
COUNCIL HOUSING STOCK- HEATING AND INSULATION

SUMMARY REPORT

Purpose of the Report

1. The purpose of the report is to update Adults and Housing Scrutiny on the status of Council Housing Stock with regards to heating and insulation, particularly in relation to issues of fuel poverty.

Summary

2. Off-gas households are particularly affected by fuel poverty. Households that heat their properties with oil, solid fuel, LPG or electricity typically have fuel poverty gaps double the average, typically over £1000. There is an estimated 3% (1500) of Darlington households not connected to the gas network, of which 145 are Darlington Borough Council properties.
3. The Council Housing Stock is heated by a variety of heating types. 218 are heated by electricity and 2 by solid fuel.
4. All Council properties with cavities are insulated and all have at least 150 mm loft insulation. Further insulation work has been carried out on specific properties.
5. 74 Council Housing properties benefit from Solar PV.
6. The current mean SAP (energy rating on a scale of 0 (poor) to 100 (good)) of Council housing is 69.
7. The Council is seeing an increasing trend in the number of tenants who are reporting condensation and damp issues, primarily because tenants are inadequately heating and ventilating their homes due to concerns around high energy costs.
8. The Council is tackling heating and insulation issues through:
 - (a) Council Housing Business Plan Heating Replacement Programme
 - (b) Loft insulation upgrade to 300mm and external wall insulation of specific properties
 - (c) Energy information and advice to tenants including information to prevent condensation and dampness.

9. Future considerations include:

- (a) Connection of 111 Off gas properties to the mains gas network
- (b) Provision of alternative options for properties where connection to the gas network is not viable including signposting to Durham Community Oil for those who use heating oil and longer term use of low carbon/ renewable technologies
- (c) Potential development of external wall insulation scheme for properties at Lascelles and Redhall
- (d) Signposting online tenants and residents to home energy information on the Council's website
- (e) Training of Tenant Liaison Officers on use of low carbon/ renewable technologies and heating controls to enable further support to be provided to tenants

Recommendation

10. Members are asked to note the report and comment on the actions being taken to improve the heating and insulation of the Council's housing stock, particularly in relation to issues of fuel poverty.

Paul Wildsmith
Director of Neighbourhood Services and Resources

Background Papers

Darlington Borough Council Adults and Housing Scrutiny, 7 January 2014, *Item 6: Fuel Poverty – Advice to Tenants and Vulnerable Groups:*

<http://www.darlington.gov.uk/democracy/democraticinvolvement/politicalmanagement/Meeting.htm?id=1632>

Elizabeth Goodchild, Green Economy Officer, 2920

S17 Crime and Disorder	There may be a link in terms of heating fuel theft – however further investigation is required.
Health and Well Being	Fuel Poverty arising from inadequate heating and insulation has associated health and wellbeing impacts including psychological stress, worry, social isolation, respiratory and circulatory conditions.
Carbon Impact	Heating and insulation of Council housing stock has no direct impact on the Council's carbon footprint, however action on energy efficiency has a direct impact on the domestic carbon footprint of the Borough.
Diversity	Fuel Poverty arising from inadequate heating and insulation impacts upon vulnerable residents.
Wards Affected	All wards, particularly those Lower Super Output Areas in the top 3% for fuel poverty (arising from inadequate heating and insulation) nationally: <ul style="list-style-type: none"> • Heighington & Coniscliffe – Rural • Northgate – All LSOAs • Central – Town Centre and Town Centre Fringe • Pierremont – East Part (Hopetown) & South Central Part • North Road – South Part
Groups Affected	Those impacted by fuel poverty include: <ul style="list-style-type: none"> • Older people • People with children under 16 • Those on benefits • People with disabilities People suffering with long term illness
Budget and Policy Framework	This report does not recommend changes to the Budget and Policy Framework
Key Decision	No
Urgent Decision	No
One Darlington: Perfectly Placed	Fuel Poverty arising from inadequate heating and insulation links to the 'One Darlington' priority to tackle deprivation and the 'Prosperous' and 'Healthy Darlington' themes.
Efficiency	No direct efficiencies though tackling fuel poverty issues arising from inadequate heating and insulation link to tackling poverty and economic decline and support ability to pay rent and Council Tax through reduction of energy costs.

