



Energy Efficient Scotland Area-Based Scheme in Orkney

Project Summary Report

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Foreword

Ross Armstrong

Government for the scheme to continue in 2022-23.



About the Energy Efficient Scotland: Area-Based Scheme in Orkney

Orkney Islands Council (OIC) was awarded funding from the Scottish Government through the Energy Efficient Scotland: Area-Based Schemes (EES:ABS) in 2021/2022. A grant of up to £10,000 was made available per customer, with a higher grant award of up to £14,000 available in certain circumstances. The higher grant level is available where customers are living with extreme fuel poverty, defined as where more than 20% of the net household income is spent on energy costs for the home.

As the Managing Agent for OIC, this has been the second consecutive year that Warmworks has delivered the

The scheme aims to make homes warmer, more energy efficient and more affordable to heat. This is done through the installation of energy-saving improvements, primarily insulation. The scheme also aims to develop the local supply chain of installation businesses, creating jobs and lasting benefits across Orkney.

Orkney Islands Council's 2017-22 Fuel Poverty Strategy indicates that up to 63% of people in Orkney are considered to be living in fuel poverty¹. This figure rises to 85% for pensioner households. With that in mind, this scheme is designed to support those customers who need help the most.

About Warmworks

Warmworks is a joint venture partnership between Energy Saving Trust, Everwarm and Changeworks.

The organisation was formed in 2015 to deliver the Scottish Government's Warmer Homes Scotland scheme, which is available across Scotland and aims to provide energy efficiency improvements to households that are in or at risk of fuel poverty.

In March 2020, Orkney Islands Council appointed Warmworks as Managing Agent to deliver the local area-

energy bills.



¹ https://www.orkney.gov.uk/Files/Consultations/Fuel-Poverty/Draft-Orkney-Fuel-Poverty-Strategy-2017-2022.pdf

lam delighted that Orkney Islands Council has secured £1.25m in funding from the Scottish Government for the scheme to continue in 2022-23.

2021/22 Headline statistics

Over £1 million

in grants within the year have been claimed for the first time since the scheme was launched in 2014.

This has seen

heating and insulation measures installed in 119 homes across the county in the past year. Further information about the number and type of installations carried out is provided opposite.

Improvements installed under the Area-Based Scheme this year have seen the energy efficiency of homes, as measured by a Standard Assessment Procedure (SAP) rating, increase by an average of

10.5 points

Energy efficiency measures installed under the scheme this year have helped to save

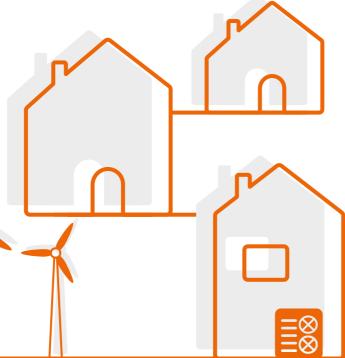
 108_{tonnes}

of CO2. This is equivalent to taking 85 cars off the road, or the emissions from charging more than 48 million smartphones.



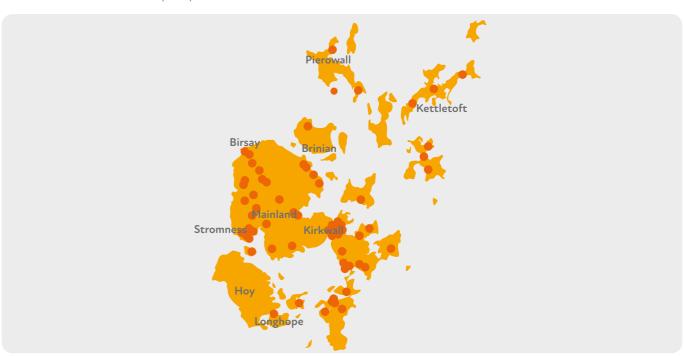
£400

per year against their energy bills thanks to the energy efficiency improvements installed.



Installations

The EES:ABS is Orkney-wide and provides support to those who need it most. The map below shows where these installations have been carried out in the past year.



Heating & insulation measures installed under EES:ABS

The table below shows the total number of each type of heating and insulation measure installed under EES:ABS in 2021/22 across the 119 households supported this year:

Measure installed	Number of installations in 21-22
Electric Storage Heaters	67
External Wall Insulation	13
Floor Insulation	8
Internal Wall Insulation	18
Loft Insulation Top Up	29
New Loft Insulations	8
Robotically Applied Under Floor	18
Grand Total	161

Referral route for applications received

The table below outlines how customers were referred to EES:ABS in Orkney in the last year:

Referral route	Annual actual
Word of Mouth	123
Newspaper	43
Radio	7
Social Media	45
HES	93
Other (Projects)	29
Totals	340

Please note that the numbers given above for referrals include applications that are still in progress and are likely to be completed during the 2022/23 scheme year.

