Appendix 1 - Copy of Cabinet Report from 19 January 2017

CABINET DECISION

ECO External Wall Insulation and Health Evaluation Update

SUMMARY

Levels of fuel poverty in Stockton-on-Tees have reduced from 11.1% in 2013 to 10.7% in 2014, in the 2016 sub-regional national data by the Department of Business Energy and Industrial Strategy (BEAIS), the second lowest level amongst the North East authorities[1]. Our approach has been to work in partnership and offer a wide range of preventative and reactive measures such as Warmer Homes Healthy People programmes and encourage large scale, area wide insulation measures funded through the Energy Company Obligation (ECO). 4999 households have been improved since 2012 in the 4 wards and 11 Lower Super Output Area's (LSOA's) with the highest prevalence of fuel poverty. This has resulted in measurable reductions in fuel poverty levels in these areas, however government funding was scaled back from 2013 resulting in ECO scheme delivery in Stockton-on-Tees being concluded in February 2016. The challenge still remains to tackle in excess of 1000 solid wall properties in the aforementioned LSOA's and provide wider assistance to the 8,585 households that require affordable warmth.

We secured external funding and commissioned Newcastle University to independently evaluate the health and economic benefits of area based energy efficiency measures, and provide a Return on Investment (ROI) analysis, which will be used to inform national policy debates on the future of such schemes. The report in Appendix A demonstrates such schemes significantly reduce energy consumption and cost for householders, by up to 32% in some cases, and have realised energy cost savings to Stockton-on-Tees householders of up to £6.2m since 2012. The longer cladding is prevalent, the fewer practice nurse appointments and outpatient hospital clinic appointments people require and the report estimates health related quality of life savings of £2.6m since 2012. The government have recently consulted on a future ECO programme from 2017 – 22 via the 'Help to Heat' proposal, and having responded we now await the outcomes on the potential for future direct support from obligated energy suppliers.

RECOMMENDATIONS

1. Members note the positive findings from the evaluation of previous energy efficiency measures of health related savings of £2.6m and lowering fuel costs by £6.2m.

2. Members note the reduction in fuel poverty levels in Stockton-on-Tees and the significant performance in delivering large scale energy efficiency measures under CESP and ECO.

3. Members note the challenges and opportunities faced by SBC as a result of the review of ECO nationally.

4. Members support a future report detailing the outcomes from the Government's consultation on the future of ECO and its significance for future insulation schemes in Stockton-on-Tees.

DETAIL

<u>Background</u>

1. Fuel poverty and the implications of not being able to access affordable warmth have the ability to significantly affect individuals and households in a variety of ways, including exacerbating health conditions, social isolation, psychological stress and in the most extreme cases, leaving to Excess Winter Deaths (EWD). A household is considered to be in fuel poverty if 'they have required fuel costs that are above average (the national median level), and were they to spend that amount, they would be left with a residual income below the official poverty line'.

2. In 2014, the number of households in fuel poverty in England was estimated at 2.38 million, representing approximately 10.6% of all English households. This is an increase from 2.35 million households in 2013 (an increase of 1.4%). At 10.7% the estimate for Stockton-on-Tees is the second lowest amongst the North East authorities[1] and shows a reduction of 0.4% from 11.1% in 2013. Only North Tyneside at 9.9% currently has lower fuel poverty prevalence.

	2012 Estimate	**2013 Estimate**	**2014 estimate**
Darlington	11.8	12.5%	12.6%
Hartlepool	11.6	12.2%	11.8%
Middlesbrough	15.1	15.4%	14.3%
Redcar	11.4	12.1%	11.8%
Stockton	**10.3**	**11.1%**	**10.7%**

Our performance is counter to the increasing trend of fuel poverty in the UK during that period. Sections 3 and 5 describes our interventions in tackling fuel poverty levels, however an estimated 8,585 households still experience challenges with affordable warmth in Stockton-on-Tees and therefore it remains a priority for us. There are also significant inequalities between wards and Lower Super Output Areas (LSOAs) across the Borough.

