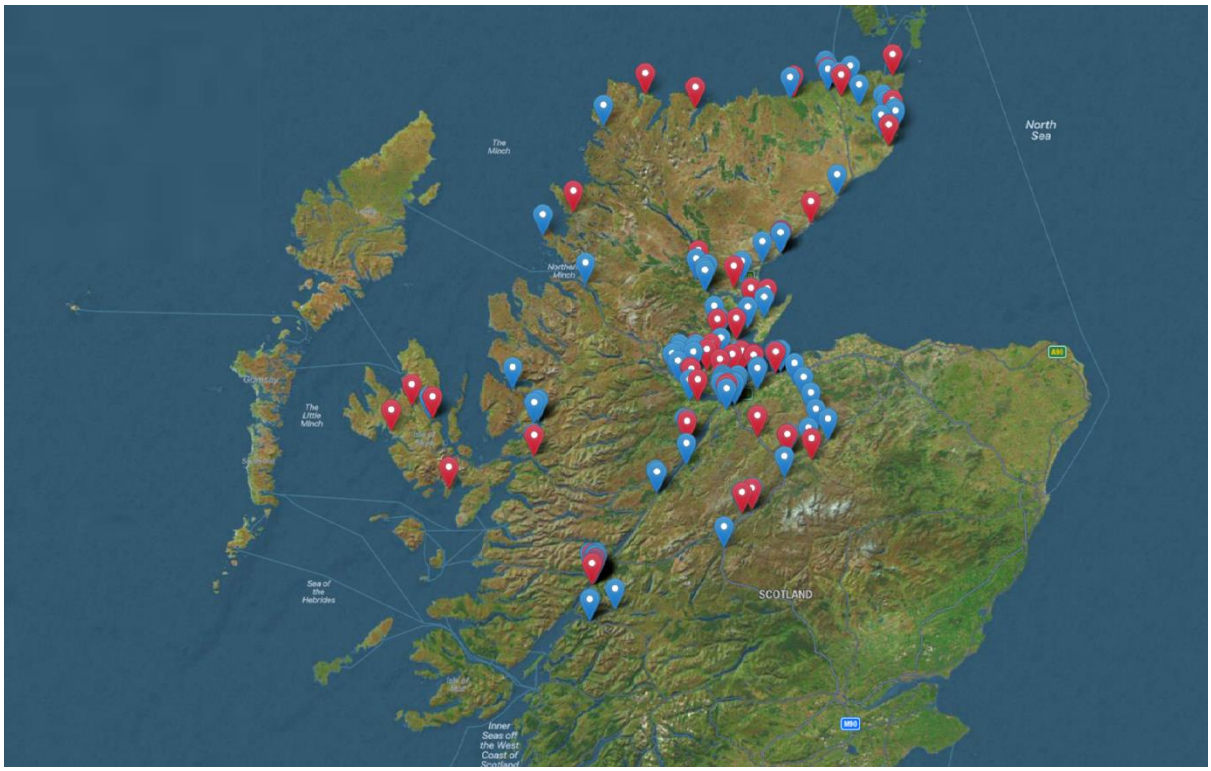
The Highland Council
Comhairle na Gàidhealtachd

Energy Efficient Scotland: Area Based Scheme (EES:ABS)



2023/24 Project End Report

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List of Abbreviations

ASHP	Air Source Heat Pump
ECO	Energy Company Obligation
EES:ABS	Energy Efficient Scotland: Area Based Scheme
EOI	Expression of Interest
EPC	Energy Performance Certificate
FTE	Full Time Equivalent
HES	Home Energy Scotland
KPI's	Key Performance Indicators
PV	Photovoltaic
SAP	Standard Assessment Procedure
SLA	Service-level agreement
SSER	Scottish and Southern Energy Renewables
THC	The Highland Council
UTS	Union Technical Services Limited

1. Background

Everyone should have access to a warm home which they can afford to heat, unfortunately for many Highland households this is difficult to achieve. Reasons for this include poor insulation, inefficient heating, lack of fuel choice, high energy costs and low income. Highland suffers significantly high rates of fuel poverty (43%) and is ranked the second highest region in Scotland (Scotland average is 31%) .

