

The report and associated database gives Peterborough City Council a clear picture of the condition of dwellings across the authority and assists in directing work around the key indicators highlighted. The database also enables the council to obtain specific information to inform and shape future projects where required. The detailed housing stock information provided in the report will facilitate the delivery of Peterborough’s Housing Strategy priorities which include:

- Supporting Substantial and Sustainable Growth
- Increase the supply of homes which people can afford
- Improve housing conditions to support health and wellbeing

The principal aims of Peterborough City Council’s Energy Strategy is to:

- Generate renewable energy
- Reduce energy consumption
- Enable regeneration
- Reduce carbon
  AND
- Get financial benefits to the city

Three aims of the stock modelling were to provide estimates of:

- The basic Green Deal variables for the private sector stock (wall and loft insulation)
- Energy efficiency variables
- Potential energy/carbon savings through “improvement scenarios”

The stock modelling approach has been developed and used by BRE for many years and the most recent 2014 models have been updated to make use of the results of the 2011 English Housing Survey (EHS) and additionally now incorporate a technique known as geomodelling which makes use of Ordnance Survey (OS) data. These dwelling level models are used to estimate the likelihood of a particular dwelling meeting the criteria for each of the key indicators:
- All Category 1 hazards (defined under the Housing Act 2004’s Housing Health & Safety Rating System (HHSRS))
- Excess Cold Cat 1 hazard
- Falls Cat 1 hazards
- Disrepair
- Fuel Poverty 10% indicator
- Fuel Poverty Low Income High Cost indicator
- Low income households
- Category 2 hazards (defined under the Housing Act 2004’s Housing Health & Safety Rating System (HHSRS))

These outputs can then be mapped to provide the authority with a geographical distribution of each of the key indicators which can then be used to target resources for improving the housing stock.

Improvement Scenarios

Table 3.5.1 below shows the impact of each of the improvement scenarios on the energy variables considered in the stock model and Figures 3.5.1, to 3.5.5 focus on the change in carbon emissions, energy demand, energy cost, heat demand and heat cost compared to the baseline, which can be expected from each of the scenarios. Taking into account that each scenario is applied in succession, adding to the previous scenario, it can be seen that the low cost measures scenario followed by the heating scenario provide a large percentage of savings as follows:

- 24% reduction in average annual heating cost
- 19% reduction in average annual energy cost
- 20% reduction in average annual Simple CO2 emissions
- 7 point improvement in average Simple SAP rating

Solid wall insulation then provides further savings but the additional impact of double glazing offers minimal savings of only 1 – 2%

<table>
<thead>
<tr>
<th>Improvement Measure(s)</th>
<th>Average Improvement per property compared to baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Improvement (Simple SAP points)</td>
</tr>
<tr>
<td></td>
<td>Simple SAP</td>
</tr>
<tr>
<td>Baseline</td>
<td>59</td>
</tr>
<tr>
<td>Low Cost Measures (LCM)</td>
<td>+2</td>
</tr>
<tr>
<td>Heating (H)</td>
<td>+7</td>
</tr>
<tr>
<td>Solid Wall Insulation (SWI)</td>
<td>+10</td>
</tr>
<tr>
<td>Double Glazing (DG)</td>
<td>+10</td>
</tr>
</tbody>
</table>

Table 3.5.1: Results of the improvement scenarios analysis – showing the average change in energy output variables compared to the baseline for the total housing stock in Peterborough (each scenario is applied in succession, adding to the previous scenario, so that the figures are cumulative)
Figure 3.5.1 Change in carbon emissions, which can be expected from each of the scenarios.

Figure 3.5.2 Change in energy demand which can be expected from each of the scenarios.
**Figure 3.5.3** Change in energy cost which can be expected from each of the scenarios.

