



Orkney's Fuel Poverty Strategy 2017-2022

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Foreword

Executive Summary

Over the last five years the level of fuel poverty in Orkney has risen owing to a number of factors including the rise in the cost of electricity and stagnating incomes. Orkney's 2017 to 2022 Fuel Poverty Strategy aims to drive down the level of fuel poverty in Orkney by building on the work that is already being done to fill the gaps in areas that are not currently being addressed. The aim of the Strategy is to reduce Orkney's level of fuel poverty to the national average by 2022 and fully eradicate fuel poverty in Orkney by 2032. This is an ambitious target, but tools are available to help meet it and the Strategy aims to make full use of these.

The key aims of the Strategy to help meet the objective of eradicating fuel poverty by 2032 are:

- To lobby the Scottish and United Kingdom Governments to improve the Island-proofing of energy efficiency and fuel poverty policy.
- To enhance impartial locally based energy efficiency advice and information.
- To enhance energy efficiency upgrade programmes for domestic properties.
- To improve partnership working between fuel poverty agencies / service providers.
- To support the development of a local electricity tariff and a service to help facilitate households switching to more suitable electricity tariffs.
- To maximise the use of Orkney's renewable energy generation to help tackle fuel poverty.

The Action Plan attached at Appendix 3 outlines the detailed actions that have been identified to try and deliver on the aims and objectives. The Strategy will be reviewed on an annual basis with a full review every five years.

1. Introduction

Orkney's 2017 to 2022 Fuel Poverty Strategy builds on the 2011 to 2016 Fuel Poverty Strategy and underpins the Local Housing Strategy. The Strategy will build upon the good work done through the previous 2011 to 2016 Fuel Poverty Strategy and part of the process in developing the strategy has been reviewing the actions of the 2011 to 2016 Strategy, refining targets where needed and looking to develop solutions for areas of continuing challenge.

The Strategy sits alongside the Orkney Energy Strategy and also relates to several other Council strategies including the Older Persons' Housing Strategy, Young Persons' Housing Strategy, Private Sector Housing Strategy and Advice and Information Strategy.

The targets and aspirations of the Fuel Poverty Strategy sit under the:

- Council's 2013 to 2018 Plan key priority of; 'Housing to meet the needs of Orkney's people'.
- Orkney Partnership's Orkney Community Plan 2015 to 2018 strategic priorities of Healthy and Sustainable Communities and Positive Ageing.

Section 95 of the Housing (Scotland) Act 2001 defines a household as being fuel poor if they are living in a home which cannot be kept warm at reasonable cost. The Scottish Fuel Poverty Statement refines this definition to say a household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income (including Housing Benefit and Income Support for Mortgage Interest) on all household fuel use. Extreme fuel poverty exists where the household spends 20% of its income on fuel. Some households may not spend more than 10% of their income on heating, but they also do not heat their property to the perceived reasonable temperature of 21 degrees Celsius in the lounge and 18 degrees Celsius in bedrooms. If these households did properly heat their homes they would meet the 10% figure so are deemed to be in fuel poverty.

Fuel poverty not only impacts on a household's ability to keep their home warm, but it also can affect both the physical and mental health of those living with the property. Some households find they have the choice between heating their property and eating.

Appendix 1 to the Strategy outlines the current fuel poverty position and the causes of fuel poverty. The five key areas are:

- Orkney's older housing stock and its condition.
- Lower than average income.
- The high cost of heating.
- Orkney's climate.
- Lifestyle choices of households.

To help reduce fuel poverty these five areas each need to be understood and where possible tackled, with objectives and actions developed to combat these five causes of fuel poverty.

Orkney has historically had one of the highest levels of fuel poverty within the United Kingdom, with the Scottish House Condition survey of 2014 suggesting that 63% of Orkney households were in fuel poverty. This Strategy gives an overview of how the Council and its partners plan to meet the 2017 to 2022 Fuel Poverty Strategy's aim of reducing fuel poverty in Orkney to the national average by 2022 and eradicating it in Orkney by 2032.

The tools and partnerships already exist in Orkney to fully eradicate fuel poverty within the Islands. Orkney's production of green renewable electricity, as well as the innovative solutions that are being developed to maximise the local utilisation of the electricity produced, are very important. They provide information and advice to households and deliver energy efficiency upgrades to properties, meaning Orkney is well placed with the physical resources required. There are stumbling blocks to fully utilising these resources including grid constraints, staffing and contractor capacity and some national policy that is not currently adapted to fit island and rural areas effectively. Work is on-going with local and national partners to address these issues.

Section two covers the key aims and objectives of the Strategy to help eradicate fuel poverty, including the main actions the Council and its partners will undertake to meet those objectives and meet the ambitious target of eradicating fuel poverty by 2032.

Appendix 1 then provides a detailed analysis of the current position with regard to Orkney's level of fuel poverty as well as the four key elements that cause fuel poverty. Appendix 1 provides a good background to fuel poverty and would be a good starting point for those new to fuel poverty matters.

Finally Appendix 2 outlines what has been done by the Council and its partners over recent years to combat fuel poverty within Orkney. Some of the Fuel Poverty Strategy 2017 to 2022's objectives and actions build on current actions that are being undertaken, while other objectives and actions fill the gaps that have been identified in the current provision through the development of the Strategy.

Each of the objectives outlined in Section Two below will require co-ordinating and delivering. Additional resourcing will be required to move certain objectives forward. The action plan attached at Appendix 3 outlines the key actions associated with meeting the aims and objectives of the Strategy.

2. Key Aims and Objectives

As outlined above, the key aim of Orkney's Fuel Poverty Strategy 2017 to 2022 is to significantly reduce fuel poverty in Orkney to the national average by 2022 and eradicate it entirely by 2032, while at the same time maximising the use of Orkney's renewables potential to benefit the community in Orkney. This is a very ambitious target and will require a multi-agency approach combining both national and local agencies.

To accomplish this aim there are some key areas and objectives that need to be focused on. These areas are outlined in the section below and build upon the evidence in Appendix 1 to this report on the causes of fuel poverty, as well as the overview in Appendix 2 of the actions and projects that are currently underway in Orkney to tackle fuel poverty.

Support the development of a local electricity tariff and a service to help facilitate households switching to more suitable electricity tariffs

With no mains gas, households in Orkney are reliant on more expensive electricity as a major form of heating. The fact households in Northern Scotland and the Isles are largely charged more for electricity than central and southern Scotland only increases the problem. In addition Orkney's climate and its older housing stock mean that Orkney households need to heat their homes for longer and use more energy than similar households elsewhere in Scotland. Appendix 1 expands on the issues of fuel affordability.

On top of these issues, the prevalence of historical dual-tariff electricity meters like Total Heating Total Control and Economy 10 mean that households can be trapped with a specific supplier or tariff-type with limited or no chance to switch to a more affordable tariff.

If the Fuel Poverty Strategy 2017 to 2022 is to meet its aim, significant work needs to be done to help households in Orkney find an appropriate electricity tariff that meets their needs and reduces their costs. With so much green renewable electricity being generated in Orkney, the opportunity for an Orkney electricity tariff that utilises locally generated electricity is huge.

The most vulnerable households, which for whatever reason do not or choose not to engage with online tariff switching services or other forms of existing assistance, must be targeted for assistance as a priority. These households have often never switched supplier and may well be paying higher prices than necessary and should they desire to switch assistance to do so is vital.

The Competitions and Markets Authority's (CMA's) ruling in June 2016 requires larger energy suppliers to offer their single-rate tariffs to households on restricted

meters like Total Heating Total Control, Economy 10 and 7. This will certainly help households in Orkney that have to date struggled to change tariff and/or supplier because they are on so called 'exotic' meters which are only supported by a small number of suppliers.