3. Our approach has been to offer a wide range of preventative and reactive measures in partnership with energy suppliers, funders and third sector partners to improve living and economic conditions for households. In September 2016 we launched a newly formed Housing, Neighbourhoods and Affordable Warmth Partnership within the Local Strategic Partnership to improve our targeting and share resources across all housing sectors, and a range of valuable programmes continue to be delivered including:

- Warm Homes Healthy People: package of interventions to assist the most vulnerable 'over 75's' and families with children under 5, with 4202 household referrals and 5952 interventions since 2012, including over £945k of benefit entitlement brought into the Borough.
- Big Community Switch': Energy tariff switching programme with 3411 households registering in the last 3 years, and combined energy savings for householders of over £99,000.
- Winter Resilience Programme: Stockton and District Advice and Information Service (SDAIS) providing vulnerable households with 'whole house' support on insulation and energy saving measures.
- From 1 October 2016, SDAIS providing a new pilot programme in Thornaby pharmacies and offering every individual with respiratory or COPD related illnesses free support on home energy.

Large scale measures

4. The most significant programme of measures in improving housing and economic conditions has been large scale, area based insulation schemes, and the street by street approach has been delivered on a scale not seen elsewhere in the UK. The pre cursor to the Community Energy Savings Programme (CESP) and Energy Company Obligation (ECO) funded insulation programmes was the cavity wall and loft insulation schemes delivered under Warm Zone between 2001 and 2004 with 15,000 homes improved in Stockton-on-Tees.

5. We delivered the largest scale CESP in the UK in 2012/13 and were part of the ECO early starter programme in 2013/14. Our external wall insulation programme continued in 2014/15 funded through EOn as an obligated supplier, and commitment from Public Health to the tune of £250k. However during this period the Government began to scale back the amount of funding per tonne of carbon saved (from £102 per tonne to £42). This continued into 2015/16, eventually reaching a point which rendered future programmes unsustainable. The programmes have delivered some impressive outcomes and the table below provides a summary of the number of households benefitting.

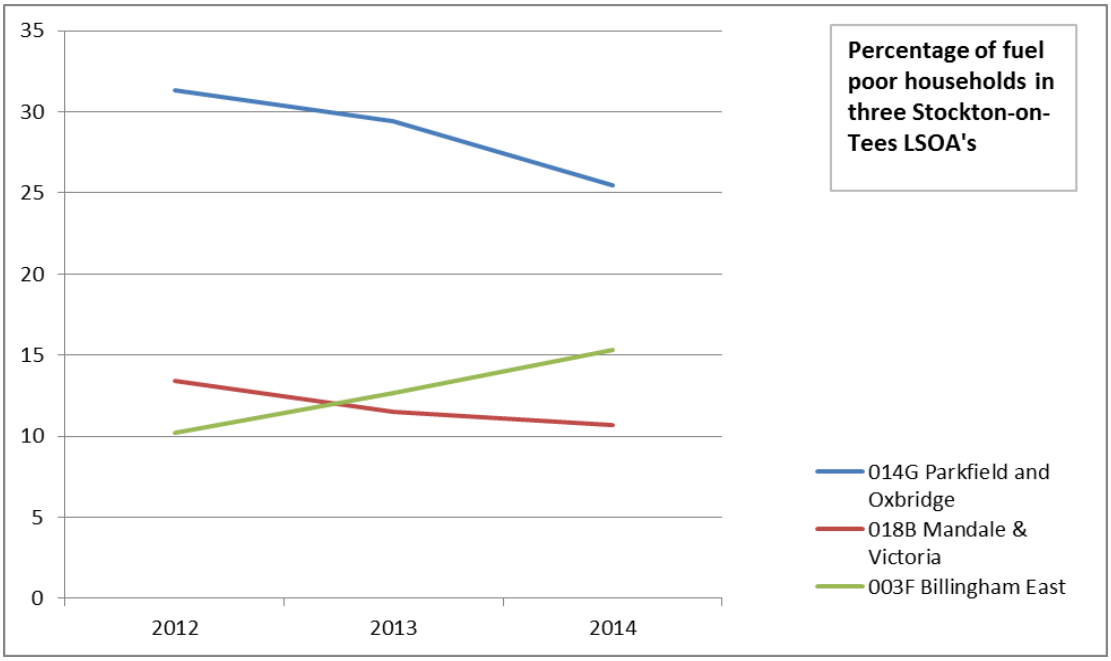
Year	Boiler installations	Loft and cavity wall insulations	External Wall insulations	Total No of households improved under CESP and ECO 4999
2012/13	310	154	1205	
2013/14	563	300	1300	
2014/15	-	196	575	
2015/16	308	-	88	
TOTAL	**1181**	**650**	**3168**	