**Figure 3.5.4** Change in heat demand which can be expected from each of the scenarios.
Stock Modelling Results

The relevant key findings of the stock modelling are detailed in Tables 3.5.2 and 3.5.3 below

<table>
<thead>
<tr>
<th>Indicator</th>
<th>All Stock</th>
<th>Private Sector Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P'boro No</td>
<td>P'boro %</td>
</tr>
<tr>
<td>No of dwellings</td>
<td>82,695</td>
<td>-</td>
</tr>
<tr>
<td>Excess Cold</td>
<td>2,522</td>
<td>3%</td>
</tr>
<tr>
<td>*Fuel Poverty 10%</td>
<td>12,019</td>
<td>15%</td>
</tr>
<tr>
<td>**Fuel Poverty LIHC</td>
<td>8,742</td>
<td>11%</td>
</tr>
<tr>
<td>Low income households</td>
<td>29,336</td>
<td>35%</td>
</tr>
</tbody>
</table>

Table 3.5.2 Estimates of the numbers and percentages of dwellings meeting energy efficiency and fuel poverty key indicator criteria for all stock and private sector stock in Peterborough compared to East of England and England (English House Survey 2011)
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Private Sector Stock</th>
<th>Social Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner Occupied</td>
<td>Private Rented</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>No of dwellings</td>
<td>49,956</td>
<td>-</td>
</tr>
<tr>
<td>Excess Cold</td>
<td>1,639</td>
<td>3%</td>
</tr>
<tr>
<td>*Fuel Poverty 10%</td>
<td>6,500</td>
<td>13%</td>
</tr>
<tr>
<td>**Fuel Poverty LiHC</td>
<td>4,156</td>
<td>8%</td>
</tr>
<tr>
<td>Low income households</td>
<td>10,444</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Table 3.5.3 Estimate of the numbers and percentage of dwellings meeting the key indicator criteria by tenure for Peterborough

*10% Fuel Poverty Indicator – More than 10% of household income spent on fuel to maintain an adequate level of warmth, 21°C in living room, 18°C in other occupied rooms.

**Low Income High Cost Fuel Poverty Indicator – required fuel costs are above average (national median level) and were household to spend that amount they would be left with a residual income below the official poverty line

The Report also estimates that:
- 7.3% (4,821) of all private sector dwellings in Peterborough are estimated to have an Energy Performance Certificate (EPC) rating below band E. 1,454 of these are private rented dwellings
- In Peterborough’s private sector stock there is an estimated 13,374 dwellings with un-insulated cavity walls and 9,652 dwellings with less than 100mm of loft insulation
- Using the 10% Fuel Poverty Indicator 6,500 (13%) of owner occupied dwellings and 3,318 (20%) of private rented dwellings are occupied by households in fuel poverty. These figures fall to 4,156 (8%) and 3,062 (19%) respectively when using the Low Income High Cost Fuel Poverty Indicator.

Health Impact Assessment

As well as commissioning the BRE to carry out stock modelling, Peterborough City Council also commissioned a quantitative Health Impact Assessment which utilises the data in the stock modelling to better understand the effect of private sector housing hazards and intervention strategies on the health of residents in Peterborough using the methodology developed by the BRE for the “Real Cost of Poor Housing” publication. The key findings of the Health Impact Assessment estimated there were:
- 8,025 individual Category 1 hazards in Peterborough’s privately owned stock and 3,771 Category 1 hazards in the privately rented stock, bringing the total Category 1 hazards to 11,796
- The estimated total cost of mitigating the Category 1 hazards so that the risk is reduced to an acceptable level is £27 million with £8.4 million in the private rented sector
- It is estimated that poor housing conditions are responsible for over 631 harmful events requiring medical treatment every year
- The estimated cost to the NHS of treating accidents and ill health caused by these hazards is £2.1 million each year. If the wider costs to society are considered, the total costs are estimated to be £5.2 million each year.
- If these hazards are mitigated to an acceptable level then the total annual savings to society are estimated to be £4.9 million, including £1.9 million of savings to the NHS.
4. Progress to Date