MAIN REPORT

Information and Analysis

Heating – Current Status

11. Heating and Off Gas Households across Darlington Borough

The majority of households across the Borough are heated by gas. By 2011, Darlington had an average domestic gas usage of 14,600 kWh/ consumer (460 more than the GB mean of 14,140 kWh/ consumer) (DECC, 2011) whereas Darlington's average domestic electricity usage was 3,620 kWh/ consumer (570 less than the GB mean of 4190 kWh/ consumer) (DECC, 2011).

12. Off-gas households, are particularly impacted by fuel poverty. Households that heat their properties with oil, solid fuel, LPG or electricity typically have fuel poverty gaps double the average, typically over £1000. (National Energy Action, 04/11/13).
13. In 2012 (the latest data available) there were an estimated 1500 households in Darlington not connected to the gas network (DECC, 19/12/13). An overall comparison is given in the table below.

Table 1: Estimated percentage of households not connected to the gas network (gas meters to number of households) in 2012 (DECC, 19/12/13)

Darlington	North East	Great Britain
3%	4%	11%

14. **Appendix 1** provides details of estimated percentage of off gas households in Darlington by Lower Super Output Area.
15. There are many off gas properties in Darlington's urban areas; this includes households which may use electricity for heating, which costs significantly more per kwh than gas. However, the highest percentages of off gas properties in Darlington are in rural areas (i.e. an estimated 57% of households in Heighington and Coniscliffe and 32% in Sadberge and Whessoe are off gas).
16. In the North East (figures not available at LA area level), most off gas properties are privately rented, however there are a significant amount which are Council/ Housing Association properties as shown in Figure 1 overleaf:

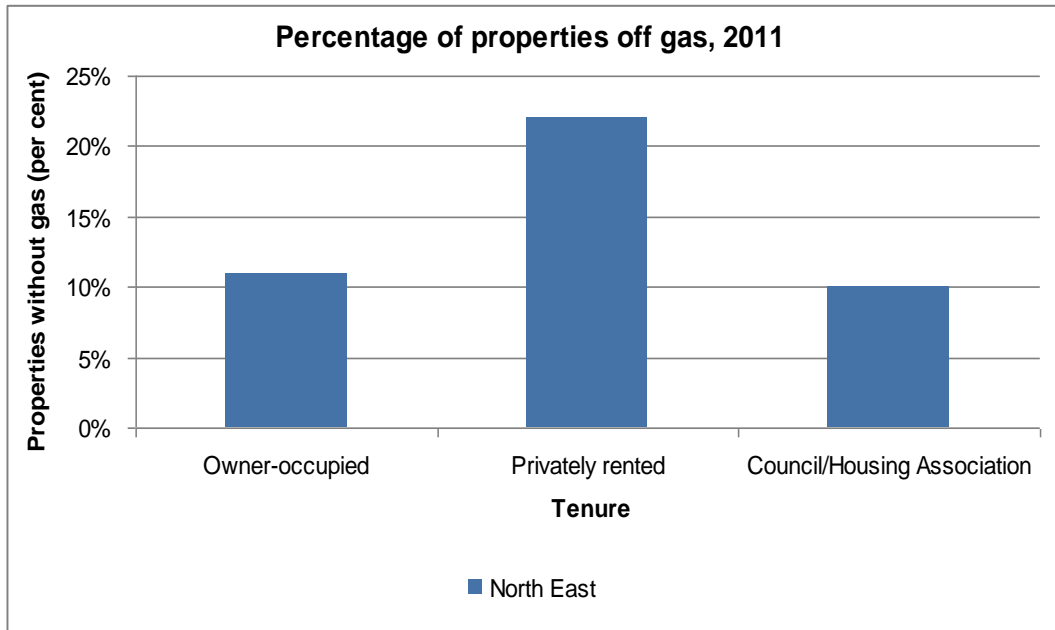


Figure 1. (Source: DECC, 19/12/13 (2))

17. The majority of off gas properties in the North East (figures not available at LA area level) are flats or detached properties:

