

## COMMUNITY AND ENTERPRISE OVERVIEW & SCRUTINY COMMITTEE

<b>Date of Meeting</b>	Monday, 16 October 2017
<b>Report Subject</b>	Domestic Energy Efficiency programme
<b>Cabinet Member</b>	Cabinet Member for Housing
<b>Report Author</b>	Chief Officer Community and Enterprise
<b>Type of Report</b>	Operational

### EXECUTIVE SUMMARY

This report summarises the domestic energy efficiency programmes that have been delivered in Flintshire over recent years to households in both the Council stock and private sector. In total 4325 households have received support in the last five years. The measures installed will save the benefitting households £1.2 million each year for the lifetime of the measures installed and will save over 123,000 tonnes of carbon dioxide emissions.

There is limited Welsh Government funding for domestic energy efficiency programmes to private sector homes currently available and the future of energy funding is unclear.

### RECOMMENDATIONS

1	That the Committee review and discuss the domestic energy efficiency programmes delivered in Flintshire.
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## REPORT DETAILS

1.00	<b>THE DOMESTIC ENERGY EFFICIENCY TEAM</b>
1.01	The Domestic Energy Efficiency team was established in 2012 to reduce and prevent the likelihood of fuel poverty occurring within Flintshire. The service outcomes are to deliver tangible benefits to Flintshire households, tangible benefits to the Council, and a sustainable service. The main work streams are undertaken by the energy unit, housing regeneration, environmental health and capital works teams in partnership with the North Wales Energy Advice Centre, the member organisations of the Affordable Warmth Partnership and other partner organisations.
1.02	Over the past five years the team has installed 4,695 energy efficiency measures across 4,325 properties in Flintshire. The savings from those installations to residents is estimated to be over £1.2 million each year. Lifetime carbon dioxide emission savings from these interventions is estimated to be over 123,000 tonnes.
	<b>The main programmes of work have included:</b>
1.03	<p><u>Solar photo-voltaic panels (solar PV)</u> Solar PV panels have been installed by the team on 1,016 Council properties in Flintshire in total.</p> <p>In total, the panels on Council properties have generated over 5.5 gigawatt hours of electricity, enough to boil the water for 278 million cups of tea. A further 3 kilotonnes of carbon dioxide emissions has been avoided through these panels generating green electricity.</p> <p>This is monitored remotely to ensure that systems are working and transmitting as necessary. Individual tenant savings from these panels will vary based on the size of the system and the usage profile, but assuming half the energy produced is used on site, tenants in Flintshire have already saved £834,984 on their energy bills from the installation of these panels.</p> <p>Although Government incentives for the installation of solar panels have reduced sharply the lower cost of PV panels now means that PV can still be a cost effective option to install on suitable properties. Moreover the benefits to the tenants only increase over time as when their electricity tariff rises the savings they achieve by using the solar generated electricity increases.</p>
1.04	<p><u>External wall insulation (EWI) and whole house area-based work</u></p> <p>Flintshire Council has promoted loft and cavity wall insulation for several years as the most cost effective solutions for the majority of the housing stock. Historically there have been fewer options available to insulate solid walled properties that have no cavity to insulate. That has started to change with the introduction of utility company and Welsh Government funding that can fund insulation for properties built with solid brick walls, and other measures in a “whole house approach”. This has been achieved through use of a mix of different external funding sources.</p>