4.1 Local energy efficiency ambitions and priorities


<table>
<thead>
<tr>
<th>Theme: ZERO CARBON</th>
<th>No net carbon emissions from energy consumption, achieved through high energy efficiency and renewable energy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target to 2016</strong></td>
<td><strong>Status</strong></td>
</tr>
<tr>
<td>Reduce per capita CO2 emissions to 5.8 tonnes.</td>
<td>Green</td>
</tr>
<tr>
<td>All approved developments greater than 10 homes or 1000sqm floor area shall achieve an emissions ratio at least 10% better than building regulation standards.</td>
<td>Green</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme: EQUITY &amp; LOCAL ECONOMY</th>
<th>A ‘high skilled / low poverty’ economy aided by the highest concentration of environmental businesses in the UK.</th>
</tr>
</thead>
</table>
| **Undertake a housing stock survey to ascertain homes in fuel poverty and subsequently target resources with the aim of achieving the Government’s target to eradicate fuel poverty by 2016** | Green | The final draft Building Research Establishment (BRE)Private Sector Stock Modelling Report has been received. The report and database provides the council with dwelling level modelled data on:  
• % of dwellings with a Cat 1 Hazard for Excess Cold  
• % of households in fuel poverty  
• % of dwellings occupied by a low income household  
• The average Simple SAP rating  
The report provides estimates on basic Green Deal variables for private sector stock (wall and loft insulation), energy efficiency variables and potential energy/carbon savings through a series of “improvement scenarios”. |
The report and dataset has informed Peterborough City Council’s Housing Renewals Policy 2017 - 2019 and will inform the emerging Affordable Warmth Strategy due to be refreshed in 2017.

4.1.2 Overview of citywide activity undertaken in relation to these themes:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Partnership</th>
<th>Commentary</th>
</tr>
</thead>
</table>
| Free Solar PV        | Empower     | Peterborough has the 4th highest number of domestic solar PV installations in Great Britain. As well as homeowners receiving direct financial benefits from this scheme the wider Peterborough community also benefits as percentage of the money generated will be shared equally between a Local Community Fund and the council. This scheme was due to close at the end of 2015, due to government changes significantly reducing the Feed-in Tariff rates for solar PV installations, but has since reopened and is being offered to all areas of the city.
|                      |             | **Key Outcomes:**  
|                      |             | - Occupiers receive the free energy generated, typically circa £200 per annum  
|                      |             | - Council makes a profit  
|                      |             | - Local community fund created  
|                      |             | - Installations to date - Peterborough: 375 Other areas: 5,384 These include Boston Mayflower, Gentoo Group, Ongo Homes, Stockport Homes  
| Renewable Heat Incentive |             | The number of accredited installations in Peterborough between April 2014 to January 2017 was 58 |
| Peterborough Energy Tariff | OVO Energy | In January 2015 the council entered into a partnership with OVO Energy to establish dual and single fuel (electricity only) energy tariffs that are exclusive to Peterborough residents. The new tariffs are jointly branded between OVO Energy and the council, as Peterborough Energy, and offer a competitive, local alternative to the Big Six energy providers. **Key Outcomes to date:**  
- 6,082 switches, (4,524 Pay As You Go - Monthly, 1,558 Pay As You Go - Pre-payment)  
- PAYM: Overall Average Saving £223  
- Current Quarter Average Saving £104  
- Maximum Saving £550  
- Total Savings For the City £1.1 million |
| Collective Switching | ichooSr | Peterborough City Council is the lead for a collective switching scheme covering several local authorities. **Key Outcomes:**  
- Number of switching rounds = 13  
- Total estimated energy savings are £2,381,141  
- 11,532 switches across all authorities  
- Current average saving per household per annum £209  
- 766 local switches |
| Energy Matters | Peterborough Environment City Trust (PECT) | PECT is an independent environmental charity helping to create a more sustainable Peterborough. The Energy Matters project ended in December 2015 and was funded by the Ebico Trust. **Key Outcomes:**  
- 351 home visits completed in the CAN-do area of the city characterised by low income households in energy inefficient properties and a high % of private renting  
- 92 Warm Home Discount applications made  
- 3 new energy-saving behaviours on average adopted by residents resulting in an annual behavioural saving of £110.23 average  
- 323kg carbon saved annually, on average per household through behaviour[1]  
- £240.91 average saving made by residents who switched tariffs  
- £225 total average household saving |
Healthy Homes Peterborough
Peterborough Environment City Trust (PECT) This project ran in 2015 and throughout 2016 and was funded by the British Gas Energy Trust, managed by Charis Grants. The project offered a free home visit and energy pack, tips on switching energy tariff (£292 average saving in 2015), information on the national £140 Warm Home Discount and home improvements including boiler replacements, insulation and property maintenance