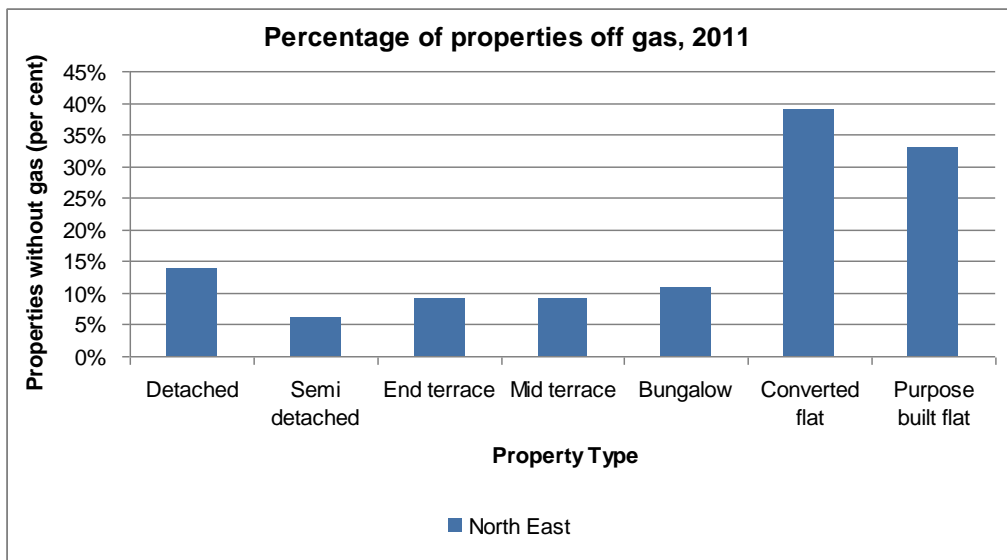


Figure 2. (Source: DECC, 19/12/13 (2))

18. Most off-gas properties in the North East (figures not available at LA area level) are post 1999 properties:

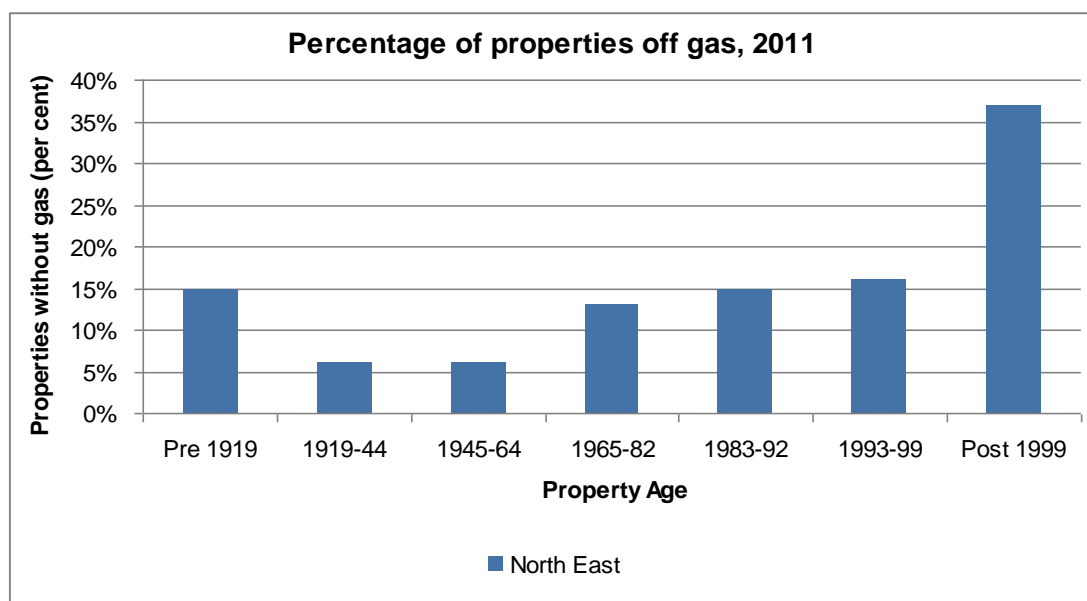


Figure 3: (Source: DECC, 19/12/13 (2))