The Scottish Government's Energy Efficient Scotland: Area Based Scheme (EES:ABS) aims to alleviate fuel poverty rates across Scotland by providing grant funding to deliver energy efficiency measures to eligible households and reduce carbon emissions.

Improving energy efficiency can create warmer, more efficient homes while reducing energy costs for households and reduce carbon emissions. Projects delivered by the Council seek to improve the lifestyle for households and improve health and wellbeing.

In 2013 the Scottish Government launched EES:ABS, Highland Council has a proven track record in successfully delivering EES:ABS projects over the last 11 years.

Measures installed to date	4,144
Scottish Government EES:ABS funding to date	£27,665,565
Energy Company Obligation (ECO)	£11,679,578
Warm Home Fund	£566,540
SSE Renewable Grant	£583,116
Total funding to date	**£40,494,799**

Over the last 11 years, the Council has leveraged additional funding from Energy Company Obligation (ECO), Warm Homes Fund, and SSE Renewable.

The 23/24 project used the EES:ABS grant to leverage additional funds from ECO and SSE Renewables. The ability to deliver multi-funded projects enables the Council to deliver whole house retrofit projects (where applicable).

2. EES:ABS 2023/24 Overview

The Council's 23/24 project targeted four Council wards, through marketing and word of mouth, awareness was raised Highland wide which resulted in installs being spread across the region, illustrated in appendix 1.

Due to the high level of fuel poverty across the region and with the addition of ECO and SSE Renewable funding the Council adopted a whole house retrofit approach, in

line with PAS 2035, adopting a fabric first approach to maximise benefit to households and reduce fuel poverty.


142
Households


£4,832,692
Funding


380
Energy efficiency improvements


85%
Extreme Fuel Poor


£643.87
Average fuel bill saving

Of the 142 households who participated in the project, 85 (59.8%) benefited from multiple measures and 64% of properties were eligible for the rural funding uplift.

The delivery of multi-funded projects allows the Council to make significant strides in addressing fuel poverty across the region, particularly in the most vulnerable communities.

In partnership with the EES:ABS contractor, the Council was able to offer additional measures, outlined in table 1.

Table 1 – Measures Delivered

Measure	Installs
Cavity Wall Insulation	23
Loft Insulation	27
Room in Roof Insulation	9
Underfloor Insulation	9
Flat Roof Insulation	1
ASHP	44
Heating Controls	44
Solar PV	95
Special Project Solar PV	25
Fire Alarm	103
Total	**380**

2.1 Integration of Energy Company Obligation (ECO)

To maximise delivery the Council worked with Union Technical Services Limited to leverage ECO funding to undertake additional works to Highland properties.

	Help to Heat Group (HTHG)	ECO4 Flex
Total properties	40	50
Number of measures	104	145
Total ECO Funding	£730,200	£914,600
EPC banding improved by (number) (average)	45.05	41.78
Total Annual Bill Saving	£73,215	£57,340
Total Carbon Savings (tC02E) (average)	251.10	348.14

3. Project Delivery

The Highland Council awarded a 12 month contract to Union Technical Services Limited (UTS) to deliver the Highland EES:ABS project, with the ability to extend by a further 24 months. The collaboration between the Council and UTS has proven to be highly successful, with significant outcomes, including the delivery of the project within 8 months. This is a testament to the coordinated planning and execution by both teams.

3.1 Areas of delivery, tenure and Archetypes

The project was delivered Highland wide, areas outlined in figure 1, which provides a detailed breakdown of the installations by Council ward. The data highlights the projects ability to deliver improvements not only in densely populated areas but also in more remote and rural parts of the region, ensuring equitable access to energy saving measures for Highland residents.