Key Outcomes:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Target</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home visits</td>
<td>360</td>
<td>362</td>
</tr>
<tr>
<td>Households assisted - community events</td>
<td>300</td>
<td>357</td>
</tr>
<tr>
<td>Energy debt payments made</td>
<td>N/A</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(£6,197.91)</td>
</tr>
<tr>
<td>Households changing tariff</td>
<td>20%</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Warm Home Discount Applications</td>
<td>N/A</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(67%)</td>
</tr>
<tr>
<td>Physical home improvements completed</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Partners trained</td>
<td>30</td>
<td>39</td>
</tr>
</tbody>
</table>

- 143 Energy Tariff changes with an average saving per participant of £213 p.a. totalling £30,495
- 243 Warm Home Discount application totalling £34,020
- 253 Behaviour changes saving £81 p.a. totalling £29,498
- The 50 funded improvements included 19 boiler replacements, 6 loft insulation and 1 cavity wall insulation installs resulting in 17,418kgCO2 saving and £4,065 cost saving per year.
Warm Homes Peterborough is a free energy advice service and community-based fuel poverty project funded by the ScottishPower Energy People Trust. This initiative is assisting city residents to enjoy affordable warmth, whilst also lowering the carbon footprint of Peterborough communities and conserving limited natural resources.

The Warm Homes project delivered total potential benefits of £157,264 across Peterborough if all of the recommended actions were to be implemented.

**Key outcomes:**

- Energy advice to 500 homes and consequently 1,454 residents across the targeted areas of Peterborough known to have high % of households on low incomes in, or at risk of being in fuel poverty - Paston, Westwood, Ravensthorpe, Orton Goldhay and Orton Malborne.
  
- 116 houses switched either their tariff or provider during their visit resulting in an average saving of £141 per house with a total saving of £16,177.
  
The remaining 384 households who did not wish to switch during the visit were given tariff switching advice offering an average saving of £184, with a potential saving of £66,517.

- Overall the project offered potential saving of £174 per household and a total potential saving of £82,694.

- 111 applications for the Warm Homes Discount were made and a further 165 residents were signposted to next year’s scheme, potentially delivering a further payment of £38,640.

- Energy efficient behaviour was discussed in the survey. Through households promising to try simple actions such as washing clothes on a lower temperature, installing energy efficient light bulbs, turning off appliances at the wall or only boiling the kettle for what they need, PECT have been able to identify an average behavioural saving of £95 per household (figures are based on calculations from the Energy Saving Trust website equating to a total behavioural saving for the project of £35,930)
| Carbon Challenge Site | Cross Keys Homes Ltd | The Vista development (Carbon Challenge) of 302 new homes has now been completed. Vista has been highly commended in the ‘Best Low or Zero Carbon Initiative’ category at the Housebuilder Awards in 2015. Judges celebrated the energy saving design of the zero carbon homes and achievements in combining contemporary architecture with emission reducing technology. |