19. (For more detailed information, a dataset with a list of all postcodes without a record of a gas supply is available on the Xoserve website (November 2013): www.xoserve.com/wp-content/uploads/Off-Gas-Postcodes.xlsx)

20. Non Gas Domestic Energy Consumption in Darlington by fuel type is shown in Figure 4:

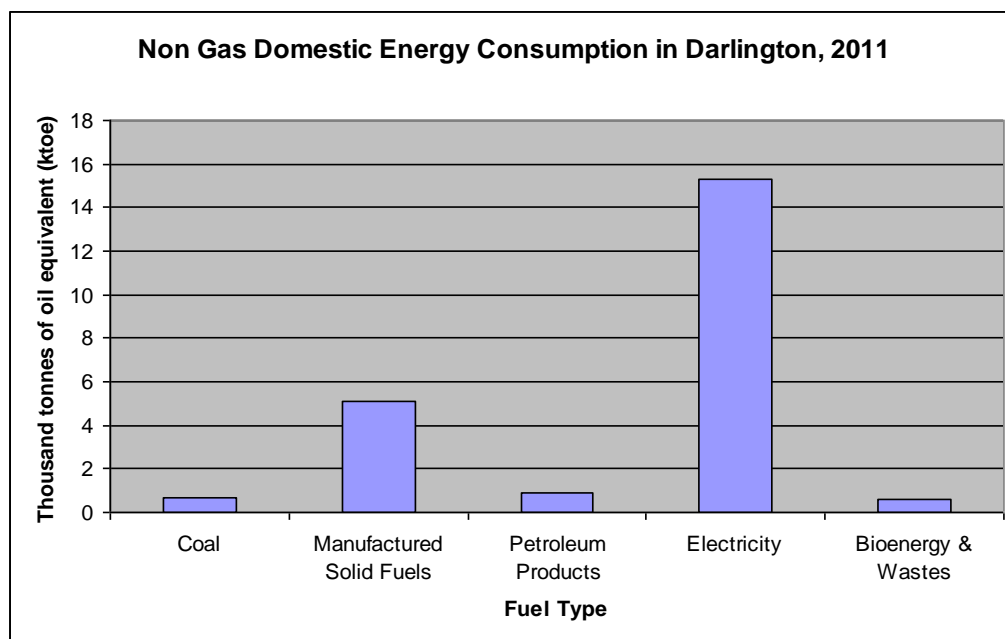


Figure 4: (Source: DECC, 26/09/13)

21. There are currently no further detailed statistics available for a breakdown of consumption of sub-types of these fuels at Local Authority level and therefore it is not clear how many households in Darlington specifically use LPG or heating oil for example.

22. Heating and Off Gas Households across Darlington’s Council Housing

The Council Housing stock is heated by a variety of heating system types. Of 5385 properties, 5165 are heated using gas, 218 are heated by electricity and 2 are heated by solid fuel. (Darlington Borough Council, 30/01/14). (Of these properties, 145 Darlington Borough Council Housing properties (2.69%) have been identified as ‘off gas’ and predominantly use electricity for heating). (Darlington Borough Council, 31/01/14).

23. A breakdown of Council Housing properties by fuel and heating system type is shown in the table below.

Table 2: Breakdown of Council Housing Properties by Fuel and Heating System Type

Fuel Type	Heating System Type	Boiler type	Number of Properties
Solid Fuel	Solid fuel	Solid fuel	2
Electric	Electric Heating Appliance	Electric Heating Appliance	4
Electric	Space Heating	Space Heating	1
Electric	Electric Storage High Energy Efficiency	Electric Storage High Energy Efficiency	141
Electric	Air Source Heat Pumps	Air Source Heat Pumps (Mitsubishi Ecodan model)	72
Gas	Gas/Oil Boiler and Radiators	Gas Fire & Back Boiler	804
Gas	Gas/Oil Boiler and Radiators	Conventional – Wall Mount	363
Gas	Gas/Oil Boiler and Radiators	Conventional - Floor	19
Gas	Gas/Oil Boiler and Radiators	Combi – Non Condensing	1063
Gas	Gas Warm Air	Combi HE Condensing – A rated (91% efficient)	27
Gas	Gas/Oil Boiler and Radiators	Combi HE Condensing – A rated (91% efficient)	2653
Gas	Communal	Communal	236
Total			5385

(Source: Darlington Borough Council, 31/01/14).