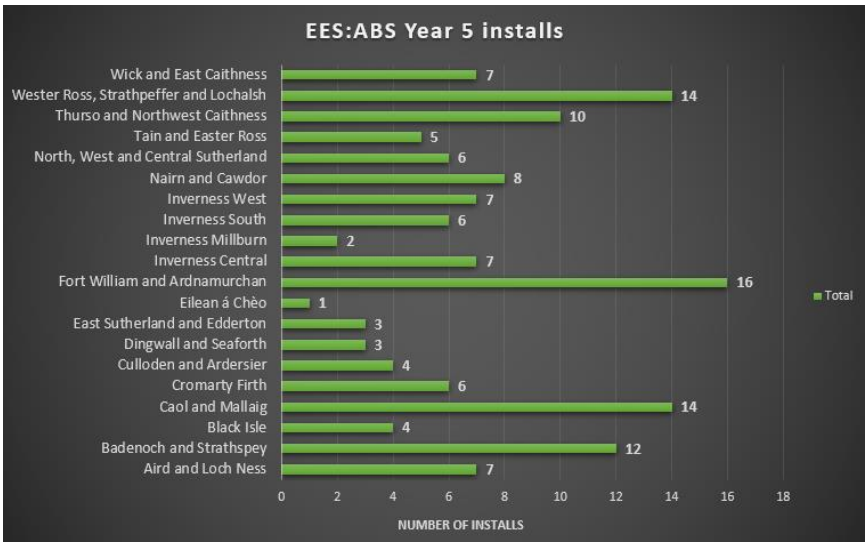
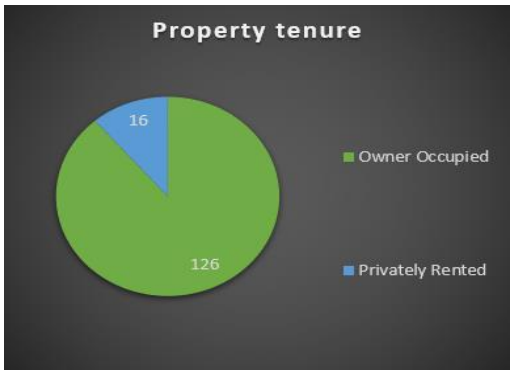


Figure 1 – EES:ABS installs by ward.

Figures 2 and 3 illustrate property tenure and types, showing the distribution between owner occupied and privately rented properties and the different property types, demonstrating flexibility of the project.



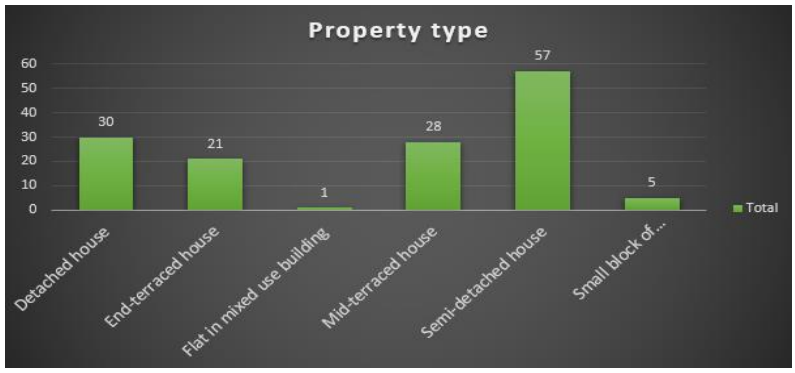


Figure *2* – EES:ABS installs by property tenure

Figure 3 – EES:ABS installs by property type

Preexisting main fuel types are illustrated below for the properties, highlighting the projects ability to address energy use in homes reliant on different fuel types and contributing to the overall reduction in energy consumption.

53	45	31	11	1	1
ELECTRICITY	OIL	MAINS GAS	SOLID	BIOMASS	LPG

3.2 Application Process

The Council has several routes for households to apply including, referrals through Home Energy Scotland and direct contact with the Council or the contractor.

Figure 4 outlines the customer journey.

The project received circa 600 EOIs and UTS proceeded to survey 569 properties, with the intention to build the 2024/25 project. Of the 569 properties, 340 properties were qualified, surveyed and ready to progress when the Council receives the 2024/25 funding award.