| Local Energy Advice Programme (LEAP) | AgilityEco AgilitySurvey | A free energy advice programme funded through the Warm Home Discount Industry Initiative funding. Peterborough City Council is one of nine local authorities/registered providers involved in this pilot project running to July 2017. The project offers:  
- Home energy visit to fit simple measures such as energy efficient lightbulbs, draught proofing, radiator panels, shower savers and check cavity and loft insulation.  
- Energy advice and tips and explain how to set heating controllers  
- Energy tariff and switching advice including the ability to switch during the visit  
- If required a referral onto IncomeMax for debt, budgeting and benefit maximisation advice  
- Onward referral for ECO funding, Council grant funding and services offered by Peterborough Council for Voluntary Services (PCVS)  

Target for Peterborough is 450 referrals. It is hoped that funding for this project will be extended for a further 4 years.  

**Key Outcomes so far (Jan - Mar 2017):**  
- 252 Referrals made  
- 90 Home Assessment Visits  
- 24 referrals onto IncomeMax  
- 5 ECO referrals  
- 35 other referrals including PCC assistance and support from PCVS |
| Peterborough City Council Repairs Assistance Programme - Boiler & Central Heating Replacements | Care & Repair HIA Local contractors | Peterborough City Council has agreed a Capital Programme in order to address Category 1 hazards under the Housing Act 2004 Housing Health & Safety Rating System (HHSRS) in homes occupied by low income and vulnerable households. The most prevalent Category 1 hazards (where the LA has a duty to remedy the hazard to an acceptable level once identified) are Excess Cold and Falls. **Key Outcomes:**  
- In 2014/2015 51 boilers and/or central heating replacements/installations were carried out. Total Repairs Assistance expenditure was £228,298  
- In 2015/2016 43 boilers and/or central heating replacements/installations were carried out. Total Repairs Assistance expenditure was £156,647  
- In 2016/2017 64 boilers and/or central heating replacements/installations were carried out. Total Repairs Assistance expenditure was £227,768  
- There is a further £59,512 of approved work to complete in 2017/2018. |
| Peterborough City Council Repairs Assistance Programme - External Wall Insulation to Park Homes | Care & Repair HIA Specialist contractors | Part of the Council's capital programme for Repairs Assistance has been dedicated to providing external wall insulation to park homes often occupied by older and vulnerable residents on fixed, low incomes who are in, or at risk of becoming in, fuel poverty. **Key Outcomes:**  
- In 2014/2015 25 park homes have been insulated in conjunction with other works (i.e. doors/window/electrical upgrades). Total expenditure £279,843  
- In 2015/2016 23 park homes received funding totalling £237,752  
- In 2016/2017 24 park homes received funding totalling £197,544  
- There is a further £115,181 of approved work to complete in 2017/2018. |
| Minimum energy efficiency standards in the private rented sector - EPC Enforcement & Selective Licensing | PCC Prevention & Enforcement Service (PES) | Selective Licensing was introduced in September 2016 to targeted areas of the city with at least 19% of the housing being in the private rented sector and areas with a higher than Peterborough average for at least five of the following criteria:  
- Low housing demand  
- A significant and persistent problem caused by anti-social behaviour  
- Poor property conditions |
• High levels of migration
• High levels of deprivation
• High levels of crime

The Selective Licence Conditions include energy efficiency standards.
• The licence holder must provide the tenant with a copy of the EPC (where applicable). The licence holder must supply a copy of the EPC to the Council within 7 days of request.
• The property should be adequately insulated including double glazing (where authorised), loft and cavity wall insulation (where applicable) and draught proofed.
• Roof/loft spaces must be insulated where they are accessible from the house. A minimum of 270mm loft insulation, or equivalent including any upright stud walls in attic loft spaces, where accessible. Cheeks and ceilings of dormer windows and roof slopes can be overboarded with insulated plasterboard to obtain greater energy efficiency if no insulation is evident
• Loft hatches must be insulated and draught proofed. Hot water tanks and exposed hot water supply pipes must be insulated if passing through unheated areas.