Smart Meters, which are due to be rolled out by electricity suppliers to all households by 2020, will assist households with monitoring energy usage and improving energy efficiency. However, the first generation of Smart Meters do not allow more than one tariff to be supported and this means that households on Economy 7 and 10 as well as Total Heating Total Control may find themselves left behind in the Smart Meter upgrade in the short term at least. Helping households move from Total Heating Total Control and Economy 7 and 10 will enable these households to gain access to Smart Meters as they are rolled out in Orkney as well as improving their access to the wider energy market.

Lobbying at a Scottish and United Kingdom level ensure that the roll-out of Smart Meters does not bypass Orkney. Ensuring that the most up-to-date Smart meters are installed, as well as the supporting infrastructure required, is a key target.

The establishment or support for a local Orkney electricity tariff that offers cheaper electricity to Orkney households is one of the key aims of the Fuel Poverty Strategy and energy supply and tariff options are also covered in Orkney's Energy Strategy 2017 to 2022.

Key Actions

1. To support households in accessing the most appropriate electricity tariff for their needs, including helping them switch away from Total Heating Total Control and Economy 10 or 7 meters if appropriate. Additional support for vulnerable households who are not able to undertake the process of switching tariff on their own will also be required.
2. To establish or support the development of an Orkney electricity tariff to provide savings to households and businesses on their electricity bills and offer tariffs that are as affordable as possible.
3. To Lobby for an improved Smart meter roll out that offers solutions to households on Economy 10 and Total Heating Total Control style meters, ensuring that second generation Smart meters are installed and all support infrastructure is delivered in a timely manner.

Lobby for the Island-proofing of energy efficiency and fuel poverty policy

A number of national strategies and programmes have been launched by the Scottish Government over recent years and some of these are more effective in rural and island contexts than others. What works for larger Central Belt areas often

doesn't work for much smaller island communities, and the reverse is also true. Making sure that future fuel poverty and energy efficiency legislation is island-proofed is of paramount importance. Orkney Islands Council and its partners will continue to lobby the Scottish and Westminster governments to ensure future policies address the specific issues faced by all of Scotland's islands.

A more flexible approach to tackling fuel poverty and energy efficiency is needed. Each local authority needs to be able to focus on the causes of fuel poverty and areas that can be combatted that are most relevant to its area, utilising the skills and capabilities of the community in question.

Key Actions

4. To continue to lobby the Scottish and United Kingdom Governments on fuel poverty and energy efficiency matters, including the unfairness of the current electricity market and difficulty in delivering on the national accreditation standards requirements like PAS 2030 for rural north Scotland and the Isles.

5. To work with the Scottish Government on the Scottish Energy Efficiency Programme (SEEP) to ensure that the objectives of SEEP fit Orkney's island context and can be delivered.

Enhance impartial locally based energy efficiency advice and information

The Scottish Government provides an impartial energy advice service through Home Energy Scotland. This is primarily a telephone-based advice service with a part-time outreach worker in Orkney.

Research has shown that the most vulnerable households with some of the highest rates of fuel poverty either cannot or chose not to engage with advice services offered over the telephone or internet. To reach these households, who are also often in some of the more remote areas, will requires locally-based staff who can initiate contact with vulnerable households on their terms, in their local community.

It is recognised that it costs significantly more to provide advice services in remote rural and island areas, but it is also recognised that these are the areas that have the least access to services and often have the highest levels of fuel poverty. Therefore frontline advice and locally displayed information is key to tackling fuel poverty and making sure the most vulnerable households have access to the services they require to help them out of fuel poverty.

Orkney has a number of organisations that offer advice and signposting to households on various matters relating to fuel poverty. These include the Citizens Advice Bureau, Orkney Islands Council, Home Energy Scotland, THAW Orkney and Firefly Energi (Orkney). Other agencies also refer clients to these bodies for advice

and information. The Council and Orkney Housing Association are usually the initial point of contact for their tenants on fuel poverty and energy efficiency issues.

Advice on fuel poverty can be delivered in a number of ways and by different partners. Home carers, medical staff, befrienders and other third sector organisations often have access to households that dedicated fuel poverty staff do not. Orkney's Fuel Poverty Strategy 2017 to 2022 needs to ensure these individuals are aware of, and trained in, identifying issues around fuel poverty and are able to refer households on to the specialist agencies that deal with fuel poverty. Effectively utilising front-line health and care staff will be vital if Orkney's most vulnerable households are to be given the assistance they need.

Training of front-line staff from various agencies, as well as contractors has been undertaken and developed by partner agencies including the Council, Orkney Housing Association Limited, THAW Orkney, Home Energy Scotland and the Energy Saving Trust. Additional training and awareness-raising for front-line staff and contractors will be needed and will utilise various partners in its delivery.

Key Actions

6. To investigate the potential for a one-stop-shop Orkney Energy Agency that would provide a space for various agencies working in the fuel poverty field to be co-located and to ascertain whether this approach would offer an improved level of service.
7. To improve training and awareness-raising for front-line staff across agencies to try and engage the most vulnerable households and tackle the very worst fuel poverty.
8. To enhance the provision of Orkney-based advice and information services to ensure all households receive the information and advice they need around fuel poverty and energy efficiency issues.

Enhance energy efficiency upgrade programmes for domestic properties

There are a number of different energy efficiency measure installation programmes currently active in Orkney. Improving the efficiency of these programmes and ensuring that they are as streamlined as possible and target those households in most need will go a long way to ensure the optimum use of available funds. Continued lobbying of the Scottish and Westminster governments around the eligibility criteria of funding made available for domestic fuel poverty and energy efficiency works is required to ensure that funding is targeted at the households experiencing the worst fuel poverty. This links with the island-proofing objective.

Orkney Islands Council will continue to explore ways of joint-working with Warmworks to improve the alignment between the Home Energy Efficiency

Programme for Scotland: Area Based Schemes (HEEPS: ABS) run by the Council and Home Energy Efficiency Programme for Scotland: Warmer Homes Scotland (HEEPS: WHS) run by Warmworks.

Key Actions

9. To maximise the amount funding that can be drawn in and utilised in Orkney from national funding programmes and other sources to tackle fuel poverty.

10. To focus the available fuel poverty funding on the most vulnerable households and the least energy efficient properties.

11. To draw programmes like HEEPS: ABS and HEEPS: WHS more closely together where possible to maximise the effectiveness of the available funding and resources.

Improve partnership working between fuel poverty agencies / service providers

Orkney has a strong tradition of partnership-working across various sectors and, as outlined above, there are a number of partners working to tackle fuel poverty or working with households that are in fuel poverty. Further developing the links between partners will enable improved targeting of resources to the households most in need.

The key partners that need to be brought further into the discussion are NHS Orkney and the Integration Joint Board, as well as more input from the Third Sector to refer their service users to programmes like the Council's HEEPS: ABS and THAW Orkney's Fuel Poverty Pipeline. Referrals from groups like GPs and Home Carers will be key to ensuring that the most vulnerable households are targeted for funding interventions. Partnership working is also key to improving front-line energy advice and assistance to household's objective.

Research has shown that improving housing conditions can have a huge impact upon the health and wellbeing of households. Therefore ensuring that NHS Orkney and the Integration Joint Board are involved as fully-fledged partners will be hugely important in tackling fuel poverty. Investing in projects to tackle fuel poverty can bring clear benefits.

For the most vulnerable households to benefit from the above objectives a co-ordinated approach will be needed from partners. This includes, Orkney Islands Council, NHS Orkney, Orkney Housing Association and various advisory partners such as Home Energy Scotland, THAW Orkney, the Citizens Advice Bureau and others.