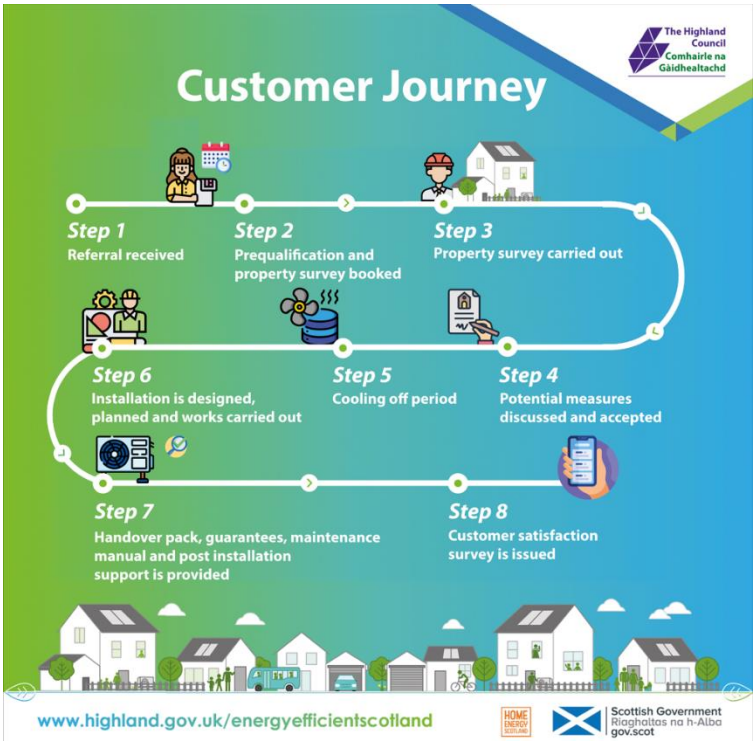


Figure 4 – EES:ABS customer journey

3.3 Contractor and Sub-Contractors

Under Community Benefits, UTS was tasked with engaging as many local contractors as possible to support the delivery of the programme. UTS subcontracted 23 contractors, of which 4 (17.3%) were Highland based companies to support the delivery of the project, contributing to the local economy by creating job opportunities and supporting businesses within the region.

3.4 Delivery Partners

Union Technical Services was awarded the contract to deliver the Highland EES:ABS project August 2023.

Home Energy Scotland partner with the Council to offer Highland residents free impartial advice and support. They also refer households to the EES:ABS project and undertake initial eligibility pre-qualification.

SSE Renewable provide grant funding to support privately owned and rented properties living in extreme fuel poverty. This vital funding reduces or eliminates the need for household contributions.

In the 2023/24, grant funding supported 61 households identified as extreme fuel poor, making a significant difference to households otherwise would not have been able to make energy efficiency improvements to their homes.

Lindsay Dougan, Senior Manager, SSE Renewables said "*The Highland Energy Efficiency Programme is a great example of partners working together to support the needs of the Highlands. SSE Renewables Sustainable Development Fund has provided grant funding to the programme to ensure households in extreme fuel poverty are supported to have the warmer, energy efficient homes they need.*"

4. Special Project

The Council received special project funding from the Scottish Government to install solar PV with battery storage. This project aimed to enhance the region's sustainability efforts by providing renewable energy solutions to properties.

Through this project, solar PV with battery storage were successfully installed in 25 properties, contributing to both energy efficiency and renewable energy generation in these homes. The total project cost amounted to £286,650.

5. Monitoring and Evaluation

The Council undertakes a range of qualitative and quantitative analysis to ensure the success, measuring the benefits and improvements. This includes data analysis from energy performance certificate, solar PV generation and customer satisfaction questionnaires.

5.1 EPC Analysis

The average SAP rating increased by 22 points and post EPCs averaged a B rating. Additionally, the average estimated reduction in fuel costs for households is £643.87 (approx. £91,430 for the total project), full details are displayed in appendix 2.

5.2 PV Data Analysis

120 properties received solar PV with battery storage, the average array for solar was 8 panels. Figure 5 shows the installations and performance to date.