Insulation – Current Status

24. Insulation across Darlington Borough

By 2012/13, Darlington had 2,674 Cavity Wall Insulations; 552 cavity wall insulation installations/ 10,000 households (352 less than the GB mean of 904 cavity wall insulation installations/ 10,000 households) (DECC, 2012/13).

25. By 2012/13, Darlington had 7,202 Loft Insulations; 1,486 loft insulation installations/ 10,000 households (121 more than the GB mean of 1,365 loft insulation installations/ 10,000 households) (DECC, 2012/13).

26. Insulation across Darlington's Council Housing

All Council properties with cavities are insulated.

27. All lofts have at least 150mm of insulation.

28. In 2012/13, the Council secured a small pot of money to allow us to carry out work to 7 miscellaneous terraced properties. They had internal wall insulation, top up loft insulation, double glazing, new doors and a new boiler installed. Based on Energy Performance Certificate information, this will produce typical savings of £1466.

29. As part of the Cockerton Redevelopment Works, the Council applied external render insulation to 24 flats and 5 semi-detached homes.

30. 165 homes in the Hundens Lane area have benefited from full door and window replacement.
(Darlington Borough Council, 31/01/14 (2))

31. The following 162 individual properties on North Road received new front and back doors:

- (a) Richard Court
- (b) Stephen Court
- (c) Elizabeth Place
- (d) George Short Close
- (e) Alfred Street
- (f) Edmund Street

(Darlington Borough Council, 31/01/14 (3))

Solar PV – Current Status

32. Solar PV across Darlington Borough

By March 2013, Darlington had 314 domestic solar installations; 65 domestic solar PV installations/ 10,000 households (70 less than the GB mean of 135 installations/10,000 households) (DECC, March 2013).

33. Solar PV across Darlington's Council Housing

The Council installed Solar PV on 67 new build properties between 2009 -2011:

Table 3: Council New Build Solar PV Installations:

Location:	Number of Properties:
Beadnell Close	34
Richmond Close	13
Burnside Road	8
Dinsdale Close	12
Total	67

(Source: (Darlington Borough Council, 31/01/14 (2))

34. The Council has also leased Council Housing property roofs to Sadberge Renewable Energy Ltd, a local private based company to support PV installations on 7 Local Authority domestic properties to allow tenants to benefit. (Darlington Borough Council, March 2013).

35. In total, 74 Council Housing properties currently benefit from Solar PV.

Energy Performance– Current Status

36. Energy Performance across Darlington Borough

In 2009 (the latest data available), the mean SAP (energy rating on a scale of 0 (poor) to 100 (good) was 51 in Darlington, which was higher than that found nationally (49) (Darlington Borough Council, 2009, p.11)

37. Energy Performance across Darlington's Council Housing

The current mean SAP (energy rating on a scale of 0 (poor) to 100 (good)) of Darlington Borough Council Housing is 68. (Darlington Borough Council, 03/02/14).

Condensation and Damp – Current Status

38. Condensation dampness is regarded as a major public health risk because it can exacerbate respiratory diseases such as asthma. The Council is seeing an increasing trend in the number of tenants who are reporting condensation and damp issues. These repairs are inspected and a vast majority are associated with tenants' behaviour and lifestyle with tenants not adequately heating and ventilating the property (e.g. opening windows). Tenants have responded that this is primarily due to their concerns that they cannot afford to heat the property. (Darlington Borough Council, 31/01/14 (2)).

39. This is an issue which is being experienced by Social Housing across the Country. The Direct Works Forum (DWF), which represents housing maintenance staff in more than 100 housing associations and local authorities, said a poll of its members carried out in November 2013 found that 90% had noted increased reports of condensation dampness, a trend it put down to welfare cuts and fuel poverty. Some members reported that tenants had asked maintenance staff if their gas supply could be cut off so they would not be tempted to use heating they knew they would not be able to afford. (The Guardian, 27/12/13).

40. The Council has installed additional electric radiator heating to entrance hallways to 133 individual properties on North Road to reduce cold spot/ condensation issues, however tenants also need to change their energy use behaviour to prevent condensation and damp issues from occurring.
(Darlington Borough Council, 31/01/14 (3)).