Key Actions

12. To develop a forum for agencies working in the fuel poverty field in Orkney to share experience, challenges and to problem solve issues.

13. To engage with local agencies including the Third Sector, NHS Orkney, development trusts and community councils to try and build partnership and identify and engage with the most vulnerable households.

Maximise the use of Orkney's renewable energy generation to help tackle fuel poverty

In each year since 2013, renewable generation in Orkney has produced more electricity than has been consumed in the county. As technology advances and more renewable generation comes on line there will be increased opportunities to further enhance the use of renewable generation and storage.

Renewables can help Orkney in a number of ways. Firstly there will be the opportunity for increased economic growth and benefit as Orkney continues to develop at the cutting edge of the renewables revolution. Secondly locally-produced renewably-generated electricity gives Orkney the opportunity to tackle energy challenges differently.

Locally-generated renewable energy reduces the county's carbon emissions and provides innovative opportunities to help tackle fuel poverty through things like a local energy supply company that offers electricity at cheaper rates. Orkney Islands Council will continue to investigate the opportunities a local energy company may offer.

A number of local partners are undertaking various research projects on renewable energy generation, storage and usage. The Council and its partners will continue to look for ways of aligning renewables projects and opportunities to tackle fuel poverty.

On a household scale, the addition of renewable energy production at a property, be it through solar photo voltaic panels or a purchased or hosted wind turbine, can help reduce a households' electricity costs by enabling the household to produce some of their own supply needs. Purchasing a wind turbine, photo voltaic array or heat-pump is, however, more than likely out of reach for the majority of fuel-poor households in Orkney. Additionally the reduction in Feed-in Tariff rates means that those households with the capacity to host a wind turbine or photo voltaic array may not have the same opportunity that some households have been able to take advantage of in recent years.

Opportunities are opening up around battery storage, hydrogen production and storage and more energy efficient heating systems. There is also renewed interest in socialised district heating systems as widely used in mainland Europe. These advances will have the potential to reduce the costs faced by households when heating their homes as well as maximise Orkney's renewable energy potential.

Key Actions

14. The Council will work alongside relevant bodies in the renewables sector to deliver the aims of the Fuel Poverty Strategy and Orkney Energy Strategy as well as lobby both the United Kingdom and Scottish Governments on issues that relate to fuel poverty and the wider renewable energy sector in Orkney.

15. To maximise the use of renewable heating systems to help cut fuel bills and combat fuel poverty.

16. The Council will work alongside the wider energy sector in the testing and rollout of new technologies that could help tackle fuel poverty including electricity storage, network management and grid utilisation, new fuel and heating options including waste-to-heat and new insulation technologies.

3. Measuring and Monitoring Performance

Robust data for project development and performance monitoring is recognised as being essential as it provides evidence to help target the most vulnerable households, as well as helping with lobbying efforts.

Fuel poverty is an area which is notoriously difficult to monitor given the linkages between household income and heating costs. The Local House Condition survey provides a snapshot of fuel poverty which is repeated every 5 years and given the cost of this it is unlikely that it will be carried out on a more frequent basis. The Council undertook an Affordable Warmth survey in 2015 and aims to undertake an additional survey in 2020 to track the changes in figures. Fuel Poverty figures are highlighted as part of the Scottish House Condition Survey and these figures will also be used to track the level of fuel poverty within Orkney.

It is hoped that enhanced partnership-working in the area of fuel poverty will provide an improved base-line of data which will help monitor the number of households assisted and provide a better overview of fuel poverty within Orkney.

The action plan is used to monitor achievements on an annual basis and is publicly reported accordingly.

Appendix 1 – Current Position and Causes of Fuel Poverty

There have been a number of pieces of research into the levels of fuel poverty within Orkney over the last 10 years. The Scottish House Condition Survey 2012/14 Local Authority Tables published in January 2016 estimated that 63% of households in Orkney are living in fuel poverty. This figure rises to 85% for pensioner households.

The Council undertook its own Affordable Warmth Survey in the summer of 2015 by sending questionnaires out to all 9,725 households in Orkney. The survey received 1,079 responses, giving an 11.7% return rate and these figures estimate a fuel poverty level of 54%. The map below at Figure 1 shows the breakdown of fuel poverty by area based on the Council's Affordable Warmth Survey and, as can be seen, the worst levels of fuel poverty are in the island areas with a figure of over 70%. There is only a 5% variance between the other areas all of which are around the 50% level.

Figure 1 – Fuel Poverty Percentage by Datazone

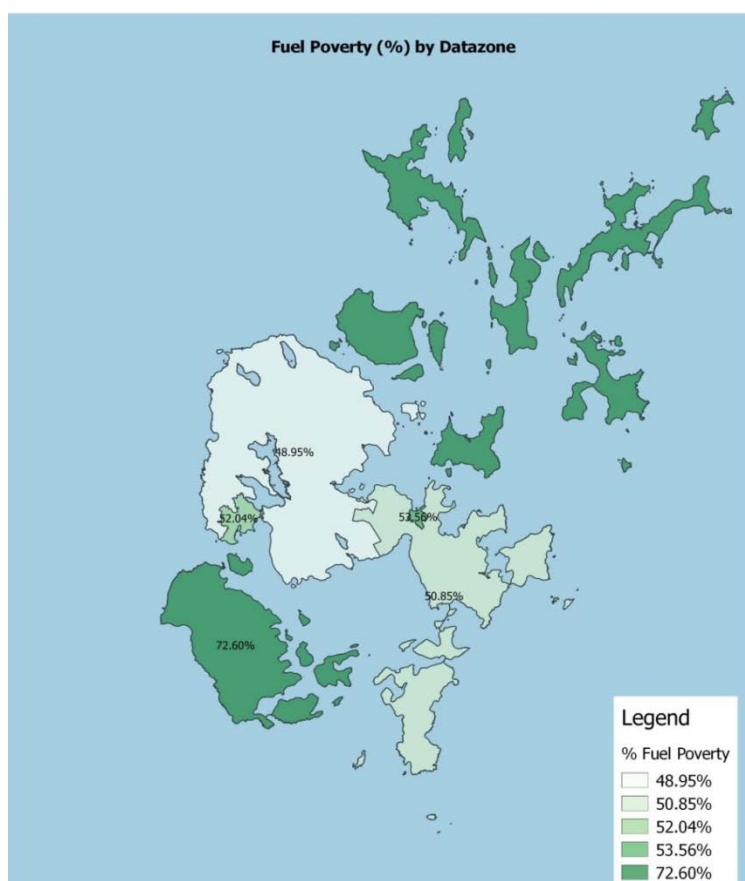


Figure 1: the level of fuel poverty by super datazone. Source: Affordable Warmth Survey 2015.