	<p>The most significant EWI installation on council properties was the insulation of the 270 council properties comprising the three tower blocks in Flint as part of their wider refurbishment. The external walls and the roof were repaired and fully insulated with Welsh-produced insulation and a render finish which, in addition to the energy savings gave the iconic blocks a new lease of life and a fresh modern look. In addition, the windows have been replaced and upgraded. Actual cost savings annually will be upwards of £40,000 from the insulation alone. Lifetime carbon dioxide savings from the improvements will be 1,729 tonnes. Heating pipework and control upgrades and heat metering has been installed which will provide further savings to tenants when full usage of the usage of the metering is rolled out.</p> <p>Over the last three years the Council has directly managed installation of external wall insulation to 214 private properties with a project value of £1,607,000 funded through a range of external sources. EWI can help to alleviate damp issues and substantially reduces the heat loss in a property, thus reducing the heating cost annually by up to £425 a year. This equates to a total heating savings over the product lifecycle of up to £10,625 per property. It can also provide a substantial cosmetic improvement to the built environment.</p>
1.05	<p><u>Gas infill schemes</u></p> <p>Mains gas heating remains one of the lowest cost form of heating available to households compared to oil and mains electricity heating systems. In the past five years the team has delivered six mixed tenure community gas connection projects, in addition to many projects connecting Council properties only to the gas network. The mixed tenure projects in Sealand Manor, Aston, Mostyn, Rhydymwyn, Trueddyn, and Penyffordd have brought gas to communities that in many cases have been campaigning for gas for many years.</p> <p>476 properties have been connected in across the six areas. In order to assist the private sector, the Council has utilised a range of funding sources to reduce the costs to the lowest income households.</p> <p>Flintshire is the first local authority in the country to achieve status of a Fuel Poor Partner with the gas distribution network in our area, Wales &amp; West Utilities. This means the Council can offer the Warm Homes Assistance voucher itself, which offers a contribution to households in fuel poverty to offset the cost of the gas connection.</p> <p>Additionally, the Council provides one-off gas connections to both public and private householders through a number of programmes of work which assists with reducing energy bills.</p>
1.06	<p><u>Off-gas pilot project</u></p> <p>In addition to areas where gas can be feasibly connected to properties, there are also areas where this is not possible. With the rising general cost of fossil fuel-based energy, alternatives are needed which provide practical solutions to affordable warmth in more rural areas. 26 properties in the villages of Gwespyr and Gwaenysgor have received a full trial package of an air source heat pump, solar PV and battery storage, supported by EDF's</p>

	<p>Blue Lab Innovation funding. All of the systems are being monitored to ensure that they are being used effectively and to track the savings being made.</p>
1.07	<p><u>Affordable Warmth Crisis Fund and Healthy Homes Healthy People</u></p> <p>The Council launched the Affordable Warmth Crisis Fund in December 2013 and is currently allocating £50,000 crisis funding per year to the programme, and funds advice home visits and caseworker support. Since its inception the Crisis Fund has allocated £263,816 to support vulnerable households but has levered in another £734,498 in extra funding, for a total value of £998,314. To date, 887 clients have received home visits and bespoke advice reports, and 2,655 measures have been installed.</p> <p>The crisis fund covers both insulation, heating, and other measures, and provides temporary heating and meter top ups where delays in repairing or replacing heating cannot be avoided. Annual bill savings from the measures installed are £338,502, and lifetime savings of £3,734,895. Lifetime carbon dioxide emission reduction is over 15,000 tonnes. In the most severe cases, the benefit is not only measured in bill savings but in a property which can be kept warm enough for the first time, with all the associated health and wellbeing benefits.</p> <p>In 2015, the Council secured funding for the Healthy Homes Healthy People programme. This funding has been the catalyst to a new way of working across Flintshire on increasing affordable warmth and reducing preventable health inequalities. The Council has played a leading role in North Wales in promoting joint working between Health, Housing and Social Services. A key part of this has been in supporting the 2025 movement which brings likeminded people together who feel passionate about wanting to reduce avoidable healthy inequality in North Wales by 2025.</p> <p>Part of the aims of 2025 is to support and deliver five early projects; Healthy Homes Healthy People (HHHP) is one of the projects being taken forward, harnessing available resources around an agreed Health Improvement Strategy for Flintshire. This major initiative is proposed as an exemplar project to demonstrate an effective strategy, which produces a practical model that can be used throughout Wales. The programme ensures that the different agencies that support vulnerable people identify their wider needs and that agencies cross-refer between themselves to give a holistic service.</p>
1.08	<p><u>Energy Advice and Community Engagement through the North Wales Energy Advice Centre</u></p> <p>The Council provides core funding of £64,000 per year to the North Wales Energy Advice Centre to help deliver projects This funding includes the provision of two energy project support officers and support for the overall Domestic Energy Efficiency project development and specialist advice and support to the team, including:</p> <ul style="list-style-type: none"> <li>• provision of a dedicated free-phone telephone advice line to the residents of Flintshire;</li> <li>• provide a trained energy adviser to offer advice and information to</li> </ul>