6. Following the Cabinet report of 16 July 2015, a decision was taken to cease external wall insulation programmes (with the last streets insulated and concluded in February 2016) and await the outcome of the governments' review of future ECO funding and obligations on the energy suppliers to fund measures. It has also provided an opportunity to evaluate the impact of the area based programmes. However, the challenge still remains to tackle the untreated solid wall properties in the aforementioned LSOA's where issues still exist with fuel poverty and excessive costs to heat the home. There are 1004 properties that would be a priority if funding was available. There is also the challenge of providing wider assistance measures to the 8,585 households that remain in fuel poverty under the government's definition and require affordable warmth. Available funding remains an issue and unfortunately the criteria for the Low Carbon priority under the current round of European Structural Investment Fund (ESIF) grant is explicit in being unable to be used on housing retrofit programmes.

Impact on fuel poverty and health

7. There is strong evidence that the extent of the insulation measures and intervention programmes described has impacted positively on fuel poverty levels in Stockton-on-Tees. The reduction in fuel poverty levels to 10.6% of borough households was in contrast to rising levels across the UK. The highest rate of fuel poverty at ward level in 2014 was Newtown at 18.12% while the lowest was Northern Parishes at 3.3%, and across the 26 wards, 19 demonstrated decreasing levels of fuel poverty in 2014. Six wards that have seen increases in fuel poverty prevalence over the last three years have not benefitted from large scale investment in external wall insulation, however neither are they comprised of traditional solid wall pre 1919 housing. This trend information will be shared through the Housing, Neighbourhood and Affordable Warmth Partnership to help target planned and new outreach work from SBC and partners.

8. We are beginning to identify potential trends where large scale affordable warmth measures have made a positive impact at Lower Super Output Area (LSOA) level. For example the graph below shows fuel poverty levels in three LSOA's from 2012 to 2014. The LSOAs in Parkfield and Oxbridge, and Mandale and Victoria were subject to large scale external wall insulation measures, while Billingham East has yet to receive measures. However the Department for Business Energy and Industrial Strategy (BEAIS) who now incorporate the former DECC fuel poverty functions, do point out that *'caution should be exercised when looking at year on year changes for individual local authorities, as changes observed may be due to uncertainty in the data unless they are very large'.*



9. In March 2016, we commissioned Newcastle University (fully externally funded) to undertake the UK's first, large scale independent health and Return on Investment (ROI) evaluation of ECO funded measures across 8 Stockton-on-Tees LSOA's, at the request of the Department for Health (DfH) and BEAIS. The full report from the study is attached as Appendix A and details whether the energy consumption and associated cost has been reduced, whether the health of individual householders has been improved through the application of external wall insulation, and whether there is a related financial benefit to the National Health Service.