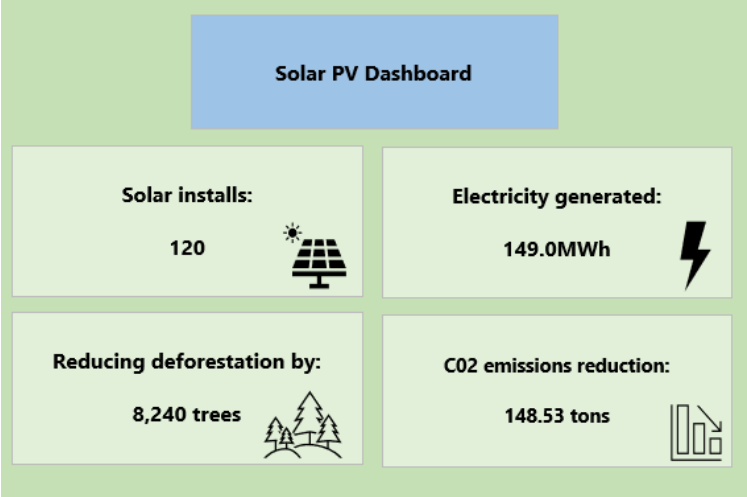


Figure 5 – EES:ABS Solar PV monitoring dashboard

5.3 Customer Satisfaction Questionnaires

The Council issued customer satisfaction questionnaires both electronically and via the post (where there were no email addresses) to all 142 properties, the response rate was 56.3% which is an increase from previous years.

The dashboard outlining key responses is summarised in appendix 3, all responses were reviews and actions taken with the contractor to address issues raised. A number of households were dissatisfied with the information received from the contractor and the cleaning up process, both issues have been addressed and additional steps introduced.

6. Case Studies

Three case studies were produced for EES:ABS 23/24, listed below, which are available on the Council website.

Evanton Case Study.docx

Fort William Case Study.docx

Munlochy Case Study.docx

7. Community and Social Value

Union Technical, the EES:ABS contractor, reported the EES:ABS 23/24 project created 1 full time employment post and 4 apprentice/ trainee opportunities were created. Additionally, they supported 4 community engagement events.

Several community benefits have been delivered by the EES:ABS contractor, including:

£2,000 of Tesco vouchers to purchase jackets and shoes for school children

Cosy Kits issued to over 100 Highland residents. Kits contained a fleece blanket, a covered hot water bottle, thermal heat holder socks and a re-useable canvas tote bag. Each bag also contained leaflets signposting to in-depth, bespoke energy saving advice.

The purchase of 3 defibrillator for Highland communities

Other proposed community benefits include school talks and training.

8. Lessons Learned

The lessons learned meeting with the contractor took place on the 4th of June 2024. This meeting worked on the format of what went well, what did not go well and what needs improvement, key points listed below.

What went well	What did not go well	Needs improvement
Project completed on time and within budget.	Slow integration of ECO funding with the EES:ABS project.	Customer communication to address gaps in information.
Project delivered in condensed timeframe (8 months).	Limited use of Tiny Tags, impacting analysis of temperature and humidity pre and post installation.	Standardised letters and emails to inform customers.
Additional insulation measures delivered.	Customer induction process, despite FAQ documents this was an area which caused the most customer disatisfaction.	Weekly project reports to include Gantt chart.
Communication between the Council and UTS.	Response times exceeded SLAs/ KPIs.	Wait/ response times.

9. Awards and Recognition

The Highland Council's EES:ABS team received recognition at the 2024 Scottish Energy Efficiency Awards, winning 'Large Scale Project of the Year' and being highly commended 'Local Authority of the Year'.

The project has also been shortlisted for the National Energy Efficiency Awards, scheduled for October, for 'Multi-Measure Project of the Year', recognising the projects successful implement of a wide range of energy efficient measures. Underscoring the Council's commitment to deliver projects with clear aims to alleviate fuel poverty and improve energy efficiency in line with national targets.

10. Summary

In summary, the Highland Council's efforts in delivering the Energy Efficient Scotland: Area Based Scheme during 2023/24 demonstrated substantial progress and success. The partnership with Union Technical Services Ltd has proven effective, resulting in a high volume of installations and broad geographical coverage. Despite some challenges, including issues with funding integration and monitoring, the team has made significant strides in enhancing energy efficiency across the region.

Moving forward, the Council will address identified areas for improvement, including enhanced customer communication and detailed reporting, to build on this success and further advance energy efficiency efforts in the Highlands.