Energy Cost – Current Status

41. As an individual, average energy costs in 2013 were 15.3 p/ kwh for electricity and 4.69 p/ kwh for gas (average energy costs across all suppliers, and payment methods in the North East including standing charges and VAT).
(DECC, December 2013).
42. Four of the Council's Sheltered Housing Schemes with communal boilers are part of the energy purchasing scheme with NEPO; this means that we are able to benefit from lower tariffs for these properties and in turn reflect these in our charges. The NEPO energy costs are 10.8p/ kwh for electricity and 2.5p/kwh for gas (these are an average as there are profile classes to consider).
(Darlington Borough Council, 31/01/14 (2))

Tackling Heating and Insulation Issues across Council Housing – Current Action

43. Housing Business Plan – Heating Replacement Programme

The Council's Housing Business Plan includes an annual, fifteen-year and thirty-year Heating Replacement Programme.

44. The annual programme replaces approximately 240 boilers per year with energy efficient boilers. (All the Combi condensing boilers are A-rated (91% efficient)). In 2012/13 the Council actually replaced 350 boilers; this was due to the change in legislation regarding fixed flues.
45. The fifteen year programme replaces boilers, timer controls and thermostats provides TVR's if required and upsizes any radiators as necessary.
46. On the thirty year programme, all pipework, radiators and the items above are replaced.
(Darlington Borough Council, 31/01/14 (2))
47. Insulation Upgrades
As homes have their heating upgraded, or have new kitchens and bathrooms or are/rewired the loft insulation is topped up to 300mm. This insulation upgrade has been carried out in individual homes and in blocks of flats.
48. Homes in the Hundens Lane area are currently benefiting from a reroofing programme; as part of this the loft insulation will be topped up to 300 mm and the flat roofs to the kitchen extensions will also be insulated.
(Darlington Borough Council, 31/01/14 (2)).

49. Prevention of Condensation and Dampness

The Council provides a leaflet to tenants to support them to prevent condensation and dampness. (Darlington Borough Council, 31/01/14 (2)).

50. Energy Information & Advice to Tenants

Housing Officers have benefited from information sessions from Age UK Darlington's HE-AT project, Darlington Citizens Advice Bureau and Darlington Credit Union to help them identify tenants who appear to be spending excessive amounts on fuel so they can be directed to one of these agencies for support.

51. The Council has also produced a guide for tenants to help them manage their money, which encourages tenants to change their energy tariff or provider, directs them to the 'uswitch' price comparison site and to Age UK Darlington's HE-AT project. Copies of this guide were distributed at the Festival of Thrift in September 2013 and went out with a recent edition of Hot News. (Darlington Borough Council, 31/01/14 (2))

Tackling Heating and Insulation Issues across Council Housing – Future Considerations

52. Connecting Off Gas Households to the Gas Network

111 Council properties are being considered for inclusion in a project with Northern Gas Networks to connect off gas properties to the gas supply next year. (The eligibility of an additional 15 is to be confirmed, there are an additional 7 which have subsequently been found to have live supply and 12 are too far from the main gas network to be viable). (Darlington Borough Council, 31/01/14). The Council has consequently amended its Business Plan to allow us to install gas heating in these properties next year. (Darlington Borough Council, 31/01/14 (2))

53. Alternative Options for Off gas Households

Several properties are too far from the main gas network to be viable for connection. Alternative options for these properties need to be considered and explored dependent upon their personal circumstances. For example, properties which use heating oil for fuel may benefit from joining a Community Oil Buying Club which can offer members a cheaper deal through bulk buying discounts. According to the Citizens Advice Bureau map of local oil clubs, there currently isn't an oil club in the Darlington area. The nearest Community Oil Buying Club is Durham Community Oil which is run by Durham Community Action Limited (formerly known as Durham Rural Community Council). (Citizens Advice Bureau, 27/01/14).