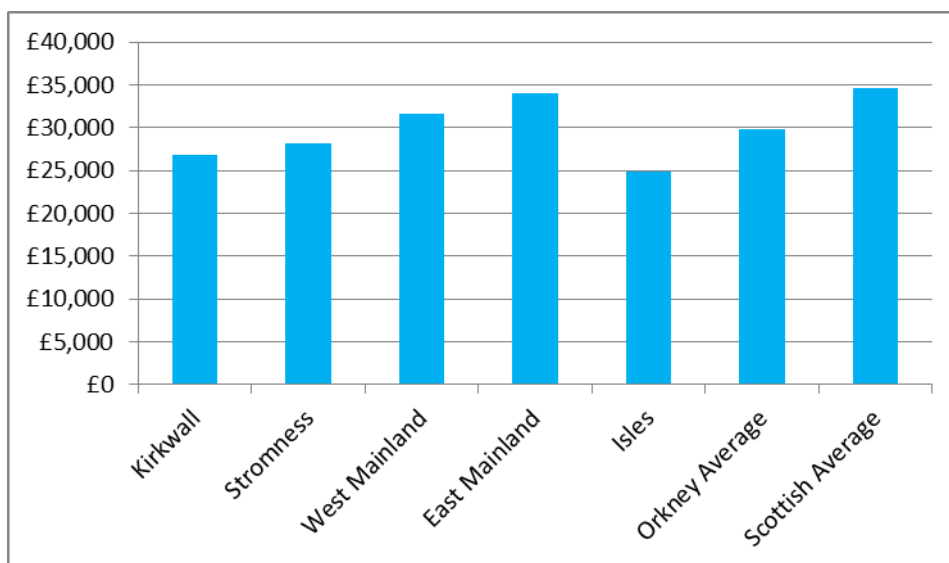
Income

There are five key elements which lead to high levels of fuel poverty in Orkney. These are:

- Lower than average income.
- The high cost of heating.
- Orkney's older housing stock and its condition.
- Orkney's climate.
- Lifestyle choices of households.

The first of these is Orkney's low average income when compared to the Scottish and United Kingdom averages. Figure 2 below outlines the average income by Orkney areas compared to the Orkney and Scottish averages. While all five of Orkney's areas are below the Scottish average, the East and West Mainland areas are the closest to the average. The average income in the Isles is around £10,000 below the Scottish Average of £34,619.

Figure 2 – Average Household Income



Source: CACI PayCheck data 2015.

Coupled with Orkney's lower average wage is the fact that living costs, including energy costs, are higher in remote rural areas like Orkney than more central urban areas.

In 2013 Highlands and Islands Enterprise commissioned a study titled A Minimum Income Standard for Remote Rural Scotland. This study found that it costs on average 20% more to live in rural island areas than in more central towns. This figure rises to around 30% for smaller remote islands like Orkney's outer islands. The higher costs relate to several areas from food shopping to transport, as well as energy bills among others.

With up to 30% higher living costs and with an average wage 29% below the Scottish average, households in Orkney's outer islands in particular face a significant hurdle in terms of affordability.

The figures above show that as well as having lower average incomes, Orkney's islands also have higher living costs than Mainland Orkney. This is a major contributing factor to the level of fuel poverty in the isles.

However, households on Mainland Orkney also face challenges and Orkney's Fuel Poverty Strategy 2017 to 2022 aims to address challenges faced across all of Orkney's islands.

Heating Types and Costs

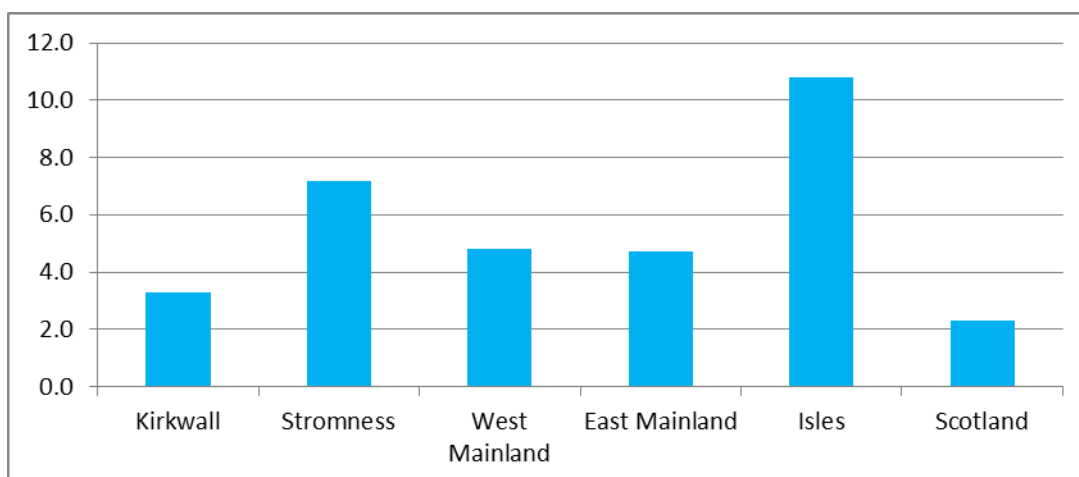
The next major contributor to fuel poverty is the cost of heating. With no mains gas, the main options for heating for households in Orkney are electricity, oil and solid fuel. While Orkney generates a large amount of the electricity it requires from Orkney-based renewable resources, consumers in Orkney and other parts of the north of Scotland may be paying up to 2.5 pence per unit more for their electricity than southern Scotland.

The Department of Business, Energy and Industrial Strategy's Quarterly Energy Prices report from December 2015 states that the north of Scotland has the lowest level of households switching energy supplier in the UK. The report states that only 35% of households have switched away from their supplier. This is the lowest figure in the UK and compares to a nationwide average of 65%. The Council's Affordable Warmth survey supports these findings with 96% of respondents stating that they had not looked into changing their energy supplier in the last 6 months and 80% of respondents stated that they were still with their original supplier.

Tariff switching is one of the easiest ways to help a household out of fuel poverty and the fact that so few households are taking up the option is a concern. This may partly be down to some households being trapped on Total Heating Total Control and Economy 7 and 10 tariffs, while others have been able to switch. The June 2016 Competitions and Markets Authority (CMA) ruling that all larger suppliers need to make their single-rate tariffs available to all customers on restricted meters like Economy 10 and Total Heating Total Control will certainly help and will allow those households previously trapped on poor deals the option to switch. More needs to be done over the lifetime of the Strategy to encourage and assist households to switch tariff and supplier to make sure that they are on the most appropriate tariff.

The graph below shows the percentage of Orkney's population that have no central heating by each of Orkney's areas. The Isles HMA at almost 11% is significantly higher than the other 4 areas. All of Orkney's areas are over the Scottish average of around 2%.

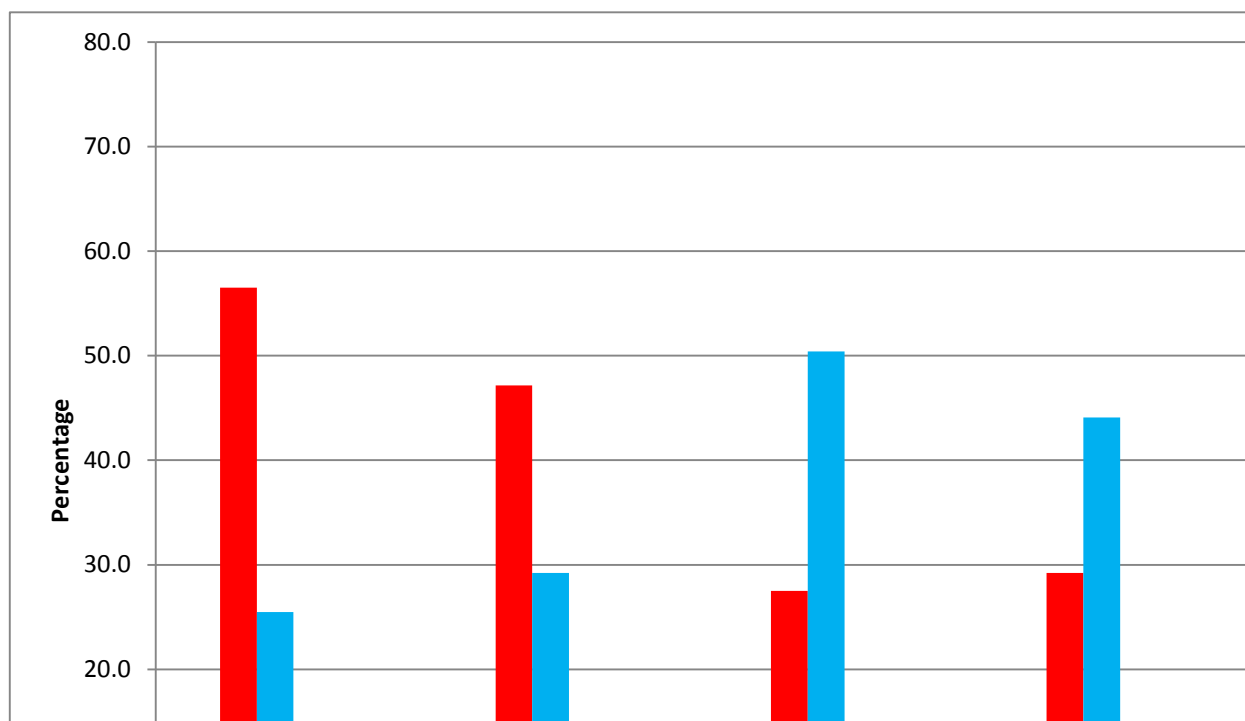
Figure 3 - Percentage of Household with No Central Heating