10. The research was based on investigating the prevalence of fuel poverty and measures of health and wellbeing from a postal survey of 3000 households in Stockton-on-Tees, which were undertaken in February and April 2016. These included 1000 households for an external (non-exposed) control group and compared against 1000 participants each from two intervention groups; those receiving EWI in 2012 (early cladders) and those receiving EWI as recently as 2015/16 (late cladders). The two separate intervention groups (early and late cladders) were also compared with each other in order to assess if there was a greater effect amongst those whose households were clad earlier, as they might have had longer time to benefit from the intervention. The research used a standard EQ-5D self-reporting questionnaire, a standardised instrument which provides a simple descriptive profile and a single index value for health status.

11. In total 232 responses were received (8% response rate) with 91 respondents from early cladders, 78 respondents from late cladders and 63 completed questionnaires from the control group participants (no cladding). The results are valid for the area based scheme being evaluated but would not produce scalable assumptions for bigger geographical areas. There is a wealth of demographic, and socio economic information, highlighted in the main report, but headlines relating to fuel and healthcare include:

Health care usage

- Early cladders (those with external insulation for the longest period of time) had the lowest number of practice nurse appointments and outpatient hospital clinic appointments between all study groups.

- Those clad most recently reported less GP home visits and less GP telephone conversations than any other group.

- No significant differences between the study groups were reported, with late cladders and the control group showing almost identical results with slightly better health reported by both EQ-5D index score and VAS (perceived health state) than those whose houses were clad early.

- The study estimates (section 4.5.3 of Appendix A) that the 'health related quality of life savings to the householders in the earliest clad properties equates to £200 per year per person, and across all 3000+ properties this realises savings of £2.6m since 2012.

Fuel used and cost

- The control group (no cladding) reported more money spent on average on both electricity and gas (£153 per month) compared to early cladders (£133, or 13% less) and late cladders (£127, or 17% less).

- The same tendency appears when comparing the monetary amount spent on gas. The control group spent an average of £92 per month, while early cladders spent £75 (18% less) and late cladders spent £74 (20% less).

- With electricity the control group spent an average of £76 per month, while early cladders spent £52 (32% less) and late cladders spent £59 (22% less).

- The number of days when participants were unable to heat the house to a comfortable temperature was similar across all three groups (2.8, 2.6 and 2.6 days respectively for early cladders, late cladders and those whose houses were not clad).

In summary, and as highlighted in section 4.5.2 of Appendix A, the study shows evidence to suggest that the insulation measures have a very positive impact on households in reducing their electricity and gas consumption, with estimated fuel cost savings to the clad properties of £1.56m per year, which equates to £6.2m since the scheme began in 2012. Those households that have had cladding for the longest period of time report fewer nurse and hospital outpatient appointments, in addition to health related savings of £2.6m, and this is very positive. There is insufficient evidence to scale up a significant improvement in health across the study group and the summary of the RoI analysis, in section 4.5.5 of Appendix A, suggests a negative return of 59% on the invested sum of the project since 2012. However, as it is only 4 years since the programme began, the savings from energy reduction and health related quality of life savings are still accumulating, with a total payback estimated at 9.7 years.

12. It should be noted that the achievements of the wide ranging programmes delivered over recent years in Stockton-on-Tees is already recognised nationally, most recently by National Energy Action (NEA), the UK's leading charity who champion the affordable warmth agenda. In their 2016 assessment of the extent to which Health and Well Being Boards in England were taking action on cold-related ill health through strategic planning, partnership approaches and delivering practical measures, we achieved maximum scores in all attributes. Since 2001, we have delivered interventions to in excess of 26,000 homes.

The future of ECO and delivering measures

13. The ECO programme to obligate energy suppliers to fund and deliver energy efficiency measures in homes across Great Britain is due to finish in March 2017. The 2015 Spending Review however set out Government plans to have a supplier obligation, with a focus on fuel poverty, in place until 2022 at an estimated level of £640m per year and issued a consultation 'Help to Heat' which closed in August 2016. Having contributed to the consultation, we now await the outcomes from BEAIS to assess whether we will be able to take advantage of funding and target those most in need in Stockton-on-Tees. We are aware that energy companies are still obligated to support measures, and that as we have an impressive track record of delivery we are well placed should a future scheme meet our needs. A report will be presented to Cabinet in due course.