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Our Customers

At the heart of the Orkney EES:ABS are the customers who rely on its support.

Here, we've included personal accounts from some of the people and families across Orkney that we have helped this year.

Customer name and location: Mrs L, Stromness
Date of installation: February 2022

Measure installed: Internal Wall insulation

Mrs L heard about the EES:ABS from one of her neighbours, and wanted to get in touch because she was spending most of her income on heating.

'I was spending almost three quarters of my money on the electric, coal and logs, just to keep warm.'

She got in touch with the local Warmworks team in Kirkwall and found out that she qualified to receive support under the scheme. Warmworks then arranged for a surveyor to visit her home to look at what measures she would benefit from.

'The surveyor was great. He was very nice and friendly and let us know exactly what they could do. He spoke in simple terms so it was easy to understand, and we weren't confused about anything'

The survey confirmed that Mrs L's home would benefit from internal wall insulation, and the next step in the process was for a technical survey to be carried out, to go through what would happen next in more detail.

'We just let the surveyor get on with it. He was quick and thorough and asked a few questions

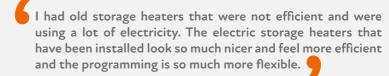
- it was very painless, there was no stress or anxiety, nothing.'

Warmworks then arranged for our local subcontractor, R Clouston Ltd to carry out the installation, and they arrived promptly on the date agreed with Mrs L. Once the installation had been completed, Warmworks organised an independent inspection to check that it had been completed to our high quality and safety standards

'The team took pictures and there was an issue with the windows opening and they came back right away. They were out in a flash and sorted it out. It was excellent.'

Mrs L says that she has already noticed the impact the new insulation has made to her home.

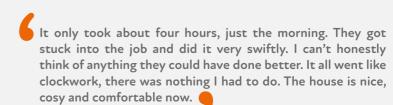
'There is a difference in the temperature of the rooms. The bedroom before was 6/7 degrees and now it's 10/11 degrees. The living room was 21 degrees the other day with the sunshine, no heating. The extra layer has made such a difference. No fire, so we've reduced the cost of the coal and logs as well as the electric, it's fantastic. I was dreading another cold winter. I'm going to be thinking that I'm in paradise this winter, I'm going to need a poster of the Caribbean on my wall!'



Ms B, Stromness Installation in September 2021

We can feel the difference with the heat staying in the house, it's definitely reduced our bills. The look is brilliant. When we put the heating on, we know this came at the perfect time. To anyone thinking of applying, I'd say absolutely go for it. It's very little hassle if you move out of the house, but if you don't, they will work around you. If you have the opportunity, definitely apply, it'll help with managing your bills.

Mr N, Stromness Installation in March 2022



Mr H, Kirkwall Installation in September 2021



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Trial of Q-Bot underfloor insulation in Orkney

In the last year, Warmworks worked with OIC to deliver a special project in partnership with Q-Bot to install a specialised form of robotically-applied underfloor insulation to homes in Orkney. Warmworks has already used this technology to deliver underfloor insulation to more than 400 homes across Scotland through our work as the Managing Agent for the Scottish Government's Warmer Homes Scotland scheme. We therefore recognised its potential to form part of the wider package of heating and insulation measures on offer to homes in Orkney.

OIC secured funding from the Scottish Government's Energy Efficient Scotland: Area Based Scheme (EES:ABS) to trial the robot on privately-owned homes. The local Warmworks team in our Kirkwall office identified 20 homes to take part in the initial trial, where traditional methods of underfloor insulation weren't possible due to issues such as space and obstructions.

Mrs B is one of the customers who took part in the trial.

Name: Mrs B

Location: **Stromness**

Measures installed: Electric storage heaters and robotically-applied underfloor insulation through Q-Bot technology

Date of installation: April 2022

Mrs B found out about the Energy Efficient Scotland: Area-Based Scheme after receiving a leaflet through the post about it. She had also heard about the scheme from some friends in Orkney who had applied and recommended getting in touch.

Her home is one of the first in Orkney to have taken part in a trial involving robotically-applied underfloor insulation. This involves a small robot, known as Q-Bot, being placed under the floorboards of the house and controlled remotely. Insulating foam is then applied in a controlled manner under the floorboards to improve and increase heat retention in the property.