Source: Scotland's Census 2011

Orkney's two primary sources are electricity and oil as outlined in the graph below. Electric heat pumps including air-to-water, air-to-air and ground source are becoming very popular in Orkney, particularly over recent years where oil prices were high and the standards for energy performance for new-build developments increased. There are also other types like solid fuel and a small number of new bio-mass systems.

Figure 4 - Central Heating Type by Area



Source: Scotland's Census 2011

The results show that in more urban areas like Kirkwall and Stromness electric heating is the key system, while the more rural areas of the East and West Mainland

and the Isles rely more on oil. Overall 41% of Orkney's households rely on electric heating while 36% of households rely on oil.

Electric heating covers the more efficient air and water heat pump heating technologies and high heat retention storage heaters as well as older storage central heating systems. Some properties have mixed heating systems which include an element of electric heating as well as other forms of heating like solid fuel. The major issue around heat pump and storage heater systems is the very limited number of dual-rate electricity tariffs that are available. The dual-rate tariffs that are available can be more expensive than single-rate Standard tariffs. However changing to these tariffs would require a change of electricity meter and may require a change of provider. The most vulnerable households are unlikely to be able to undertake this process on their own.

Electricity

Orkney's use of electricity is well above average. According to the Scottish Government's Energy in Scotland figures published in 2016, the average yearly electricity KWh consumption figure for the United Kingdom was 4,092 in 2014. Scotland had a figure of 4,465, while Orkney came second only to Shetland with a figure of 8,193, which is over 83% higher than the Scottish average. This higher average electricity use in Orkney evidences the reliance on electricity as one of the three main heating types in Orkney. Orkney's Affordable Warmth Survey put the use of electric heating at 43%, very close to the 41% identified in the 2011 Census.

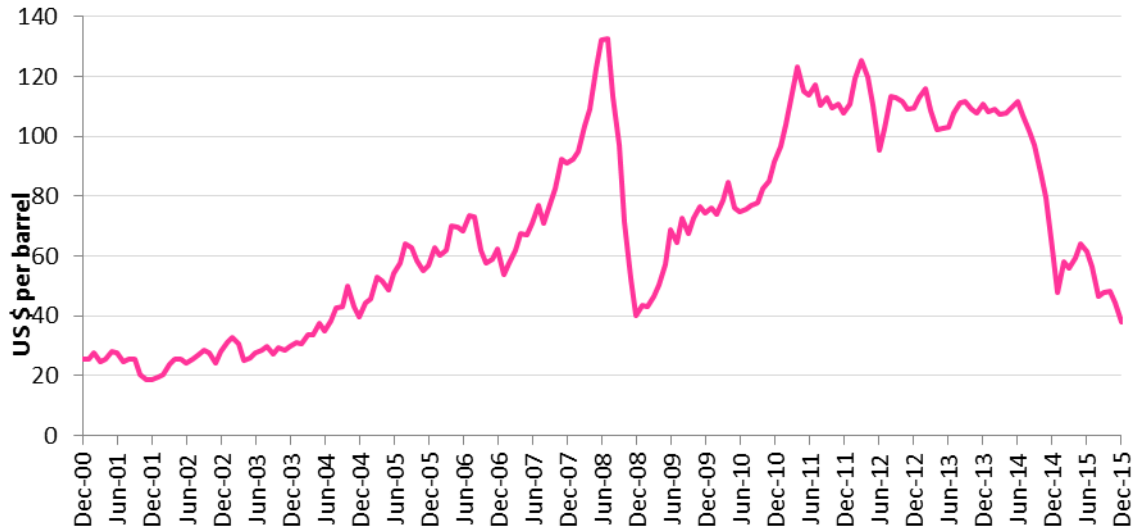
There is a considerable gap in the cost of electricity between consumers in more urban areas and rural and island areas, with higher electricity prices in the rural areas that do not have access to mains gas and rely more on electricity for heating. As well as the difference between electricity prices in different areas, there is also a large difference between the price of electricity and mains gas. Mains gas sells at prices around 3.34p per KWh while the average north of Scotland electricity price was 15.61p per KWh. So even if heat is delivered by an electrical heat pump with a usual Coefficient of Performance (CoP) of 3, electrical heating will still cost 5.2p per kWh or 1.5 times the cost of gas. (A CoP of 5 is needed before it becomes cheaper than gas).

Oil

The Council's Affordable Warmth Survey estimates that between 25 and 30% of households in Orkney use oil as their primary means of heating their property. This backs up the 36% figure from the 2011 Census.

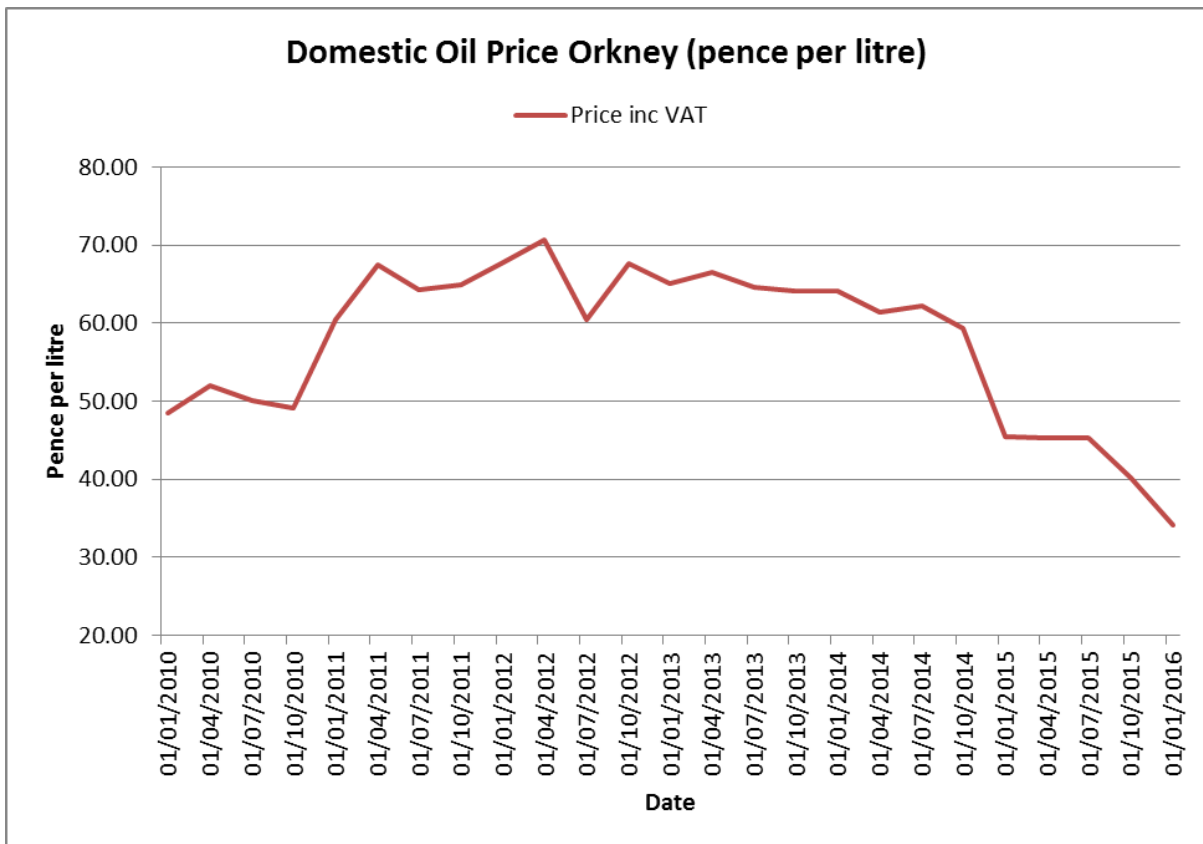
The graph below shows the price of crude oil over the last 15 years. The relatively high price from December 2010 through to June 2014 has had a big impact on the cost of heating for households in Orkney.