PCC’s PES also has delegated authority for the enforcement of EPCs for private rented sector properties.

Key Outcomes:
• **6,500 applications received to date for a License**
• **1,000 EPCs have been completed as a result of the Licensing scheme coming into force.**
• **Since beginning 2015 94 notices have been served on properties found to be rented without a valid EPC.**
• **9 landlords have been prosecuted with 3 current prosecutions being prepared.**
4.2 Measures that take advantage of financial assistance and other benefits offered from central Government initiatives, to help result in significant energy efficiency improvements of residential accommodation

<table>
<thead>
<tr>
<th>Activity</th>
<th>Partnership</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Deal Communities Funding</td>
<td>AgilityEco, Agility Survey,</td>
<td>The council secured £3.9million from the Department for Energy and Climate Change’s Green Deal Communities Fund which delivered External Wall Insulation in the Operation Can Do area of the city. This area has a large percentage of pre 1919 solid walled properties, with a high proportion of privately rented dwellings. These, together with the privately owned properties are predominantly occupied by low income households likely to be in fuel poverty. Up to £6,000 of assistance per property can be provided from a combination of DECC and ECO funding.</td>
</tr>
<tr>
<td>ECO Funding</td>
<td>PCC, PECT, AgilityEco</td>
<td>The Council and its partners continue to assist and signpost eligible residents to ECO funding.</td>
</tr>
</tbody>
</table>

Key Outcomes:
- 369 properties received external wall insulation
- Estimated total carbon saving is 9262.6 tonnes

Key Outcomes:
- 7,386 ECO measure have been installed in Peterborough up to December 2016.
5. HECA Forward Plan 2017-19: Current and Ongoing Activities

The following table provides an update on the actions that the council and its partners will take forward in the next two years to continue achieving significant improvements in the energy efficiency of residential accommodation in Peterborough.

The table shows what each action aims to achieve, which partners are involved, how we aim to achieve each action with an indicator of target dates if applicable.

<table>
<thead>
<tr>
<th>Action</th>
<th>Partners</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Action Plan</td>
<td>PCC, PECT</td>
<td>Current and Ongoing until 2020</td>
</tr>
<tr>
<td>Reduce per capita CO2 emissions to 4.5 tonnes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Poverty</td>
<td>Care &amp; Repair HIA</td>
<td>Current and Ongoing until 2020</td>
</tr>
<tr>
<td>Ensure that as many fuel poor homes as reasonably practicable achieve a minimum energy efficiency rating of Band E by 2020, Band D by 2025, Band C by 2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar PV</td>
<td>Empower</td>
<td>Current and Ongoing until 2036</td>
</tr>
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</tbody>
</table>