14. While previous ECO and earlier external wall insulation schemes have delivered significant and measurable benefits to almost 5000 households, the latter stages of programme delivery were not without their challenges due to the falling levels of available funding. This included Tees and Durham Energy Advice Centre (TADEA) and Community Energy Solutions Ltd (GoWarm) entering administration in June 2015 and March 2016 respectively as support of the energy efficiency sector was scaled back. This impacted upon the quality levels at the very end of programmes being delivered by third parties, and although there was no legal duty or obligation on behalf of Stockton-on-Tees Borough Council to intervene, issues relating to a very small minority of latter beneficiaries are currently being resolved. Any future programmes would benefit from direct delivery by an obligated supplier and managed by Stockton-on-Tees borough Council.

COMMUNITY IMPACT IMPLICATIONS

15. The positive impact upon the communities benefitting from ECO measures has been significant. Since 2013:

- Measures under ECO have been delivered across 4 wards and 11 LSOA's.
- Fuel poverty levels in the Borough have fallen from 18.1% in 2010 to 10.7% in 2014 (DECC report 2016).
- The LSOA's receiving measures have seen the largest decreases in fuel poverty levels, such as Parkfield & Oxbridge with a 3% decrease alone in 2014.
- 4999 private sector rented and owner occupied properties have received new boilers, cavity wall or external wall insulation measures across the Borough.
- The early outcomes of the health evaluation suggest that the measures are leading to lower energy bills in both gas and electricity, while we await the outcomes from the return on investment analysis.

16. We await the outcomes from the national ECO programme consultation to assess whether there will be potential opportunities for funding further schemes, and this will be reported to Cabinet in due course.

FINANCIAL IMPLICATIONS

17. During the lifetime of the CESP and ECO programmes over £20m of external investment was secured. The financial benefit of wider schemes detailed in section 3 is well documented, and we await the outcomes of the ECO health evaluation highlighting the cumulative energy savings to householders.

LEGAL IMPLICATIONS

18. We have no legal obligation to deliver programmes of this nature, however energy suppliers are still legally obligated to deliver energy efficiency programmes in the UK and we await the outcomes of the governments 'help to Heat' ECO consultation on future programmes that may be of benefit to Stockton-on-Tees.

RISK ASSESSMENT

19. The risks associated with this report are categorised as low to medium risk. Existing management systems and activities are sufficient to control and reduce the risk.

COUNCIL PLAN POLICY PRINCIPLES AND PRIORITIES

20. Affordable warmth and fuel poverty programmes have the ability to significantly impact on a number of Policy Principles in the Council Plan:

- **Protecting the vulnerable through targeted intervention**
  All of our programmes target vulnerable households or communities, for example Warmer Homes Healthy People (WHHP) measures are available to over 75's, those with a long term health condition and families with children under 5 with a cold related health condition, while ECO programmes have targeted those LSOA's in the top 10% most deprived

- **Developing strong and healthy communities**
  The principle of affordable warmth interventions is to reduce health inequality by improving living and economic conditions of those most in need

- **Creating economic prosperity**
  All of our fuel poverty and affordable warmth schemes seek to improve the economic conditions that many householders find themselves in, for example £750k has been secured for WHHP clients which was previously being unclaimed, while one of the aims of the ECO programme was to reduce the amount of energy being consumed and hence purchased by householders

CORPORATE PARENTING IMPLICATIONS

This report does not contain corporate parenting implications.

CONSULTATION INCLUDING WARD/COUNCILLORS

Consultation was not necessary for this particular update report on previous delivery, however any future opportunity to deliver further schemes would consult members on appropriate targeting.

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Education related? No

Background Papers None

Ward(s) and Ward Councillors: None

Property

Unrelated to Council property.

References:

1. DECC (2016), Annual Fuel Poverty Statistics Report