	<p>clients;</p> <ul style="list-style-type: none"> <li>• provide information to residents on available grants and schemes for energy efficiency measures, and invite householders to an immediate direct referral to schemes;</li> <li>• development of, and support for, partnership working and the Healthy Homes Healthy People programme;</li> <li>• assisting in the design and development of new energy projects including options appraisals and evaluation and prioritisation of new schemes;</li> <li>• capacity building for the Council’s domestic energy team.</li> </ul> <p>Through this work, NWEAC assist people with their energy bills, identifying a total £34,091 saving to households from switching, an average of £247 per property. In addition, their assistance with billing dispute resolution has saved another £800 to clients.</p>
	<p><b>Future programmes of work include:</b></p>
<p>1.09</p>	<p><u>Further support for Council tenants</u></p> <p>A longer term programme is being developed to run alongside the Welsh Housing Quality Standard housing improvement programme, particularly with those properties which will be more difficult to achieve energy efficiency increases because of location, listed status, size, build type and orientation. The programme will be integrated with current and forthcoming external funding sources to make the Council’s own funds go further.</p> <p>The Council has developed a procurement framework which is available to public sector organisations and partners across Wales. This is currently being marketed and it will, if successful, generate a commercial income to the Council.</p>
<p>1.10</p>	<p><u>Healthy Homes Healthy People</u></p> <p>This year there will be further work with both the statutory electricity and gas networks in Flintshire; Scottish Power Energy Networks and Wales &amp; West Utilities, to identify households for inclusion on the Priority Services Register which provides a range of support including meter moves, safety locks on appliances and advance notice of any disruption to service. The team will also be proactive in helping people access bill discounts alongside the area-based and reactive works. The team has been successful in securing funds for a full time post to carry out these works across North Wales, based within Flintshire’s Environmental Health team.</p>
<p>1.11</p>	<p><u>Private sector homes</u></p> <p>The main resource for domestic energy efficiency improvements to houses in the private sector has been Welsh Government programmes. These are currently on hold and the Council awaits further information from Welsh Government on future funding for these programmes which usually target households at highest risk of fuel poverty.</p>

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<b>2.00</b>	<b>RESOURCE IMPLICATIONS</b>
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2.01	<p>The Council uses an annual capital allocation of £100,000 to support the work of the North Wales Energy Advice Centre and the Affordable Warmth Crisis Fund.</p> <p>Other measures have been funded by external grant funding or by Council borrowing against the income generated by the measures installed.</p>
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<b>3.00</b>	<b>CONSULTATIONS REQUIRED / CARRIED OUT</b>
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3.01	None.
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<b>4.00</b>	<b>RISK MANAGEMENT</b>
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4.01	None arising directly from this report.
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<b>5.00</b>	<b>APPENDICES</b>
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5.01	None
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<b>6.00</b>	<b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>
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6.01	<p><b>Contact Officer:</b> Niall Waller Service Manager Enterprise &amp; Regeneration  <b>Telephone:</b> 01352 702137  <b>E-mail:</b> niall.waller@flintshire.gov.uk</p>
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<b>7.00</b>	<b>GLOSSARY OF TERMS</b>
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7.01	<p>Affordable Warmth Crisis Fund – Council funded support for the most vulnerable households facing a crisis with their energy costs or supply.</p> <p>Arbed – The Welsh Government’s area-based energy efficiency project. There have been two streams to this funding for the past 3 years, one which has been delivered directly by Local Authorities, and another which LA’s bid for and then is managed by a scheme manager (In the previous phase Willmott Dixon in North Wales and Melin Homes in South Wales)</p> <p>ASHP - Air Source Heat Pump, a heating system which works like a fridge in reverse, using electricity to condense the heat in the air to a temperature usable for space and hot water heating.</p>
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ECO – Energy Company Obligation, the current obligation on major gas and electricity suppliers requiring them to achieve certain levels of carbon dioxide and energy bill reduction in domestic properties.

EWI – External Wall Insulation, a way of insulating solid brick and other properties without suitable cavities to fill using panels of insulation which can be finished with render, pebbledash, brick effect, etc.

Fuel Poor Partner – The Council has secured permission to issue subsidies on behalf of Wales and Wales Utilities, the local gas distribution network operator, to vulnerable households.

Gas Infill – A community-level project to connect homes to the gas supply network.

GSHP – Ground Source Heat Pump, a heating system which works like a fridge in reverse, using electricity to condense the heat in the ground to a temperature usable for space and hot water heating.

Healthy Homes Healthy People – The programme ensures that the different agencies that support vulnerable people identify their wider needs and that agencies cross-refer between themselves to give a holistic service

NWEAC – the North Wales Energy Advice Centre are a community interest company that delivers advice and support to tackle fuel poverty and reduce energy use.

Priority Services Register – a database of vulnerable households held by the utility providers which ensures that they receive appropriate consideration and support.

Solar PV – Solar Photovoltaic, solar panels which generate electricity

Welsh Housing Quality Standard – a Welsh Government standard for homes which the Council is obliged to meet for all homes in its ownership. A programme of work is underway to achieve this.