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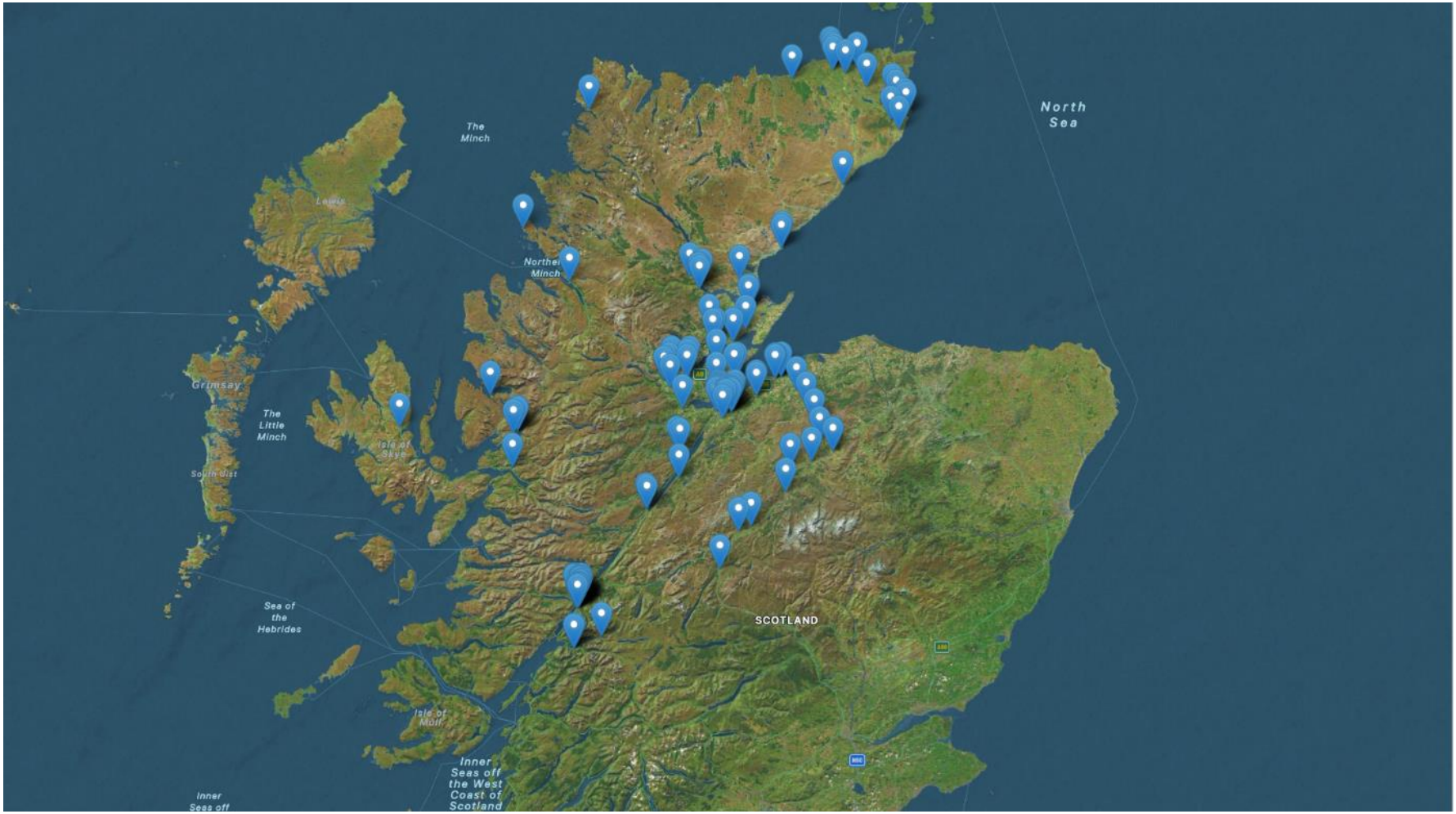
Appendix 1 – Areas of Delivery