'Our property's energy efficiency was poor, with very little insulation and heating so we wanted to

make sure our house was warm and comfortable. As first-time buyers with little experience of installing these types of measures, I was also keen to make sure we used a trusted installer with a good track record. We are renovating our house and I doubt we would have been able to afford the installation without the grant funding assistance. Benefiting from the scheme has allowed us to save money and put it towards other future home improvements.'

After Mrs B got in touch with the local Warmworks team in Kirkwall, we arranged for a survey to be carried out of her home to look at what could be done to make it warmer and more energy efficient for her.

'The survey was quick and efficient, and the surveyor explained his recommendations to me and what to expect in the next stages.'

The survey recommended that Mrs B's home would benefit from electric storage heaters and robotically-applied underfloor insulation. The next stage in the process was for a technical survey to be carried out, to look at what would be involved at the installation stage in more detail.



Mrs B says that, thanks to the installation of the electric storage heaters and the underfloor insulation, she has noticed a difference in her house.

'We are so pleased with the work that was carried out. Our heating and hot water system has been completely modernised and improved, which has made a massive difference to the comfort of our house. We previously had very old, inefficient storage heaters which did not provide enough heat and were expensive to run. We now have so much more control over how we heat our home, and we much prefer the look and design of the new, modern heaters. Heating our home this winter will be much less challenging and daunting. The biggest improvement to our daily lives has been the new water heater. Our previous water heater did not provide enough hot water for what we needed on a day-to-day basis, and so having this replaced has made a huge improvement. I can really appreciate having a hot shower now!'

Mrs B also says that she has noticed a difference thanks to the underfloor insulation that has been installed in her home using Q-Bot technology.

'With the underfloor insulation, I have noticed our house feels much more snug and free of draughts. I imagine we will notice a big difference this winter with less draughts and generally warmer.

With all improvements made to our property via the scheme, I feel a much greater pride in our house. The scheme has helped us to modernise our energy usage and improved the comfort levels in our home.'

'The company who carried out the technical survey and installation were great. Very friendly and informative. The survey was quick and simple, and they took my points on board about where I'd like the heaters to be positioned. They answered all my questions and made some useful suggestions about the water heater and how this could be improved. I really appreciated this since my knowledge on technical matters like this is not great.'

The next step in the process was the installation of the electric storage heaters and the robotically-applied underfloor insulation. For the underfloor insulation, a small robot, known as Q-Bot, was placed under the floorboards. The robot was controlled remotely to spray insulating foam under the floorboards, with the aim of improving heat retention in Mrs B's home.

'I was really impressed with the installation team. They were timely and worked hard to get the job done on time. I work from home and so I really appreciated that there was minimal disruption as the work was underway. Everything was cleaned and tidied away at the end, and I am so pleased with how everything looks and works now.

The installers were excellent. They arrived when expected and worked hard and long days to get the job finished on time. I was really impressed with the finished look of the final installation – the work carried out is clean, tidy and very professional. The installers also took time to explain what they were doing at all stages of the installation, which I really appreciated.'

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Warmstart Apprenticeship Case Study

Warmworks is committed to developing the people and skills to support the delivery of the green jobs of the future, as we decarbonise our homes and support the transition to a net zero nation.

As part of this work, we have created a programme known as Warmstart, that sees young people matched with training and apprenticeship opportunities through members of our supply chain.

The EES:ABS in Orkney has benefited from our Warmstart programme. Working together with our partners at Orkney Islands Council, this year we recruited our first Warmstart colleague in our office in Kirkwall, Jude Erdman.

Jude has joined the Warmworks team in Orkney, working to support the delivery of the EES:ABS. He talks below about his experience working with our team and on the scheme during this record year.

I decided to apply for the position with Warmworks after my job coach for the Kickstart Scheme at my previous employer told me about it. It seemed like a job that I would be good at and enjoy.

In this last year, I have learned telephone skills and I now feel more confident on the phone. I have also picked up knowledge of using databases, and I have learnt a lot about the energy efficiency industry and how it works.

What I really like is that the job is focused on working with the local community. I work closely with the people coming in the door or on the telephone, as well as working with local contractors and other agencies.

The position with Warmworks has also given me the opportunity to work towards a Level 4 Decarbonising Homes Certificate. I was able to shadow the work of one of the Warmworks inspectors when they came to Orkney. I learn from my colleagues both in our local office and across the company.

At Warmworks, everyone is very friendly, they all try to be as helpful as they can. I work closely with my colleagues in the Highlands & Islands team in Warmer Homes Scotland as we share quite a few customers.





Contact & Queries

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