54. Durham Community Action Limited, an independent registered charity (reg. 229119) established in 1935 and affiliated to ACRE (Action for Communities in Rural England), has an agreement with sister organisation Tees Valley Rural Community Council to operate Durham Community Oil in the Darlington Borough area. Indeed, as of December 2013, the club had 5 registered members in the Darlington area (one in Heighington (DL5) and four in High Coniscliffe (DL2)). (Durham Community Action, 04/12/13; 28/01/14). (Detailed information on the Charity is available from Durham Community Action's website: www.durhamrcc.org.uk and from the Charity Commission: www.charitycommission.gov.uk/find-charities/)

55. Further information on Durham Community Oil is available at: www.durhamrcc.org.uk/durham-community-oil.html or at 01207 529 621
56. It is recommended that tenants and residents who currently use heating oil be signposted to the Durham Community Oil scheme (this is at minimal/ no cost to the Council with this recommendation being supported by the Council's Chief Officers and Carbon Management Board).
57. In the longer term, Off gas households may particularly benefit from low-carbon/ renewable technologies and these should be considered on a case by case basis, dependant on individual circumstances.
58. Warm Up North
The Council has been working with Warm Up North and the procured provider, British Gas, to explore potential funding of external wall insulation schemes for properties at Lascelles and Red Hall through the Energy Company Obligation (ECO).
59. Unfortunately when they eventually came back to us with an offer this required a significant contribution to cost from Darlington Borough Council. The situation is further complicated because the Government has recently made changes to the Energy Company Obligation (ECO).
60. Housing Services has been exploring alternative options with Yorkshire Energy and their provider Cosyseal, who, we are currently led to believe, may be able to provide full funding. The Council's Legal and Procurement Team is currently investigating this.
(Darlington Borough Council, 31/01/14 (2))
61. Energy Information and Advice to Tenants
The Council's Green Economy Officer has recently developed a Council 'Home Energy' webpage for residents to help them to save energy and money. This was launched in The Big Energy Saving Week (27 – 31 January 2014). It is recommended that Council Housing tenants and residents with access to the internet, be signposted to this webpage available at: www.darlington.gov.uk/home-energy Those without access to the internet or who require further support should continue to be signposted for energy information and advice to Age UK, Darlington's HE-AT project, Darlington Citizens Advice Bureau and Darlington Credit Union.
62. The Council has recently arranged for a Customer Liaison Officer to attend NAREC (National Renewable Energy Centre) training on the use of Solar PV and Solar Thermal, and Air Source Heat Pumps and Heating Controls. This is with the aim of supporting tenants to use these technologies effectively in the future, and thus reduce energy costs over the longer term.

63. Energy information and advice will continue to be developed by the Council's Green Economy Officer working with Council Housing and partners on an on-going basis.

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LSOA Estimates of Darlington Households not Connected to the Gas Network, 2011

LSOA Name	Estimated number of households not connected to the gas network	Estimated percentage of households not connected to the gas network (gas meters to number of households)
Heighington & Coniscliffe- Rural	550	57%
Sadberge & Whessoe	270	32%
Northgate- South/West part	190	27%
Hurworth- Rockcliffe, mid Hurworth on Tees	170	21%
Haughton North- NW/central part (Whinfield)	150	20%
Northgate- East part	120	16%
Harrowgate Hill	110	16%
MSG- Middleton One Row, Oak Tree	90	15%
Park West- Inner (NE) part	100	13%
Lascelles- E/part	70	9%
Haughton East- W/Central part	40	9%
North Road- W part (Rise Carr)	70	9%
Bank Top- SW part	50	8%
Lascelles- W part	90	8%
MSG- Mid MSG, Low Dinsdale	50	8%
Faverdale	90	7%
Cockerton West- East/Central part	40	7%
Haughton East- Red Hall	40	6%
Cockerton West- North part	40	6%
Cockerton East- Central part	40	6%
North Road- North-East part	30	5%
Park East- N/NW part	30	4%
Eastbourne- NE part	50	4%
Central- Albert Hill	30	4%
Cockerton West- West part	20	4%
MSG- North MSG	20	3%
College- W part	20	3%
North Road- Central part (Rockwell to Crosby Street)	20	2%
College- E/N part	20	2%
Heighington & Coniscliffe- Heighington village	10	2%
Haughton East- NE/Central part	10	1%
Lingfield- W part (Hundens Lane area)	10	1%

Source: DECC, 23/12/13