



# Air source heat pumps: Hebridean Housing Partnership



## 1 Project overview

### Introduction

In 2023, the Hebridean Housing Partnership completed a project installing air source heat pumps in 102 properties across their diverse housing stock on the isles of Lewis, Barra and Uist.

The Housing Partnership want to take steps to support Scotland's transition to net zero and have been involved with several decarbonisation projects over the last decade.

Most of the properties included in the project previously used electric storage heating. Offering these households an air source heat pump has anecdotally reduced their energy bills. As a result, many of their other tenants are requesting air source heat pumps and the partnership is keen to help facilitate this.

**Project name:** Hebridean Heat Pumps

**Landlord:** Hebridean Housing Partnership

**Project manager:** Peter O'Donnell, Hebridean Housing Partnership  
**Installer:** Alex Murray Construction Ltd



**Overall cost:** £1,519,290  
**Funding source:** Social Housing Net Zero Heat Fund: £749,480  
Hebridean Housing Partnership: £769,810



**Heat technology:** Air source heat pumps



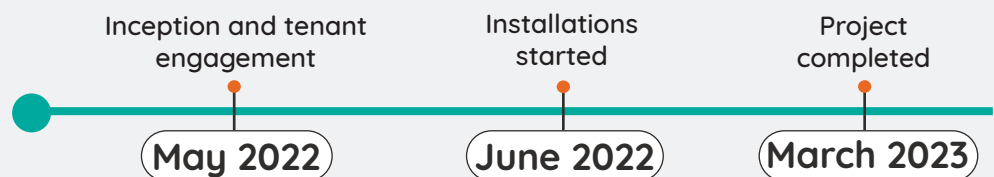
**Building archetype:** Mix of bungalows, houses and flats, totalling 102 properties  
**Year:** 1971-2008, with the majority built between 1996-2004  
**Tenure:** Rented social housing



**Location:** Isles of Lewis, Barra and Uist



### Project timeline:



## Measures

Air source heat pumps were installed in all of the properties. The partnership have delivered a number of projects over the last decade to improve the energy efficiency of their housing stocks, building fabric, as a result, the properties were already sufficiently insulated to make air source heat pumps a viable heating option.

## 2 Project management

### Contractor



Project management, tenant engagement and impact evaluation were delivered internally by Hebridean Housing Partnership. The installer procured to deliver the installation was Alex Murray Construction Ltd.

### Tenant engagement

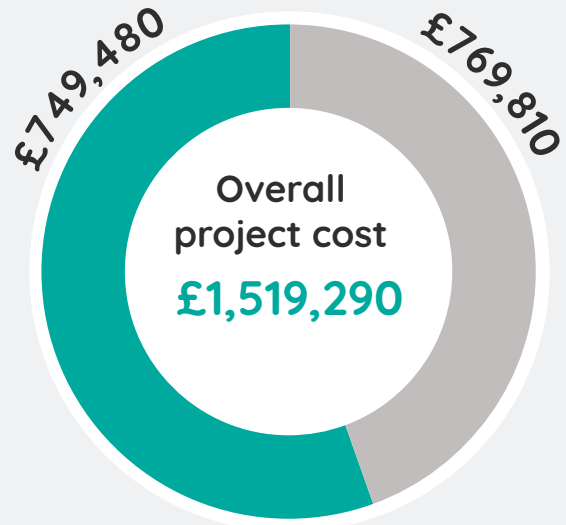


The housing partnership successfully delivered 102 out of 110 installations proposed as part of the project. Many of the tenants involved in this project were aware of the benefits heat pumps bring to similar households. This was due to word of mouth across the islands' communities from previous successful projects, as well as from promotional material on the partnership's website. This significantly reduced the need to deliver and fund tenant engagement.

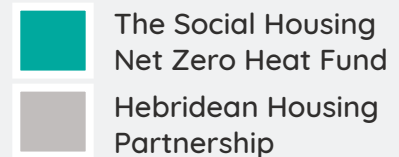
“I love the ease of the air source heat pump and how warm it keeps the house.”

Tenant

## 3 Costs



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Overall project cost was primarily associated with the purchase of heat pumps as well as the installation.

The cost per property of a heat pump, installation, and post-installation visits were between £11,000 and £20,000. The average cost was £14,895.

The costs for project management and tenant engagement were around 10% of the total budget, approximately £152,000. Project management was not included in the match funding stated above but was paid for as part of day-to-day staff time. No specific funding was allocated to monitoring and evaluation.

## 4 Project impact



### Evaluation approach

The housing partnership's light-touch impact evaluation was carried out using Energy Performance Certificates (EPCs) to capture the modelled impact of the installation on the energy performance of the building (EPC rating) and carbon savings calculated from change in energy consumption.

To capture the direct impact on electricity consumption, meters have been fitted to the heat pumps. This data will be captured by the annual service contractor and analysed by the partnership to evaluate the efficiency of the system. The first data was made available in March 2024.



### Results

The EPCs indicate a modelled average saving of three tonnes of carbon per property per year. Most EPC ratings improved for the properties, but only by a relatively small amount, the average increase in the Standard Assessment Procedure (SAP) being 2.7. The EPC rating of a small minority of households worsened, and this was consistent with the solid wall properties, which are typically harder to insulate. The consistent heating provided by the heat pump is less effective in these properties.

Anecdotal evidence indicates that energy consumption and fuel costs have decreased. The partnership reports very high tenant satisfaction, with improvements in tenant comfort.



## 5 Challenges and recommendations

### Installation rate



**Challenge:**

The partnership aimed to deliver a set number of installs per week and, if households cancelled, they would risk having to pay installers for their time whilst not delivering an installation.

**Solution:**

The partnership had a list of households who had agreed to get a heat pump installed, scheduled for the next year. If there were any access issues, the following year's cohort were offered the same slot, meaning that installers could still deliver on their weekly quota.

**Recommendation:**

Housing associations should ensure they have a list of alternative properties who are available to take part in the project at short notice, so tenant refusals or other issues have minimal impact on the number of installations delivered.

### Tenant confidence



**Challenge:**

Some tenants were not confident controlling the unfamiliar technology of a heat pump.

**Solution:**

The housing partnership has developed a guide to explain what to expect from the heat pump, as well as during the installation process. They have included a top tips sheet that is updated annually and handed to tenants at their annual service.

**Recommendation:**

Providing households with a concise and clear heating control guide during the installation process will help to ensure the system is used

## 6 Project contact

Hebridean Housing Partnership welcomes enquiries about site visits from other social landlords. Please email Peter O'Donnell: [petero'donnell@hebrideanhousing.co.uk](mailto:petero'donnell@hebrideanhousing.co.uk)

This is part of a suite of case studies which can be found on [the ClimateXChange social housing decarbonisation project webpage](#), alongside a summary report which gives an overview of the key learnings and recommendations.