- Peterborough Environment City Trust (PECT) will provide energy advice support to 2,000 households.
- Seek to take advantage of grant funding to increase energy efficiency and the uptake of renewable energy.
- Peterborough City Council’s Affordable Warmth Strategy will be refreshed in 2017 taking into consideration the results of the BREs Stock Modelling and Improvement Scenario recommendations to target fuel poor households.
- The Council’s refreshed Housing Renewals Policy will target the available funding to those households who are not eligible for national ECO funding.
- The free Solar PV Scheme will be continued to homeowners living in Peterborough.
- Savings generated for householders per annum are £1.2m.
- Predicted income generated for Local Community Funds is £58k per annum to the year 2036.
- Predicted income generated for Landlords/PCC an equivalent of £58k per annum to the year 2036.
<table>
<thead>
<tr>
<th>Renewable Heat Incentive</th>
<th>The Peterborough Solar PV Scheme is to be marketed to other LA/Registered Providers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peterborough Energy Tariff</td>
<td>To monitor and provide information and guidance to residents on the uptake of renewable technologies</td>
</tr>
<tr>
<td>OVO Energy</td>
<td>Current and Ongoing</td>
</tr>
<tr>
<td>Collective Switching</td>
<td>Continue to market the Peterborough Energy Tariff through leaflet drops, radio and an energy shop.</td>
</tr>
<tr>
<td>iChoosr</td>
<td>Current and Ongoing</td>
</tr>
<tr>
<td>Local Energy Efficiency Advice Programme (LEAP)</td>
<td>Pilot project to end in June 2017</td>
</tr>
<tr>
<td>AgilityEco AgilitySurvey</td>
<td>Energy Company funding confirmed for 2017/2018. Target of 650 referrals into this scheme</td>
</tr>
<tr>
<td></td>
<td>Press Release and web campaign to widely advertise the scheme and promote self referrals during May 2017</td>
</tr>
<tr>
<td></td>
<td>To fully integrate referrals for UK Power Networks Priority Service Registers into the LEAP referral process</td>
</tr>
<tr>
<td></td>
<td>Current and Ongoing until March 2018</td>
</tr>
<tr>
<td>ECO2 introduced ECO Help to Heat Flexible Eligibility allowing</td>
<td>To initially produce a Statement of Intent linked to the LEAP project to maximise the take up</td>
</tr>
<tr>
<td>AgilityEco AgilitySurvey</td>
<td>Current and Ongoing until June 2017</td>
</tr>
</tbody>
</table>
| Local Authorities to identify eligible households living in fuel poverty and those living on a low income and vulnerable to the effects of living in a cold home | of ECO Help to Heat funding for households not meeting the HHcro Affordable Warmth funding criteria  
- AgilityEco have already secured ECO Flexibility funding for the next 18 months and the eligibility criteria for LEAP, agreed by Ofgem, were specifically designed to ensure that households in fuel poverty or on low income and vulnerable are being targeted | Then ongoing until March 2018 |
| Minimum Standards in the Private Rented Sector | PCC Prevention & Enforcement Service |  
- Peterborough City Council will continue to work directly with landlords and through the Accreditation Scheme run in conjunction with the National Landlords Association to increase awareness of energy efficiency, minimum energy standards and the take up of available funding  
- In the Selective Licensing area of the city, the Council will monitor compliance with the conditions relating to energy efficiency.  
- Where necessary the Council will continue to utilise appropriate enforcement powers under the Housing Act 2004 | Current and Ongoing |
| Utilise the Council’s Capital Programme for Repairs Assistance | Care & Repair HIA, Local Heating Contractors |  
- The 2017/2018 budget for Repairs Assistance Heating Grants is £250,000  
- The existing framework agreement for Boiler and Central Heating works will be extended until March 2018 allowing for a new framework will be in place by April 2018 | Current and Ongoing until March 2018 |
| Utilise the Council’s Capital Programme for Discretionary Disabled Facility Grants to Support Health | Home Service Delivery Model (Care & Repair HIA, Therapy & Reablement) |  
- Peterborough City Council’s Renewals Policy 2017 -2019 introduced Discretionary DFGs to support health priorities.  
- The initial 2017/2018 budget is £50,000 | Current and Ongoing until March 2018 |
<table>
<thead>
<tr>
<th><strong>Maintain Database of Energy Efficiency Properties</strong></th>
<th><strong>Building Research Estab (BRE) Elmhurst Energy</strong></th>
<th><strong>To enhance the BRE Stock modelling database with actual survey data and Landmark data on EPCs lodged</strong></th>
<th><strong>Current and Ongoing</strong></th>
</tr>
</thead>
</table>

| **Teams**, Social Care Teams, Intermediate Care Teams, Hospital Discharge Teams | **● Heating and insulation measures can be funded through these grants (up to a maximum of £6,000 for each case) in order to facilitate hospital discharge or as a preventative measure to prevent hospital admission/re-admission** | | |

Signed: [Signature]

Gillian Beasley

Chief Executive Peterborough City Council

Dated: 31st March 2017