Figure 5 - Crude oil price (not adjusted for inflation), December 2000 – December 2015.



The graph below shows the cost of heating oil in Orkney from April 2010 to March 2016. When compared with the base price of crude oil in Figure 5 above, the correlation between the two is evident. When the base price of crude oil rises, the price of heating oil generally follows.

Figure 6 - Quarterly Domestic Oil Price in Orkney (pence per litre).



The fall in heating oil prices from early 2015 has helped with the affordability of households utilising oil heating, but with prices dependent upon market fluctuations it may not be long before prices are once again on the rise, pushing the households who use oil back into fuel poverty.

Solid Fuel

Solid fuel heating systems are another common heating system in Orkney, although observations suggest they are being replaced by both oil and electric systems in many households. The Affordable Warmth Survey estimates that 14% of households in Orkney use solid fuel as a heating system. This is higher than the 2011 Census figure of just over 6%, but it is believed that solid fuel heating systems are often supplemented by other heating systems. This is supported by the 2011 Census which states that 7.5% of households use more than one heating type and many of these multi-system households are believed to utilise a solid fuel system as part of the mix.

A major benefit of solid fuel heating is that it is possible to provide free or very cheap heating if a household burns waste wood or peat. Solid fuel systems used in this way provide some households with a very cheap form of heating.

The move away from solid fuel, either due to old systems coming to the end of their usable life or households aging and requiring an easier to operate heating system, may push some households into fuel poverty as their access to cheap or even free solid fuel is replaced by the need to purchase electricity or oil.

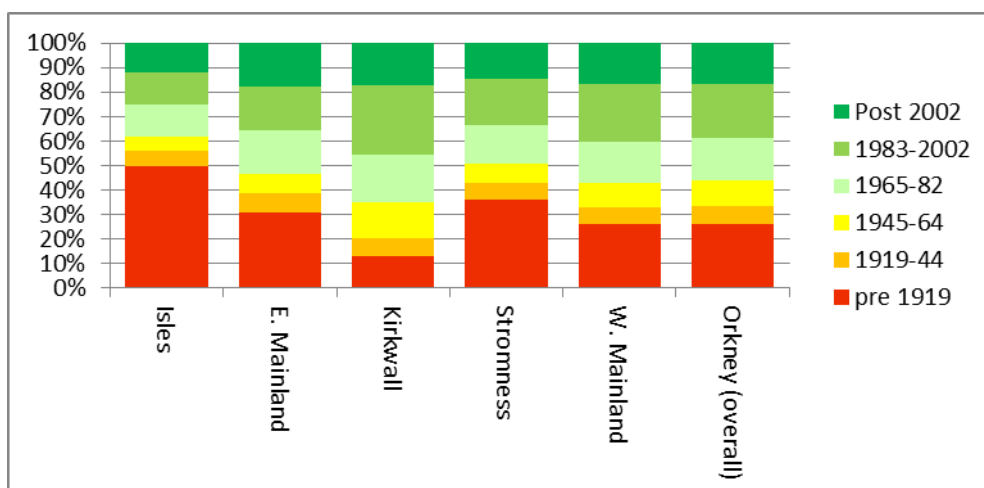
Observations suggest a number of households are fitting new air-to-air heating systems and retaining their solid fuel systems as secondary heating systems. Other households are fitting single room multi-fuel solid fuel systems with the hope of accessing free or cheap sources of fuel.

Housing Stock Condition and Climate

The final major contributors to fuel poverty are the condition of the housing stock and the local climate. Orkney's housing stock varies in age and quality. Around 25% of the stock is pre-1919 and consequently not very energy efficient. There has been a lot of new-build development since 1983 in both the private and social housing sectors and this stock is predominantly more energy efficient than pre-1983 stock. The majority of these properties will either be owner-occupied or social housing, with the majority of private rented stock being in the older age brackets.

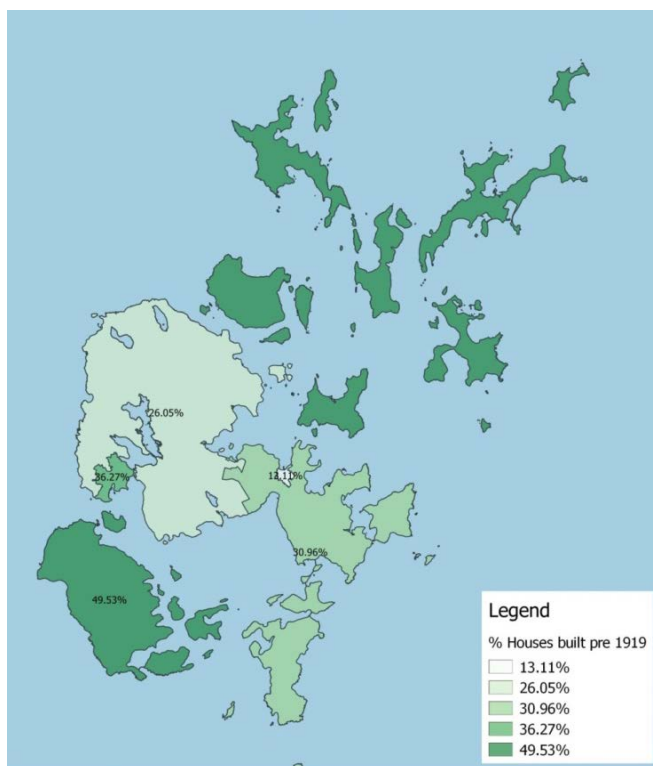
The graph and map overleaf show the age split of Orkney's housing stock. As can be seen almost 50% of the housing stock in the isles is pre-1919. This equates to 30% or less for Kirkwall, the West Mainland and the East Mainland. These three areas also have the highest proportion of post-1983 stock, with over 45% of Kirkwall's stock being post-1983.

Figure 7 - Age Band of Properties



Not only is Orkney’s housing stock older than the national average but it also mostly comprises individual bespoke properties rather than streets or areas of the same property style and type. This makes retrofit projects to upgrade the energy efficiency of properties more difficult and expensive as individual properties often have more than one construction type and may be very different from neighbouring properties.