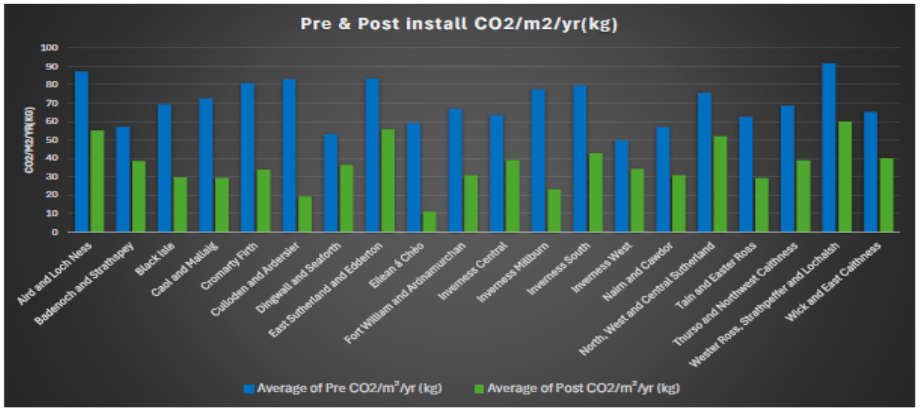
Appendix 2 – EPC Dashboard

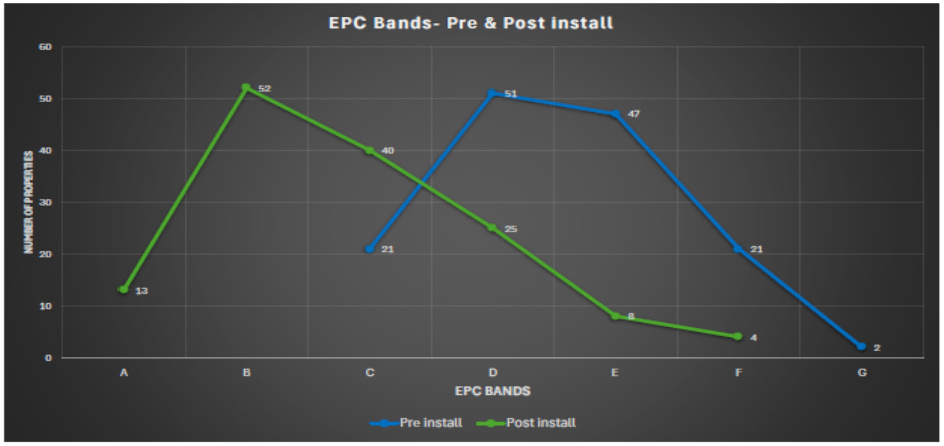
www.highland.gov.uk/energyefficientscotland

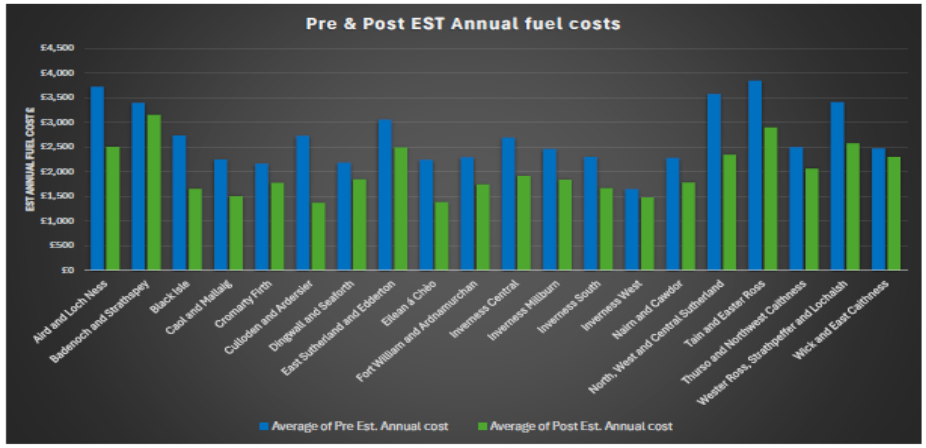
Energy Efficient Scotland Area Based Scheme (EES:ABS) 2023/24

www.highland.gov.uk/energyefficientscotland

Average Pre EPC band D	Average Post EPC band B	Average EPC band increase 2
Average Pre SAP rating 54	Average Post SAP rating 76	Average SAP increase 22
Average Pre CO2/m²/yr (kg) 70	Average Post CO2/m²/yr (kg) 39	Average CO2/m²/yr (kg) reduction 31
Average Pre annual fuel costs £2,712.16	Average Post annual fuel costs £2,068.29	Average annual fuel costs reduction £643.87







Appendix 3 – Customer Satisfaction Questionnaire