Figure 8 – Percentage of Properties built pre-1919



Percentage of properties built pre-1919. Source: Affordable Warmth Survey 2015

The Council undertook a Local House Condition Survey in 2015 and the findings support the figures laid out above.

Orkney's climate is also a factor in the level of fuel poverty within the islands. Long winters and higher than average wind speeds as well as Orkney's coastal island location all impact upon the energy efficiency of Orkney's housing stock.

Household Behaviour

The final element that can draw households into fuel poverty is household behaviour. Some households are high energy users through choice, while others may be high energy users through lack of knowledge. Firstly a household may well be in an energy efficient property but if they are not living in the property in an energy efficient manner any benefits of the energy efficient property are lost. This includes choices such as leaving windows and doors open and not using the property's heating system effectively.

Conclusions

Orkney's fuel poverty rate of 63% according to the Scottish House Condition Survey, the highest in the United Kingdom, is a combination of low wages, high heating costs, particularly for households who use electricity as their heating energy source, older energy inefficient housing stock, lifestyle choices of some households and a harsh climate. In order to lift more households out of fuel poverty, action needs to be taken to improve the housing stock, reduce energy bills and where possible increase wages and maximise incomes.

This section has given a brief overview of the current situation and the elements that feed into Orkney's high level of fuel poverty. It informs the Strategy and the objectives and actions which need to be taken to address the issues outlined above.

Appendix 2 - Existing Programmes to Tackle Fuel Poverty

There are a number of Scottish Government funded programmes aimed at tackling fuel poverty, as well as some locally established projects currently underway. These schemes offer different energy efficiency measures, from advice and information, to upgraded heating systems and insulation measures. The different schemes also have different eligibility criteria and many households find themselves in a position where they are not eligible for any grant funding assistance, yet still find themselves in fuel poverty.

Partnership Working

The Council has the strategic responsibility for tackling fuel poverty and works closely with partners towards the Scottish Government's aim of eradicating fuel poverty.

Orkney's Community Planning Partnership has also identified fuel poverty as a key issue that needs tackling within Orkney. There are a number of partner agencies that are involved in tackling fuel poverty within Orkney. These partners include, but are not limited to, NHS Orkney and the Integration Joint Board who are a key partners due to the established links between fuel poverty and ill health. In addition Tackling Household Affordable Warmth (THAW) a charity established in December 2014 with a staff resource following in January 2016 with the sole aim of tackling fuel poverty; Orkney Care and Repair which provides adaptations and repair works for vulnerable households; the Orkney Renewable Energy Forum (OREF) which brings together various agencies and individuals with an interest or involvement in Orkney's renewable energy sector; the Orkney branch of the Citizens Advice Bureau who deliver debt and income maximisation counselling and Home Energy Scotland who runs the Highlands and Islands telephone advice line for fuel poverty and energy efficiency and have a part-time outreach worker based in Orkney.

Third sector groups are also important partners as their clients may well be in fuel poverty. The ability of those groups to refer their clients to other partners who can offer specific fuel poverty advice and services is key. Links with Development Trusts on Orkney's islands have also been developed over the duration of the 2011 to 2016 Fuel Poverty Strategy, and these have proved positive and will need to be developed further during the lifetime of this Strategy.

Lobbying

The Council has been lobbying the Scottish Government and other bodies for an improved approach to tackling fuel poverty in rural and island areas and had an officer sitting on the Rural Fuel Poverty Taskforce. Lobbying has included work on the key Island-Proofing agenda which is being discussed with the Scottish Government and other island authorities, as well as direct interaction on individual

projects and programmes. These discussions have been productive and the Scottish Government has taken on board the Council's arguments. Changes to programmes have been enacted and the projects have been improved as a result.

The Council will continue to lobby the Scottish Government, the Department of Energy and Climate Change, Ofgem and other bodies to push for actions that will benefit the areas with the highest levels of fuel poverty and push the need for rural and island areas to be given greater flexibility around delivery of energy efficiency measures and advice and information.

Home Energy Efficiency Programme for Scotland: Area Based Schemes (HEEPS: ABS)

The Home Energy Efficiency Programme for Scotland: Area Based Scheme (HEEPS: ABS) is a national programme aimed at reducing fuel poverty and carbon emissions in the private sector. HEEPS: ABS programmes are run by local authorities on behalf of the Scottish Government. Orkney Islands Council appointed a Managing Agent in early 2015 to assist the Council in driving forward HEEPS: ABS installations in 2015/16 and 2016/17.

The Council aims to help over 200 households a year with funding for insulation measures through HEEPS: ABS. The first two years of the HEEPS: ABS programme are nearing completion and over 250 households have been signed up to the programme. The Council will continue to lobby for the eligibility criteria to be based more on the energy efficiency of the property rather than its Council Tax Band.

Home Energy Efficiency Programme for Scotland: Warmer Homes Scotland

The Home Energy Efficiency Programme for Scotland: Warmer Homes Scotland (HEEPS: WHS) is a second Scottish Government scheme aimed at reducing fuel poverty. It is co-ordinated on a national level and the national contractor is required to undertake installations of measures throughout Scotland. HEEPS: WHS offers more measures than are available through HEEPS: ABS and has differing eligibility criteria, being aimed at households on specific key benefits.

The Council is working alongside the Scottish Government's HEEPS: WHS contractor to try and maximise take-up of the grant in Orkney and develop the HEEPS: ABS and HEEPS: WHS programmes so they complement each other. THAW Orkney has also attracted funding from the British Gas Energy Trust to help gap-fill individual installations that required additional support. A number of options may exist for similar style funding going forward and it will be important to attract and utilise any funding available. Partners will investigate opportunities for further funding.

THAW Orkney Pipeline

Tackling Household Affordable Warmth (THAW) Orkney received funding from the British Gas Energy Trust to pilot the development of a fuel poverty pipeline which hand held households through the process of engaging with various agencies to receive benefit maximisation, tariff switching options and access to energy efficiency installations. THAW have had over 350 enquiries over the duration of the 12 month pilot and they are applying for funding to continue the project.

Training

Training for front-line staff who work in housing, health and care and specialist fuel poverty staff has been delivered on a number of occasions with the second round of training being organised and facilitated by THAW Orkney and delivered by Energy Action Scotland. The training has proved popular and successful and should be repeated at least once every two years, if not yearly, to try and catch new staff and provide a refresher for existing staff. Additional funding will be required to deliver more front line training over the lifetime of the Strategy.

The Council along with the Energy Savings Trust has delivered training to local contractors on the requirements for PAS 2030. This included practical demonstration rigs being built to take tradesmen through the practical processes.

Appendix 3 – Fuel Poverty Strategy 2017 to 2022 Action Plan

The below actions are taken from the Key Actions section at the foot of each of the Fuel Poverty Strategy's objectives. The Action plan provides more details on the specific actions that will be required, as well as the main partner agencies involved.

Issue/or Action	Objective	Specific Actions	Partners
1. Support households in accessing the most suitable electricity tariff for their needs.	Households being on the best electricity deals available to them and their needs which will reduce their electricity costs and help reduce fuel poverty.	Utilise an available system to assist households in changing tariff and/or supplier. Publicise the various tariff switching options that are available to households via media, social media and public events.	Orkney Islands Council. Home Energy Scotland. Orkney Housing Association Limited. Orkney Citizens Advice Bureau. THAW Orkney. Island development trusts.
2. Establish or support the development of an Orkney electricity tariff.	Cheaper electricity for Orkney households which will help reduce the level of fuel poverty.	Continue work around the establishment of an energy supply company. Liaise with potential entrants to the market about the services they would like to provide and what would be beneficial for Orkney households.	Orkney Islands Council. Community Energy Scotland.

<p>3. Lobby for an improved smart meter roll out that doesn't leave island areas behind.</p>	<p>Ensure that households with Economy 7 and 10 and Total Heating Total Control tariffs don't get missed out in the smart meter roll out.</p>	<p>Continue discussions with Smart Energy GB around the smart meter roll out focusing on how best to deliver the roll out in Orkney.</p> <p>Lobby the Scottish Government, Ofgem and energy suppliers to ensure Orkney is not left behind in the roll out.</p>	<p>Orkney Islands Council. Community Energy Scotland. Home Energy Scotland.</p>
<p>4. Lobbying of both UK and Scottish Governments on fuel poverty issues.</p>	<p>To keep fuel poverty at the forefront of the political agenda and to island-proof new legislation and programmes as much as possible.</p>	<p>To ensure that new legislation is island-proofed.</p> <p>To maximise the funding that can be drawn into Orkney for fuel poverty work.</p> <p>To lobby for fairness in electricity pricing.</p>	<p>Orkney Islands Council. The Orkney partnership.</p>
<p>5. To work with the Scottish Government on the Scottish Energy Efficiency Programme (SEEP).</p>	<p>To ensure that the new Scottish Energy Efficiency Programme (SEEP) and its objectives meet the aspirations of Orkney's Fuel Poverty Strategy and can be delivered in the islands.</p>	<p>Lobby the Scottish Government to ensure that the SEEP reflects the situations and circumstances that rural and island areas face.</p> <p>Develop programmes and projects to maximise the use of any funding that may become available through SEEP.</p>	<p>Orkney Islands Council.</p>

<p>6. Investigate the potential for an Orkney Energy Agency one-stop-shop advice and information centre.</p>	<p>To establish whether a One-stop-shop centre that could accommodate various fuel poverty agencies would be the most effective way of combatting fuel poverty.</p>	<p>Utilising the newly developed fuel poverty forum investigate the potential for an Orkney Energy Agency Gauge the interest of partner agencies in the potential for co-location.</p>	<p>Orkney Islands Council. Home Energy Scotland. Citizens Advice Bureau. Care and Repair Orkney. THAW Orkney. Community Energy Scotland.</p>
<p>7. Training and awareness raising of frontline staff.</p>	<p>To increase the awareness of fuel poverty issues and skills of frontline staff who deal with clients who may well be in fuel poverty so that these households can be given assistance.</p>	<p>Roll out further training and awareness sessions for frontline health, care, housing and third sector staff. Liaise with frontline services in NHS Orkney, Orkney Health and Care and the Third Sector to keep the issues of fuel poverty and positive effect work to counter fuel poverty can have high on the agenda.</p>	<p>Orkney Islands Council. NHS Orkney. The Third Sector. THAW Orkney. Orkney Housing Association Limited. Island development trusts.</p>
<p>8. Additional on the ground advice and assistance on fuel poverty and energy efficiency.</p>	<p>To improve households understanding of fuel poverty issues and to help households to access the support that is on offer.</p>	<p>Improve joint working between advice agencies to make sure that individual households receive all the advice they require. Investigate any funding opportunities that may arise for additional staffing for existing service provision.</p>	<p>Orkney Islands Council. NHS Orkney. THAW Orkney. Home Energy Scotland. Warmworks. Firefly Energi (Orkney).</p>

9. Maximise the funding that can be drawn in and utilised in Orkney from national funding schemes.	To ensure as many households as possible receive advice, information and energy efficiency installations as possible.	Increase the amount of work that can be undertaken around fuel poverty within Orkney. Increase the number of households who can be assisted with advice and information.	Orkney Islands Council. Warmworks. Home Energy Scotland. Firefly Energi (Orkney). THAW Orkney.
10. Focus the available fuel poverty funding at the most vulnerable households.	To ensure the most vulnerable households are targeted for assistance.	Helps the most vulnerable households and targets the housing stock in most need of upgrading. Ensures that those most in need of support are identified and adequate support is available and delivered.	Orkney Island Council. Warmworks. Home Energy Scotland. THAW Orkney.
11. Increase the alignment of the HEEPS: ABS and HEEPS: WHS programmes.	Improve the efficiencies of the HEEPS: ABS and HEEPS: WHS and maximise the potential impact the projects can have in Orkney.	Build on the established links between the Council, Home Energy Scotland and Warmworks. Improve data sharing processes. Minimise duplication of surveys and streamline delivery of installations wherever possible.	Orkney Island Council. Warmworks. Home Energy Scotland.

<p>12. Develop a fuel poverty forum to include various agencies involved in the area of fuel poverty.</p>	<p>To help improve co-ordination of the different fuel poverty programmes and help meet the objectives of the Fuel Poverty Strategy.</p>	<p>Establish a forum and invite relevant agencies.</p> <p>Investigate the viability of an Orkney Energy Agency joint advice and information centre.</p> <p>Help co-ordination between agencies and projects where appropriate</p> <p>Action relevant Fuel Poverty Strategy objectives.</p>	<p>Orkney Islands Council. Home Energy Scotland. Citizens Advice Bureau. Care and Repair Orkney. THAW Orkney. Community Energy Scotland. NHS Orkney. Warmworks. Firefly Energi (Orkney).</p>
<p>13. Improve engagement and interaction with local agencies around fuel poverty.</p>	<p>To improve the level of engagement between fuel poverty services, NHS Orkney and the wider Third Sector.</p>	<p>Help identify vulnerable households who require support but may have slipped through the net.</p> <p>Improve the dissemination of information on fuel poverty and projects.</p>	<p>Orkney Islands Council. Home Energy Scotland. Citizens Advice Bureau. Care and Repair Orkney. THAW Orkney. Community Energy Scotland. NHS Orkney. Warmworks. Firefly Energi (Orkney).</p>

<p>14. Coordinate the delivery of the Fuel Poverty Strategy and relevant elements of the Orkney Energy Strategy.</p>	<p>Work alongside partner agencies to ensure that relevant projects relating to the Orkney Fuel Poverty Strategy and the Orkney Energy Strategy complement each other.</p>	<p>Improved co-ordination of lobbying and projects across the energy and fuel poverty sectors.</p> <p>The opportunity to deliver projects that benefit both fuel poor households and the wider Orkney energy sector.</p> <p>The opportunity to improve the links between new technologies and fuel poverty projects.</p>	<p>Orkney Island Council. Orkney Renewable Energy Forum. Various other private sector and Government.</p>
<p>15. Maximise the use of Orkney's renewably generated electricity to help cut fuel bills and combat fuel poverty.</p>	<p>To reduce fuel poverty through the use of Orkney's renewably generated electricity.</p>	<p>Utilise Orkney's renewably generated electricity locally to try and help ease constraints of generators.</p> <p>Investigate the potential for cheaper electricity for Orkney households when enabling constrained generation to be enabled.</p>	<p>Orkney Islands Council. Highlands and Islands Enterprise. Orkney Renewable Energy Forum. Community Energy Scotland. Island development trusts. Technology developers.</p>

<p>16. Maximise the opportunities for new technology to be utilised in tackling fuel poverty.</p>	<p>To maximise the opportunities that may be presented from new energy generation or storage technologies in the battle against fuel poverty and utilise the research and expertise being developed in Orkney.</p>	<p>Work with other Council services, development trusts, Highlands and Islands Enterprise and other private and public sector partners to develop or make use of technology opportunities that may emerge.</p> <p>Work with technology developers on trialling new technologies in the field of energy storage, insulation and efficient heating options.</p>	<p>Orkney Islands Council. Highlands and Islands Enterprise. Community Energy Scotland. Development trusts. Orkney Renewable Energy Forum. Private sector partners. Technology developers.</p>
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